Minutes ABE60 (2) 2015

Subcommittee Meeting ABE60 (2)
Accessible Transportation Technology Subcommittee
94th Annual Meeting of Transportation Research Board
Monday January 12, 2015
Marriott Marquis, Supreme Court
8:00 am – 9:45 am

In Attendance:

Co-Chair:

Aaron Steinfeld, Co-chair	Carnegie Mellon University

ABE60 Members:

Kate Hunter-Zaworski	Oregon State Univ.
Rex Luk	Hong Kong Society for Rehabilitation
Jim Marston	Atlanta VA
Uwe Rutenberg	Rutenberg Design Inc.
Lilian Salazar	Instituto Tecnologico de Monterrey
Richard Schultze	RLS & Associates
Lalita Sen	Texas Southern University
Anabela Simoes	Instituto Superior de Edcacao e Ciencias
Ling Suen	International Centre for Accessible Transportation
Russell Thatcher	TranSystems Corporation
Karen Wolf-Branigin	The ARC
Mohammed Yousuf	Federal Highway Administration

Friends:

Evangeles Bekiarir	Hellenic Inst. of Transport
James Cooper	Napier Univ., Edinburgh
Cecelia Feeley	Rutgers University
Trevor Hanson	Univ. of New Brunswick
Janett Jimenez	Access Consultant, Mexico
Eileen Lu	Eden Foundation
Marie Maas	Easter Seals
Joe Nien-Tsu Wang	Eden Foundation
Carol Wright	Easter Seals

AGENDA

1. Call to Order   8:00

2. Introduction of new members, current members and friends   8:05

3. Review of previous meeting minutes for 2014   8:15

4. TRB Staff Announcements   8:20

5. **Dan Blais:** TCRP, ACRP, NCHRP, Research   8:25
   Programs Overview

6. **Uwe Rutenberg:** Report on Rail Vehicle Advisory
   Accessibility Committee (RVAAC) and technologies to
   improve railway accessibility   8:30

7. **Mohammed Yousuf: Update on** Accessible Transportation
   Technologies Research Initiative (ATTRI)   8:45

8. **Kate Hunter-Zawworski**: Technologies to improve air
   transportation accessibility   9:00

9. **Angelo Bekiarir:** Accessibility Pass Scheme to provide
   information on the accessibility level of Hotels and
   Conference Centers   9:15

10. **James Cooper:** Accessible taxi cabs
                                                                                               9:30

11. Other subcommittee business and questions for presenters   9:45

MINUTES

1. Call to Order
Aaron Steinfeld called the meeting to order at 8:00 am and extended a welcome to all participants. He noted that agenda item 4, TRB Staff Announcements, would be accommodated when staff arrived at the meeting.

2. Introduction of new members, current members and friends
Meeting participants introduced themselves and provided their affiliations. He noted that Co-Chair Daniel Blais had been involved in an accident and unfortunately was not able to attend. Twelve members of the Accessible Transportation and Mobility Committee (ABE60) participated, along with nine friends of the committee for a total of 21 participants. Regional representation included the USA, Canada, Mexico, Greece, Hong Kong, Portugal, Taiwan, and the UK.

3. Review of previous meeting minutes for 2013
A motion to accept the minutes as prepared was put forward and seconded. The minutes of the 2014 meeting were accepted as written.

5. TCRP, ACRP, NCHRP, Research Programs Overview
Aaron Steinfeld provided an overview of TRB's three research-funding programs. These programs are the Transit Cooperative Research Program (TCRP), the Airport Cooperative Research Program (ACRP) and the National Highway Cooperative Research Program (NHCRP). There are two types of submissions that can be made for each program, these are 1) submissions for full research undertakings (which require the submission of a complete Problem Statement) and, 2) submissions for synthesis research (which require only short research needs statements). Full research projects typically have a duration of 18 to 24 months with a funding range of $ 250 000 to $ 400 000. Synthesis research reports on current knowledge and practice, in a compact format. Typically the durations of synthesis projects is 12 months with a funding range of $ 30 000 to $ 35 000. Information on both types of programs can be found at the following website:

Cooperative research:
http://www.trb.org/AboutTRB/Public/AboutCooperativeResearchPrograms.aspx

Synthesis research:
http://www.trb.org/SynthesisPrograms/Public/SynthesisProgram.aspx

Having multiple TRB committee support on research proposals is beneficial for the selection process as is being a member of a TRB committee; however, proposal submissions are open to everyone. State support is not a necessary requirement, but it is helpful for project statements submitted to the NCHRP.

Mr. Steinfeld noted that new synthesis research problem statements are due in February for NCHRP and March for TCRP. Full proposals are due in June. Projects are selected and bids are put out in the late summer with project usually starting in September / October.

The contact for new problem statement submittals is:

Mr. Christopher Jencks
Deputy Director, Cooperative Research Programs
Transportation Research Board
Cooperative Research Programs
202-334-2379 (PHONE)
202-334-2006 (FAX)
cjencks@nas.edu

Mr. Steinfeld encouraged participants to bring ideas for new research projects to the ABE60 Research Subcommittee meeting later in the day as well as to the full ABE60 Committee meeting on Wednesday.

4. TRB Staff Announcements
TRB representative Rick Pain introduced himself and noted that he and Steve Andrle had replaced Jennifer Rosales as the ABE60 Committee liaison. He cited the importance of committee and subcommittee work and thanked attendees for their participation. He noted the move this year to the Convention Center location and welcomed feedback on any issues encountered. He also reiterated the importance of new research problem statements and the deadlines in 2015 for the submission of new research ideas.

A question was asked about the number of attendees and Mr. Pain indicated between 12,000 and 12,500.

There was also a question about reductions in funding for TRB research. Mr. Pain noted that the original budget proposal was only $1 million, but that after some negotiation the amount was increased to $4 million. He noted this was still well below funding levels in prior years.

Several attendees raised issues with the accessibility of the new Convention Center venue. These included the lack of contrast on stairs (an ADA requirement) and the high gloss and slippery floors. The location of Accessibility Committee meetings—on the lowest level of the Marriott and in rooms farthest away from the elevators—was problematic. Mr. Pain said he would raise these issues with TRB and encouraged attendees to email him with these and any other concerns.

6. Report on Rail Vehicle Advisory Accessibility Committee (RVAAC) and technologies to improve railway accessibility by **Uwe Rutenberg**
Uwe Rutenberg reported on the activities of the new Rail Vehicle Advisory Accessibility Committee (RVAAC). The committee was formed by the federal Access Board to assist with the updating of rail vehicle access standards. Mr. Rutenberg was nominated to serve as a member by Committee ABE60. He noted that a focus of the initial meetings was standards for real-time information in audio and visual formats. Mr. Rutenberg also provided a presentation on various technologies for improving rail vehicle access. A participant noted the need for the standards to include elements for ambulatory people with disabilities, such as steps and seats.

Draft ABE60-2 Minutes 2015

7. Update on Accessible Transportation Technologies Research Initiative (ATTRI) by **Mohammed Yousuf**

Mohammed Yousuf provided a presentation and updated on the 5 year ATTRI research and development effort. He noted that ATTRI was a cooperative effort between FHWA and FTA which had high-level support within the administration. The presentation provided figures on persons with disabilities in the USA, including an expected increase in the population. The presentation also summarized travel challenges for various populations, including people with disabilities, seniors, and veterans. Mr. Yousuf noted that the first phase of the initiative—stakeholder engagement and a user needs assessment—had been completed and that the project was entering Phase 2—the funding of several demonstration projects. He noted that the number of planned demonstrations had been increased from two to four. He invited attendees to submit ideas for demonstrations and explained the process planned for soliciting demonstration projects.

A participants indicated that the needs of persons with cognitive disabilities are often overlooked in similar projects. Mr. Yousuf agreed that more input was needed on these issues and noted that the project is working on ways to increase participation in this area.

A participant also asked if the project was considering technologies and similar projects in Europe. Mr. Yousuf responded that European involvement had been developed at a higher staff level. He also indicated that an RFP to study international efforts and technologies was being considered.

8. Technologies to improve air transportation accessibility by **Kate Hunter-Zaworski**

Kate Hunter-Zaworski provided a presentation on air transportation accessibility and efforts to develop systems and technologies to improve access to air travel. She noted several challenges, including: (1) real-time information accessibility onboard aircraft; (2) access for travelers who are deaf-blind; (3) accommodation of service animals; (4) larger seats to accommodate larger travelers, and; (5) inconsistent lavatory access—particularly in double-aisle aircraft.

Ms. Hunter-Zaworski also noted the need for better quality control of airline accessibility. She said a better effort is needed to make sure that airlines and airport authorities are meeting the existing standards and requirements for access.

9. Accessibility Pass Scheme to provide information on the accessibility level of Hotels and Convention Centers by **Angelo Bekiaris**

Angelo Bekiaris presented a process that has been developed by the Hellenic Institute of Transport (HIT) in Greece for assessing the accessibility of facilities such as hotels and conference centers. As requested, on-site reviews of facilities are conducted and an accessibility rating is developed. This rating can then be used by the facility to advertise accessibility. The ratings are also maintained in a database that can be used to assist travelers in identifying whether facilities are accessible. Mr. Bekiaris also noted that as part of the program, HOT offers training of facility staff in accommodating guests with disabilities.

10. Accessible taxi cabs by **James Cooper**

James Cooper provided an overview of recent accessibility issues in the taxicab industry. He noted that the development of Transportation Network Providers (TNPs) such as Uber and Lift is changing the market for private pay paratransit services. He also noted that taxicab operators and regulators are struggling to adapt to this new reality. Mr. Cooper suggested that the impacts on the taxicab industry could be significant if companies hold to traditional markets and legacy approaches and do not change with the times.

It was noted that, to date, TNPs typically do not provide services that are accessible. If taxicab services, some of which are accessible, are impacted by the advent of TNPs, this could have an impact on the overall availability of transportation services for people with disabilities.

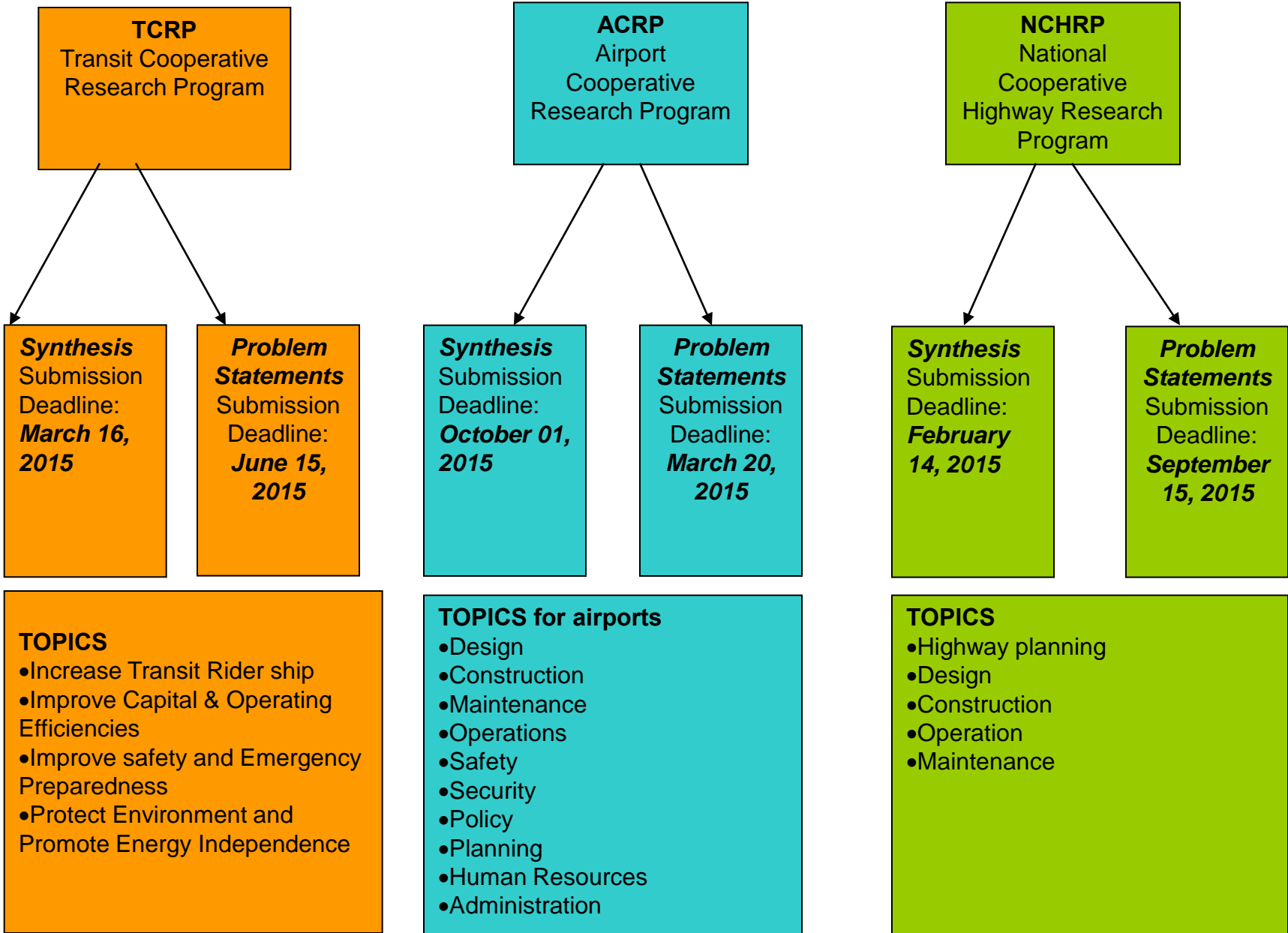11. Other subcommittee business and questions for presenters.
There was no other business.

The meeting adjourned at 9:45 am.

RESEARCH Programs Submissions for FY 2015

Contact for all programs: Christopher W. Jenks: cjenks@nas.edu
Submissions online: http://www.trb.org/Studies/Synthesis/SynthesesSubmittal.asp

TCRP
Transit Cooperative Research Program

Synthesis Submission Deadline: *March 16, 2015*

Problem Statements Submission Deadline: *June 15, 2015*

TOPICS
- Increase Transit Rider ship
- Improve Capital & Operating Efficiencies
- Improve safety and Emergency Preparedness
- Protect Environment and Promote Energy Independence

ACRP
Airport Cooperative Research Program

Synthesis Submission Deadline: *October 01, 2015*

Problem Statements Submission Deadline: *March 20, 2015*

TOPICS for airports
- Design
- Construction
- Maintenance
- Operations
- Safety
- Security
- Policy
- Planning
- Human Resources
- Administration

NCHRP
National Cooperative Highway Research Program

Synthesis Submission Deadline: *February 14, 2015*

Problem Statements Submission Deadline: *September 15, 2015*

TOPICS
- Highway planning
- Design
- Construction
- Operation
- Maintenance

ACCESSIBLE TRANSPORTATION TECHNOLOGIES
RESEARCH INITIATIVE

Accessible Transportation Technologies Research Initiative (ATTRI)

Mohammed Yousuf, FHWA
January 2015

U.S. Department of Transportation
Federal Highway Administration

U.S. Department of Transportation
Federal Transit Administration

Accessible Transportation Technologies Research Initiative (ATTRI)

- A U.S. DOT Multimodal Multi-Agency Research and Development Effort
  - Co-led by FHWA, FTA; currently supported by ITSJPO, and NIDRR
  - Identifying user needs of travelers with disabilities to develop new transformative applications to increase their mobility
  - Building strong partnerships with US and International research communities
  - Continues to seek new opportunities to leverage technology deployment and resources
  - Has a unique opportunity to develop and deploy novel applications for accessible transportation
- Accessibility Benefits that Would Extend to All Travelers
- Seeking a national initiative across a broad spectrum of partners

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ITS Joint Program Office**

The Challenge

Persons with Disabilities

Veterans with Disabilities

Older Adults

- 56.7 million; 19% US population [1]
- Unemployment Rate – 13.2 %; [5] Income: $38,400 ($61,000) [7]
- Poverty: 24.7% (9.0%) [7]
- Rise in Autism: 1 in 150 (2000) to 1 in 68 (2010) [9]
- Fed expenditures: $226 B (2002); $357 B (2008) [8]
- 21.4 million Americas are Veterans [2]
- Disability claims: 104,819 (2006) vs. 634,743 (2012) [14]
- 2.6 million deployed in 2012 [3], 45% of eligible Veterans file claims for disability [13]
- Spending: $0.93 billion (2006) vs. $5.95 billion (2012) [14]
- Disability rates rise as people get older [15]
- 43.1 million age 65 + in 2012 or 1 in 7 people [4]
- 28% live alone [4]
- Expected to reach 72.1 million by 2030 [6]

- WHO estimates that more than One Billion people in the world live with some form of disability [10]
- The global GDP lost annually due to disability is estimated to be **$1.37 trillion** to **$1.94 trillion** [11]
- Australian study: reducing the gap in workforce participation by **1/3** would result in a **$43 billion** increase in GDP over **10 years**[12]

Image Source: Thinkstock/USDOT

The Role of Transportation

- 76% people with disabilities say adequate transportation is important to their job search
- 29% consider it a significant problem in accessing jobs [1]

Targeted Populations

Persons with Disabilities

Veterans with Disabilities

Older Adults

Types of Disabilities

Vision

Mobility

Hearing

Cognitive

Enabling Technologies

ITS, Wireless and Sensors

Connected Vehicles

Automated Vehicles/ Personal Mobility

Robotics, Artificial Intelligence

Accessible Data

Image Source: Thinkstock/USDOT

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Potential Technology Solutions

Wayfinding & Navigation Solutions

- Indoor/Outdoor navigation & orientation Apps
- Situational awareness and text recognition devices

Assistive Technologies

- Travel and emergency announcements with captioning and haptic/flashing alerts
- V2V, V2I and V2P apps for pedestrians

Automation & Robotics

- Personal mobility vehicles for first/last mile
- Virtual caregivers/concierge services with machine vision/AI, V2X

Data Integration

- Accessibility data and information systems
- Interoperability and data needs

Enhanced Human Services Transportation

- Real-time multimodal trip planning & services
- Inclusive one-fare payment application for all travelers
- Paratransit to Fixed-route

Image Source: Thinkstock/USDOT

ATTRI Phases

PHASE 1	PHASE 2	PHASE 3
Exploratory & User Needs Research	**Innovation & Prototyping**	**Demonstration**
FY2012-14	FY2015-17	FY2018-19

PHASE 1

Exploratory & User Needs Research

FY2012-14

- **Collaboration Building**
- **Strategic Plan and Roadmap**
- **Stakeholder Engagement and User Needs Assessment**
- **State of the Practice/ Innovation Scan**

PHASE 2

Innovation & Prototyping

FY2015-17

- **Institutional and Policy Issues Assessment**
- **International Research Coordination**
- **ATTRI Social-economic Impact**
- **Standard Development & Harmonization**
- **ATTRI Effects on Non-User**
- **ConOps & System Reqts**
- **Prototyping**

- **Accessible Transportation Applications Selection**

PHASE 3

Demonstration

FY2018-19

- **ATTRI Joint Demonstrations**
- **Joint Demonstration Evaluations**
- **Deployment Guidance**

Image Source: Thinkstock/USDOT

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Strong Partnerships

FHWA
FTA
ITS JPO
OST

U.S. DOT Research

Federal Partners

NIDRR
US ARMY-TARDEC
ICDR
White House
Access Board
DOL-ODEP
DHHS-ACL
VA
NASA
NRI

International Collaboration

E.U. City Mobil2
Singapore GreenMan Plus
Japan MLIT/SIP Tokyo 2020 Olympics

Research Institutions

CMU – Robotics
GA Tech – Apps for Older Adults
CCNY, Auburn, TRX – EAR Program
MIT-Singapore (SMART)

Private Industry

General Motors
Toyota
IBM
Qualcomm
Intel

ACCESSIBLE TRANSPORTATION TECHNOLOGIES RESEARCH INITIATIVE

Phase 2 – FY15 Plans

- Procurements:
  - Institutional & Policy Issues Assessment
  - International Research Coordination
  - ATTRI Social-economic Impact
  - Outreach and Coordination
  - Standards Development & Harmonization

- Accessible Transportation Applications Identification and Selection

  - RFI to be released February 2015

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Lessons Learned and Opportunities

- To meet the diverse needs of travelers with disabilities more than one application is needed

- Applications will have to be integrated or connected to provide total transportation experience

- Need for testing applications in all ATTRI technology areas

- Applications may be within one ATTRI technology area or across multiple technology areas

- Applications are to be designed using universal design principles to ensure benefit to all travelers

- Potential to grow from initial plan of 2 to 4 applications to 2 to 4 integrated applications

Image Source: Thinkstock/USDOT

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ATTRI Independent Mobility Applications System (Integrated)

Image Source: Thinkstock/USDOT
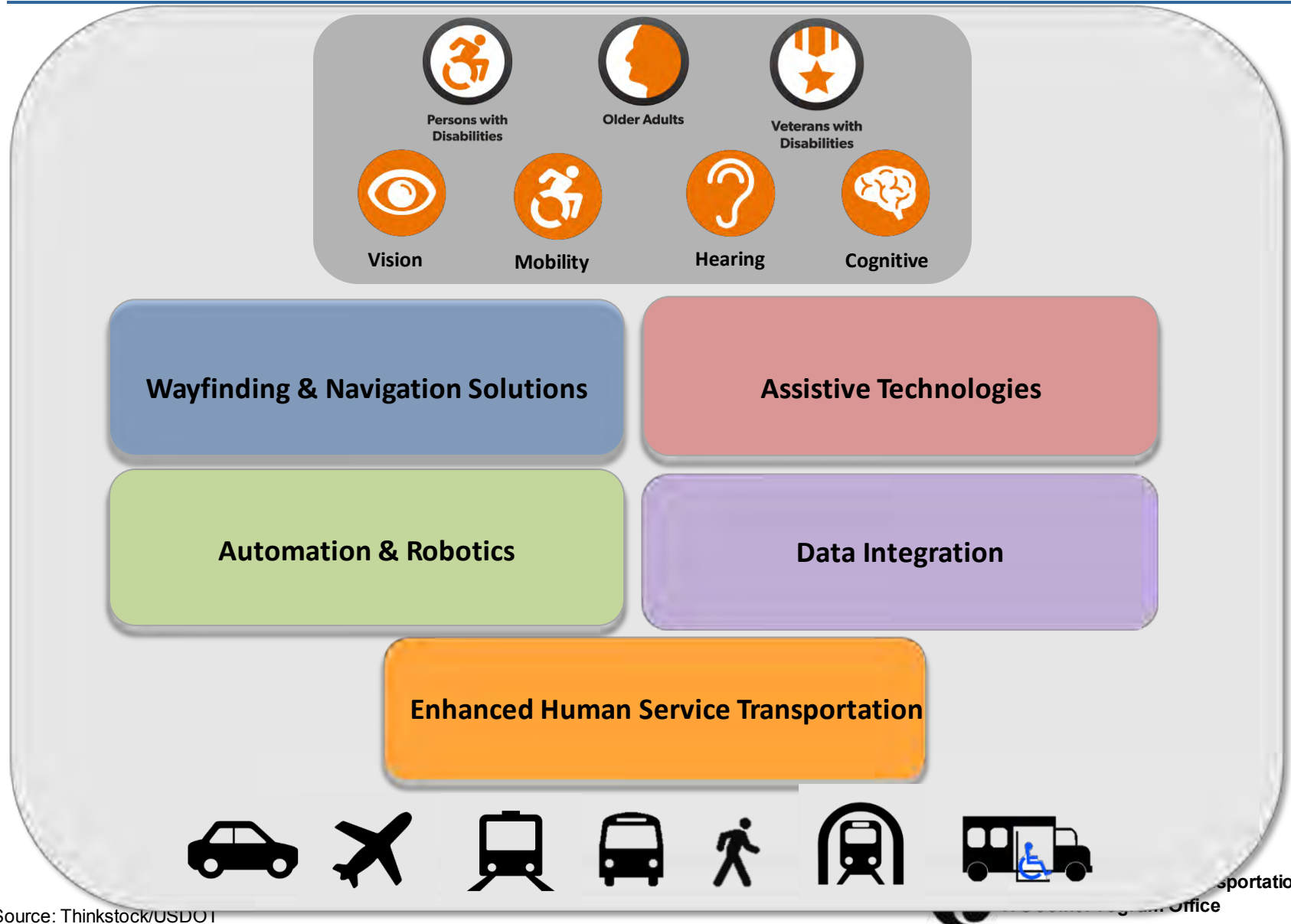
Example
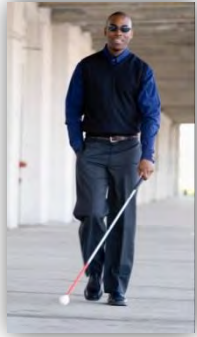
Wayfinding & Navigation Solutions
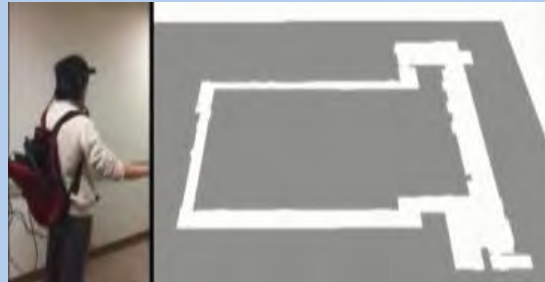
Bill uses wayfinding application to navigate through a new environment

Assistive Technologies

Bill can use his connected smart phone with voice to text features and text recognition capability to identify his environment and receive travel information

Data Integration

Bill's accessibility data is stored in the cloud that allows services to be tailored to his needs
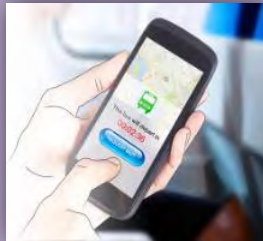
Automation & Robotics

Bill summons a personal mobility vehicle that uses maps to get Bill to his destination

Enhanced Human Service Transportation

- Connection to fixed routes
- One fare payment system

Image Source: Thinkstock/USDOT

ATTRI Program Trajectory

ATTRI is addressing a significant transportation problem in a comprehensive way

- *Collaboration & Partnerships*
- *25th Anniversary of Americans with Disabilities Act*

Phase 3: Pilot Demonstrations

Phase 3: Limited Demonstrations

Phase 2: Application Selection and Prototyping

Phase 1: Exploratory Research & Partnership Development
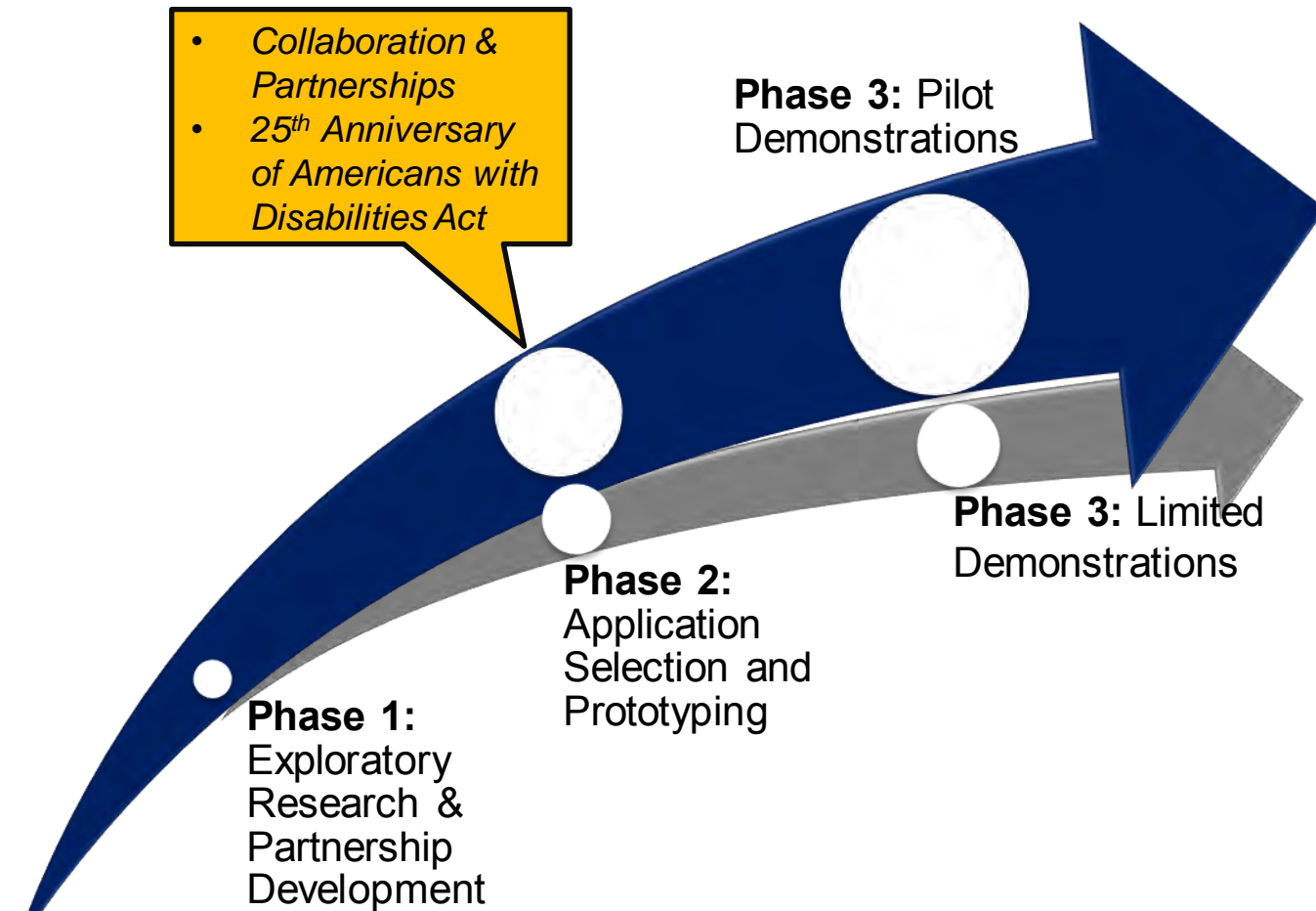
Positions ATTRI Program to capitalize on potential large-scale opportunities

Image Source: Thinkstock/USDOT

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Key ATTRI Events/Dates

- Stakeholder engagement webinars/workshops – February to April 2015

- ATTRI application ideas, RFI – February 2015

- ATTRI applications selection workshop – May 2015

- New RFP for procurements

- Contacts:

  □ Mohammed Yousuf, mohammed.yousuf@dot.gov

  □ Jeffrey Spencer, jeffrey.spencer@dot.gov

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Technologies to Improve Air Transport Accessibility

TRB Annual Meeting
ABE60 Technology Sub Committee meeting
January 12, 2015

Kate Hunter-Zaworski, Oregon State University

Outline

- Motivation
- Landside/Terminal
- Aircraft
  - Communication
  - Physical Access

Motivation

- Changing Demographics
- Aging
  - Mobility
  - Sensory
- Obesity

Landside -Terminals

- ADA and other country's regulations
  - Focused on Air Terminal
  - Universal/Inclusive Design
    - Level changes
      - ✓ Elevators
      - ₋ Stairs
      - ✗ Escalators
    - Surface treatments
      - ✓ Hard Surfaces
      - × Carpet

Air Terminal

Unique considerations

× Luggage carousels

× Mobility Devices –Carts

➢ Special Assistants

× Moving walkways

➢ Retail outlets, Food Courts

✓ Service Animal Relief Areas

✓ Unisex Accessible Restrooms

Aircraft

Communication and Information

- Emerging real time captioning –for inflight announcements
- Captioning of in flight entertainment
- Challenge for deaf-blind travelers
- Service Animal Accommodation

Physical Access

- Space very limited
- Seats getting smaller
- Legroom shrinking
- Very little change in boarding chairs and on board chairs
- Lavatories
  - Revisions to ACAA may require single aisle aircraft
  - Double Aisle
    - Required, but not defined
    - Inconsistent level of accessibility
- Premium seats –variability in accessibility

Summary

- Many Airports have service animal relief areas within TSA secure space
- Advances in communication technology
- Few advances in physical access
  - New lavatories in design-inclusive for families and obesity
  - Larger passengers accommodated in lavatory but not seats
  - Airlines define aircraft interiors

The need

According to the **World Health Organization**:

✓ people with disabilities account for about the **15%** of world population

✓ in the European Union, during the last decade, there is an increase rate of 7.2% which seems to be due to traffic accidents.

According to the **OECD**:

✓ the proportion of people aged over 65 years is the 7.6% of the world population

✓ rates are continuously growing and is predicted that the rate will be 9.4% in 2020 and 11.7% in 2030.

To whom it concerns?

People with a disability may include people:

✓ with motor disability

✓ with visual disability

✓ senior citizen

✓ with hearing disability

✓ with cognitive or learning disability

To whom it concerns?

People with a disability may include:

✓ people with allergies & other medical conditions

and… all of us!!!

Examples of Accessibility Schemes in other European countries

National Accessible Scheme (NAS)

- **National scheme** that has started in 2011 by VisitEngland, the national Tourist board.
- Provides a set of Accessible Standards for people with motor, visual and hearing disabilities.
- Provision of National Accessible Scheme symbols.
- Initiative greatly promoted in view of the Olympic Games of London (2012).
- **No staff training** procedure.

OpenBritain

- Website that aims to provide a large range of accessible information.
- Started in 2011 and is a joint project between RADAR and Tourism for All UK.
- OpenBritain labeling: DisabledGO symbols (20 symbols)
- All properties on the site are **self-assessed**.

ACCESSIBLE FLANDERS

- Accessibility label only for Flanders for hotels, holiday centres, youth holiday centres, camping sites and guest rooms, created in 2008 by Toegankelijk heidsbureau.
- Developed in cooperation with OSSATE and Libretto projects.
- Accessibility assessed by specially trained accessibility supervisors.
- Following items are assessed: the access walkway from the public road, the entrance and the reception area, the public toilets, the restaurant or the dining room, the bedroom with corresponding bathroom and the corridors between these components.
- Hotel categorization, according to accessibility level, 2 labels (A+:comfortably and independently accessible & A: basic accessibility)
- **No training** procedure (just seminars with no certification).
- It **operated only briefly** and through funding from local government.

Examples of Accessibility Schemes in other European countries

Tourism & Handicap label

- Quality" label for the accommodation of disabled people.
- Developed in 2001 by the Secretary of State for Tourism and the Tourism et Handicap association.
- All properties on the site are **self-evaluated** at the beginning and then assessed by assessor.
- Common categorization with ACCESSIBILITY PASS.
- **No training** procedure.

Accessibility Label

- The Accessibility Label is a quality label created by Godadgang.dk (The Danish Accessibility Association) in 2004 and provides information to users about accessibility, not only for tourism facilities.
- To be labeled companies must go through a quality check. Afterwards a report will state the current accessibility status for the various disability groups and explain what to do to improve the accessibility.
- No categorization of facilities (levels).
- **No labeling**
- **No training** procedure (just seminars with no certification).

People with disabilities

✓ People with disabilities:

- Have the same **needs** and **desires** for tourism as all the other people

- have the same **incentives** to travel like the rest of the population

- should do **much more preparation** in order to make a trip than the non-disabled.

Short description of ACCESSIBILITY PASS

The accessibility certification of hotels and conference centers is being made *through measurements and exams of:*

✓ **Infrastructure and provided services**

✓ **personnel skills for serving persons with disabilities**

Short description of ACCESSIBILITY PASS

✓ Infrastructure and services are considered "accessible" for people with disabilities, only if these people **can have access on their own** - with any assistive devices, guide dogs, etc. that normally use - without requiring any help from the hotel staff or someone else.

✓ The adequacy of personnel, regarding only the issue of accessibility, is verified by the number of employees of each hotel who have **relevant certification** recognized by the ACCESSIBILITY PASS.

ACCESSIBILITY PASS – Certification levels

✓ ACCESSIBILITY PASS provides four certification levels depending on the level of accessibility
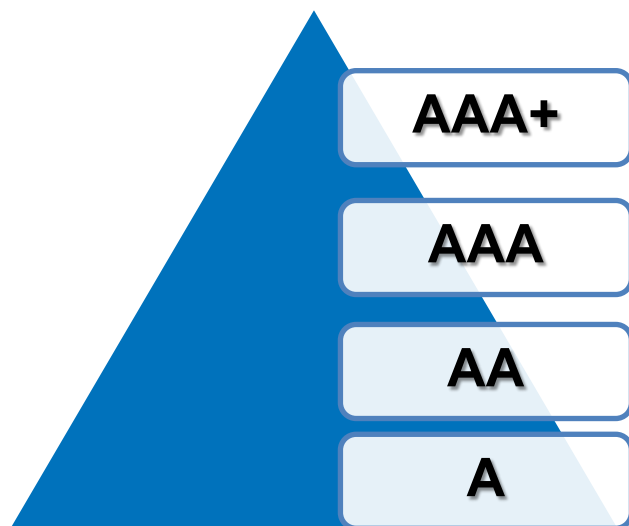
✓ the certification is distinct for each type of disability

✓ the certification level is not related to the hotel category (i.e. stars)

✓ the accessibility certification regarding the elderly has not different levels

ACCESSIBILITY PASS – Hotels certification levels

- ✓ **A** – **Commitment to Accessibility** → accessible attendance and accommodation

- ✓ **AA** – **Core Accessibility** → all basic hotel services are accessible

- ✓ **AAA** – **Superior Accessibility** → all public areas & service types are accessible, except business and/or recreation areas

- ✓ **AAA+** – **Total Accessibility** → all public areas & service types are accessible

- ✓ **Senior Citizen Friendly** → certifying that services and infrastructure are adequate for Senior Citizens

How the accessibility certification levels are determined?

✓ The accessibility levels are being determined in accordance with the ACCESSIBILITY PASS criteria, based on the infrastructure and provided services of a hotel or conference center, as well as the skills of the certified personnel.

✓ To accomplish that, **a site assessment process (auditing) is required by an independent and qualified auditor**, the duration of which varies depending on the amount of space and number of evaluable services / infrastructure.

How the accessibility certification levels are determined?

More specifically, this evaluation assesses:

- ✓ **the physical accessibility of each area**
- ✓ **the services offered to clients (for each type of accessibility)**
- ✓ **the availability of staff holding relevant certification**

Basic requirements:

- ✓ *autonomous access (without the help of a third party)*
- ✓ *appropriate evacuation procedures for emergencies*
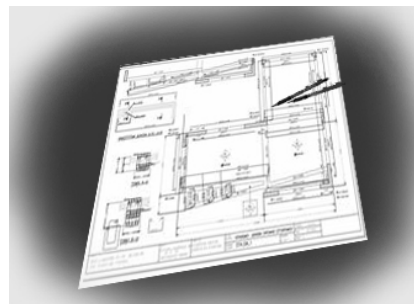
Tools & evaluation process for infrastructure and services

Checklist Criteria

This checklist is probably the main tool of the auditor, as it contains **in details ALL the parameters evaluated** in a hotel / conference center and has the following features:

- ✓ is divided in 3 major categories (infrastructure, services & personnel)
- ✓ Is spread over 4 levels:
  - ▪ **22** key areas/services (i.e. parking spaces, accessible room, public restroom, leisure facilities, emergency procedures / systems)
  - ▪ **74** elements of infrastructure and services (i.e. room: door, interior room, bathroom)
  - ▪ **206** components (i.e. door: door width, height lock)
  - ▪ more than **750** questions

Tools & evaluation process for infrastructure and services

Checklist Criteria

Contains information / clarifications about the following:

- ✓ Units of measurements

- ✓ Types of disability

- ✓ Minimum or maximum limits (based on national legislation and international standards)

- ✓ References

# Tools & evaluation process for infrastructure and services

Infrastructure section	Infrastructure element	Sub-element	Questions	Value	Units	Threshold		Disability types	Threshold reference
1.1 Car parking	1.1.1 Valet parking	1.1.1.1 Generic	1.1.1.1.1 Does the hotel offer 24hour valet parking to all guests?	❏ Yes ❏ No		If no continue with the 1.1.1.1.1.1, else skip it.		Motor Senior Visual	"2010 ADA Standards for Accessible Design"
			1.1.1.1.1.1 Is it offered only for disabled guests?	❏ Yes ❏ No				Motor Visual	"2010 ADA Standards for Accessible Design", chapter 209.4
			1.1.1.1.1.2 Is it the only mode of parking?	❏ Yes ❏ No		If yes, continue with 1.1.1.1.1.3 else skip it and go to element 1.1.2.		Motor Visual	
			1.1.1.1.1.3 Is it without extra charge for the disabled guests?	❏ Yes ❏ No		Yes!		Motor Visual	
	1.1.2 Parking area	1.1.2.1 Generic	1.1.2.1.1 Does the hotel have parking spaces for disabled guests (according to hotel declaration)?	❏ Yes ❏No		Yes! If yes, answer the rest questions, else skip it and go to section 1.2.		Motor	
			1.1.2.1.1.1 Total parking spaces		Number	Total parking spaces:	Disabled parking spaces:	Motor	"2010 ADA Standards for Accessible Design", chapter 208.2
			1.1.2.1.1.2 Disabled parking spaces		Number	❏ 1-25 ❏ 26-50 ❏ 51-75 ❏ 76-100	❏ 1 ❏ 2 ❏ 3 ❏ 4		

Tools & evaluation process for infrastructure and services

Infrastructure section	Infrastructure element	Sub-element	Questions	Value	Units	Threshold	Disability type	Threshold reference
1.11 Guest rooms	1.11.1 Signs	1.11.1.1 Braille	1.11.1.1.1 Are the accessible rooms' identifying numbers in embossed characters or in Braille?	❏yes ❏no		Yes! If yes answer question 1.11.2.1.1.1, else skip it.	Visual disability	"How to make a Hotel Accessible", Svayam, New Delhi 2009, page 92.
	1.11.2 Guestroom interior	1.11.2.1 Room space	1.11.2.1.1 Is there a free maneuvering space in the accessible rooms of min. 135cm diameter?	❏yes ❏no			Motor disability	"Accessibility issues in tourism", DIADA, page 58.
			1.11.2.1.2 What is the space between obstacles inside the room (insert the smallest)?		cm	Min. 90cm.	Motor Visual	"How to make a Hotel Accessible", Svayam, New Delhi 2009, page 93.
		1.11.2.2 Switches and electrical outlets	1.11.2.2.1 Are the controls of desk lamps and heating/air conditioning units operable with one hand, without tight grasping, pinching or twisting of the wrist?	❏yes ❏no		Yes!	Motor disability Senior	PAS 88 – Guidance on accessibility of large hotel premises and hotel chains, BSI, chapter 19.4.
		1.11.2.3 Alarm	1.11.2.3.1 Are there any visual emergency signals inside the room?	❏yes ❏no		Yes!	Hearing disability	"Accessibility issues in tourism", DIADA, page 44.

Auditor's application

✓ The ACCESSIBILITY PASS application (AuditKey) is being used by the hotel/conference center auditor **in order to record all measurements on each element of infrastructure, services and certification of personnel.**

✓ It supports the full content of the criteria contained in the checklist.

✓ Upon completion of all the measurements record this electronic application automatically transfers the data to the evaluation system for calculating the level of accessibility of the hotel / conference center for each type of disability, while highlights the areas where improvements could be made for achieving a higher level.
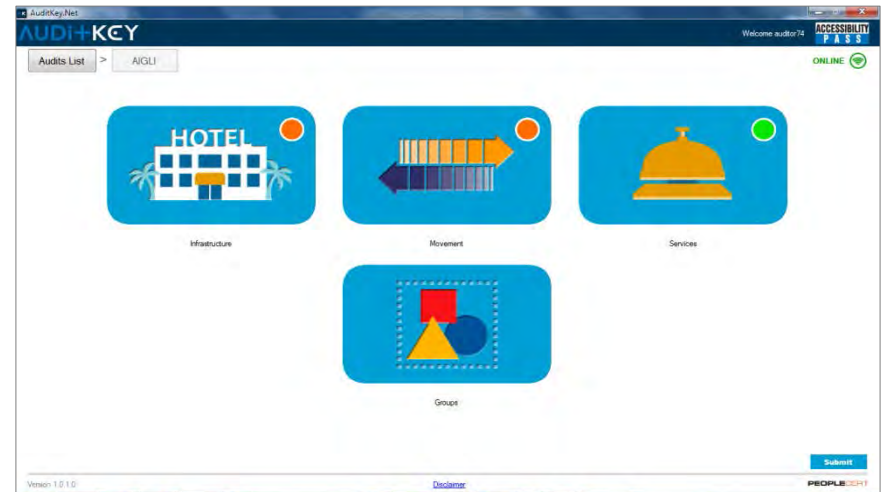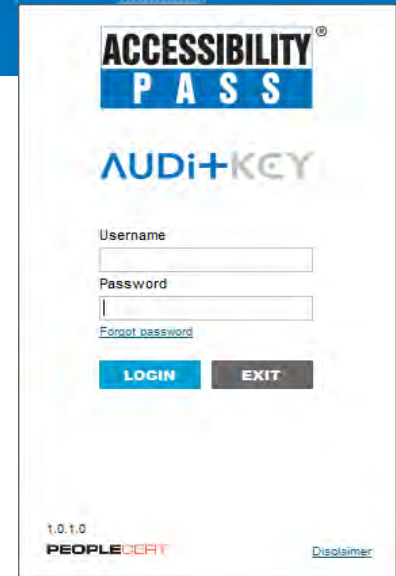
Auditor's application
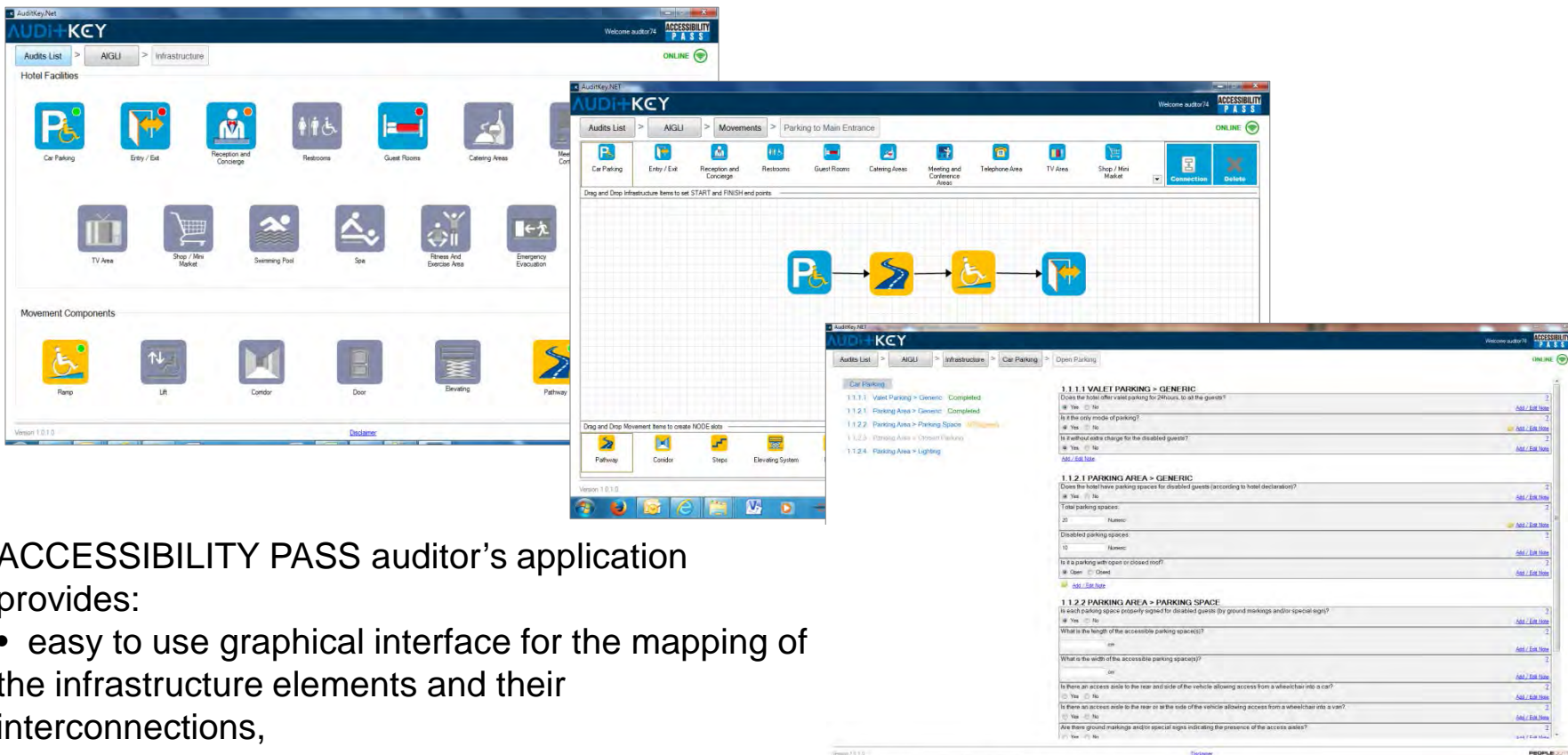
ACCESSIBILITY PASS auditor's application provides:

• easy to use graphical interface for the mapping of the infrastructure elements and their interconnections,

• full autonomy to the user, since although it is operated by making use of the internet, it is not necessary for the unhindered operation of the application and the evaluation process.

ACCESSIBILITY PASS – Personnel certification

The training of a hotel's personnel on accessibility issues is something that is not common, and even if it exists **it is not accompanied by the certification process.**

However, the adequate training and certification of personnel who provide services to clients with disabilities, in conjunction with the evaluation and certification of the infrastructure, can provide a **complete solution** and a high business opportunity for the hotel industry.

ACCESSIBILITY PASS – Personnel certification

The ACCESSIBILITY PASS personnel certification concerns the following categories of employees:

✓ **Hotel Management** (Managers, Managers on Duty, Boutique & Small Hotel Owners)

✓ **Hotel Guest Services** (Booking Personnel, Receptionists, Reservation Managers, Food & Beverages Managers, Concierge Services Personnel)

✓ **Hotel Housekeeping & Facilities Services** (Grooms, Housekeepers, Room Service, Technical Support, Valet Service, Hotel Shuttle Bus Drivers)

  ✓ Each certification is based on a different syllabus.

Objectives of the personnel's training

The ACCESSIBILITY PASS training provides to the personnel:

- ✓ Guidelines about **their behavior** towards people with disabilities.

- ✓ Guidelines about the **way they should act** in particular **situations**.

- ✓ Awareness of the **diversity of potential clients' with disabilities** profiles as well as their needs and how these affect their interactions and mobility overall.

ACCESSIBILITY PASS – A complete solution

Certification of Hotel & Conference Centers :

- ✓ annually
- ✓ independent of class (e.g. stars), based **only** on Accessibility
- ✓ through onsite measurements and approved Auditors

and…

- ✓ Certification exams for personnel (3 certifications)
- ✓ E-learning & classroom training material
- ✓ Student 's Handbooks (3, one per certification)
- ✓ Training material and Trainer's Handbook for use by Trainers
- ✓ Auditor's Handbook

eLearning

E-learning (http://accessibility.e-learning4all.org/login/)

- ✓ Built in Adobe Flash Professional v11, requires Adobe Flash Player

- ✓ Hosted in Moodle Course Management System (https://moodle.org/)

- ✓ Accessibility features

eLearning

Tips on how to behave to all people with motor disabilities

Initial contact

- For long conversations (for example when the guest is making travel arrangements with the concierge), place yourself at the person's eye level by sitting.

- People that have lower limb disabilities, but do not use a wheelchair, should not be left standing while checking in or being served at the reception desk.

- People with upper limb disabilities, such as hand trembling or loss of upper limbs, should sign forms "as well as they can" or skip this requirement. Limit yourself to oral information and booking arrangements.

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1.4.6 Deaf and blind persons behavioral tips

Tips on how to behave to all people with hearing disabi

Initial contact

- Approach the person with the hearing disability so
- Calmly catch the person's attention, by waving o on the person's shoulder before speaking.
- Introduce and identify yourself and the people a necessary. Give your name/s and if necessary yo
- Always maintain eye contact with the person you
- Avoid speaking dialect and do not talk with your
- Face the source of light and do not cover your m
- Whether or not the person with the hearing disa accompanied by an interpreter, speak directly to through her/his companion.
- Use simple and clear gestures and facial express
- In a conversation with three or more people, try in turns.
- Avoid background noise and make sure there is s
- Keep in mind the need for additional time to com

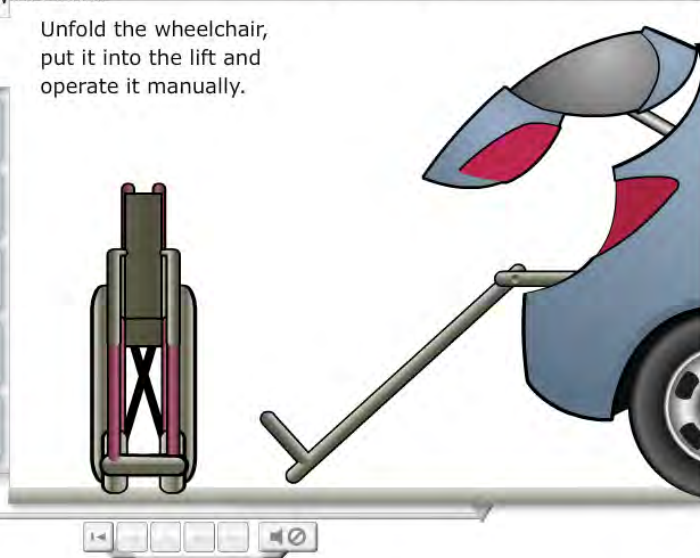Last modified: Tuesday, 2 December 2014, 12:35 PM

4.2.2 Wheelchair anchoring/storage systems for people with restricted walking ability

Wheelchair anchoring/storage systems for people with restricted walking ability

These systems are for people who are usually able to take a few steps, perhaps with the use of a walking cane, without their wheelchair. Such aids are commonly used by many people with disabilities that are unable to walk and rely on others for the storage/unstorage of their wheelchair.

- Manual rear door wheelchair lifter
- Rear bumper folded wheelchair anchoring system
- Rear bumper unfolded wheelchair crane-type lift
- External wheelchair carrier
- Wheelchair boot storage ramps
- Trunk wheelchair crane lift

Unfold the wheelchair, put it into the lift and operate it manually.
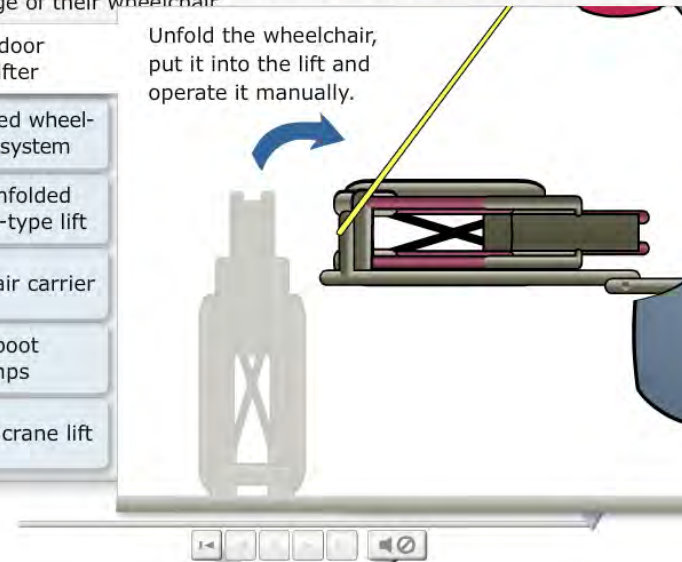
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eLearning

2.3.1 Hotel shuttle buses: Ingress & egress

If you are a driver of hotel shuttle buses (with one or more wheelchair-reserved areas), you must keep in mind the following tips when you are transporting passengers with disabilities:

- Make sure you can provide your assistance, if needed, with the ingress and egress of people with a motor disability.

- Most preferably, reserve the area located near the front door of the bus for the wheelchair users.

- Do not deploy the wheelchair ramp until all other clients are on board. Similarly, the wheelchair user (or his/her escort) must wait until the ramp is fully extended before moving the wheelchair onto it.

- Once all passengers are on board, wait untill the front door is completely closed and then back up the wheelchair until it sits firmly in the designated area.

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2.3.1 Hotel shuttle buses: Ingress & egress

If you are a driver of hotel shuttle buses (with one or more wheelchair-reserved areas), you must keep in mind the following tips when you are transporting passengers with disabilities:

- If you notice any barriers at the stop where a wheelchair user wishes to disembark, inform the passenger and ask him/her to exit at the next accessible bus stop.

- Once you stop the bus, be sure that all other clients have disembarked first, and then ask your passenger with disability to move to the front door.

- Then, kneel the bus (if needed and possible), deploy the wheelchair ramp (or unfold it yourself manually if needed) and open the door.
Note: For more information about passengers ingress/egress, see the "*Ingress/Egress Vans & Buses*".
http://www.cdta.org/accessibility_paratransit_wheelchair.php

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ACCESSIBILITY PASS – Public Registry

- ✓ Certified hotels and Conference Centers are added (if they wish) to the Public Registry available at the ACCESSIBILITY PASS website.

- ✓ Seen on a Google map

- ✓ Through simple clicks users may
  - o search for venues by disability type and by level
  - o see a summary of the venue's accessible features
  - o see a full list of the venue's measurements

ACCESSIBILITY PASS – Public Registry
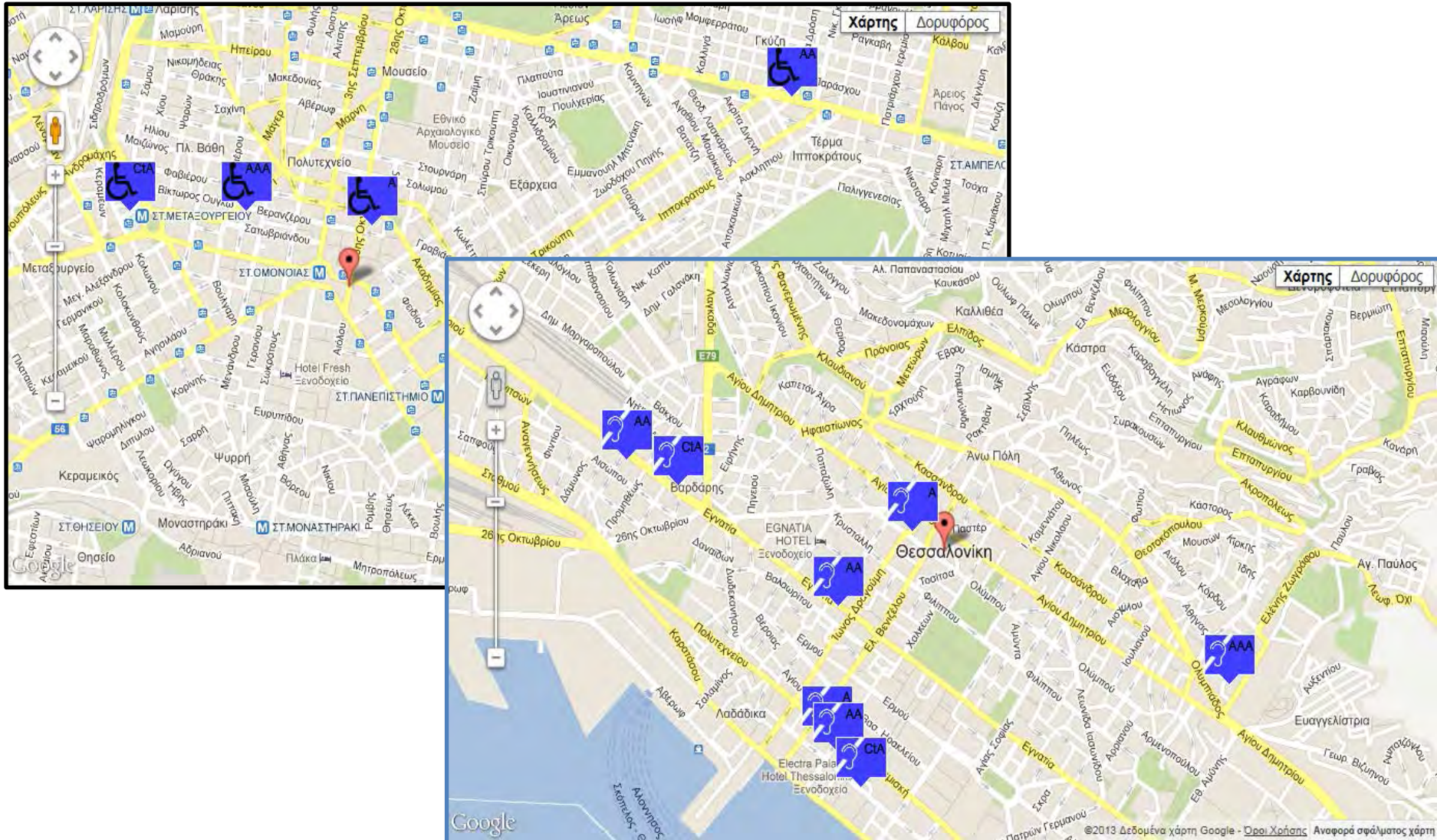
ACCESSIBILITY PASS – Executive Council

The Executive Council of ACCESSIBILITY PASS scheme is an Independent Consulting Body of International Experts in the field of Accessible Tourism that oversees the Quality of the scheme, validates its updates and provides expert guidance on its scientific and marketing evolution through an annually updated Roadmap.

More specifically, the scope of the ACCESSIBILITY PASS Executive Council consists in:

✓ Evaluating the ACCESSIBILITY PASS scheme, any new releases or updates and providing expert feedback on potential shortcomings and required improvements, if any.

✓ Developing a three year Roadmap on the scientific and marketing priorities and actions of the scheme, which is monitored and updated annually.

✓ Overseeing the Overall Quality in the application of the scheme and providing expert feedback and guidance on any technical issue arising from that, upon being notified by PEOPLECERT.

✓ Communicating and supporting the ACCESSIBILITY PASS scheme publicly.

ACCESSIBILITY PASS – Executive Council

Members of the ACCESSIBILITY PASS Executive Council:

A/A	Name	Contact Details
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3.	Dr. John Gill – ISO-CEN standardization committees' expert, former RNIB technical Director	Tel: 07590 982 732 Email: johngill@btconnect.com
4.	Mr. David Colven – Technical Consultant on Accessibility Issues.	Tel: +44 (0) 1865 759800 +44 (0)7712168901 Email: d.colven@btopenworld.com
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7.	Mr. J. Agglos – Hotelier, former General Secretary of Tourism.	Tel : +30 2107257757 Email: jagglos@acci.gr

References & Standards of ACCESSIBILITY PASS

✓ The accessibility evaluation of the infrastructure and services of a hotel or conference venue is based on predetermined criteria and limits which are in accordance with national accessibility requirements but also with European and International standards, such as the following:

- 2010 ADA Standards for Accessible Design, USA
- ADA Checklist for New Lodging Facilities, USA
- ADA Accessibility Guidelines (ADAAG), USA
- Detailed access guidelines, UK
- Building for Everyone-Inclusion, Access and Use", UK
- BSI – Standards Publication Design of buildings and their approaches to meet the needs of disabled people - Code of practice (BS 8300:2009+A 1 :2010)
- PAS 88 – Guidance on accessibility of large hotel premises and hotel chains", BSI
- Accessibility issues in tourism", DIADA
- How to make a Hotel Accessible", Svayam, New Delhi 2009
- Accessible swimming pools & spas", United States Access Board
- Australia accessible events 2006
- Revised Accessibility Specification for Small Buses designed to carry 9 to 22 passengers (inclusive)", Disabled Persons Transport Advisory Committee Revised – UK
- "Designing for All - Design Guidelines", YPEKA
- ELOT Standard for Disabled Persons 1439:2013

References & Standards of ACCESSIBILITY PASS

- Design Guidelines, Standardization and Policy Recommendations towards an accessible PT framework", Access2All project
- How to Prevent Falls at Home (http://finseldercare.com/managing-your-care/how-to-prevent-falls-at-home)
- A step for safer stairs- A kit for improving stair safety, Community Health Research Unit, University of Ottawa
- Measuring functional fitness of older adults, The Journal on Active Aging, March April 2002.
- ACCESSIBLE TOURISM Concepts and Issues, Buhalis, D. Ambrose, I., Darcy, S., 2011, Accessible Tourism Issues: Inclusion, Disability, Ageing Population And Tourism, ISBN 1845411609 Channel View Publications
- Accessible Tourism Issues: Inclusion, Disability, Ageing Population And Tourism, Channel View Publications
- Normative Values for Isometric Muscle Force Measurements Obtained With Hand-held Dynamometers, 1996
- Accommodations for seniors, Bradford Perkins, J. David Hoglund, Douglas King, Eric R. Cohen, Stephen A. Kliment, 2010 VOLUME 13 ISSUE 1
- Code of accessibility in the built environment, 2007
- Accessibility access older adult customers (http://www.ada.gov/olderaccess.htm)
- In the right place. Accessibility, local services and older people; Help the Aged; Alan Burnett, 2005, page. 5. ISBN 1-904528-93- 7
- Building & Home Safety Hazards & Accident Prevention for Senior or Disabled People (http://inspectapedia.com). www.everydayergonomics.org

Certification of Hotels and Staff during the Pilot Phase

The scheme has been piloted so far in Greece. During this pilot phase:

- ✓ **31** hotels have been audited and
- ✓ **19** hotels have been certified for some category
  - o   10 hotels have been certified for motor disability
  - o   12 hotels have been certified for visual disability
  - o   7 hotels have been certified for hearing disability
  - o   14 hotels have been certified for cognitive disability

- ✓ **222** hotel staff have been trained
- ✓ **182** members of staff have been certified.

Because infrastructure may be inaccessible for each one of us!!!