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The role of accessible transport in fostering tourism for all

Roundtable on

The Economic Benefits of Improved Accessibility to Transport Systems

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International Transport Forum

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Legal background

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- **Convention on the Rights of Persons with Disabilities (CRPD)**

➢ Full and effective **participation** and **inclusion** in society by all persons with disabilities is a **human right**!

➢ **Accessibility** is one of the general principles of the CRPD!

Legal background

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- **Convention on the Rights of Persons with Disabilities (CRPD)**
  - "**States Parties shall take appropriate measures to ensure to persons with disabilities access, on an equal basis with others**, to the physical environment, **to transportation,** to information and communications, including information and communications technologies and systems, and to other facilities and services open or provided to the public, **both in urban and in rural areas**." (CRPD, Article 9 – Accessibility)
- **National states** usually have a **complementary legislation** for people with disabilities regulating also the general provisions for accessibility

Legal background

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- Pending question is **how to design** the several transport elements with their locally specific characteristics **in detail**
- In this context economic conditions of course play an important role for example in the context of Cost-Benefits-Analyses (CBA) for investment decisions in reliance to **time and financial limits**

Social aspects

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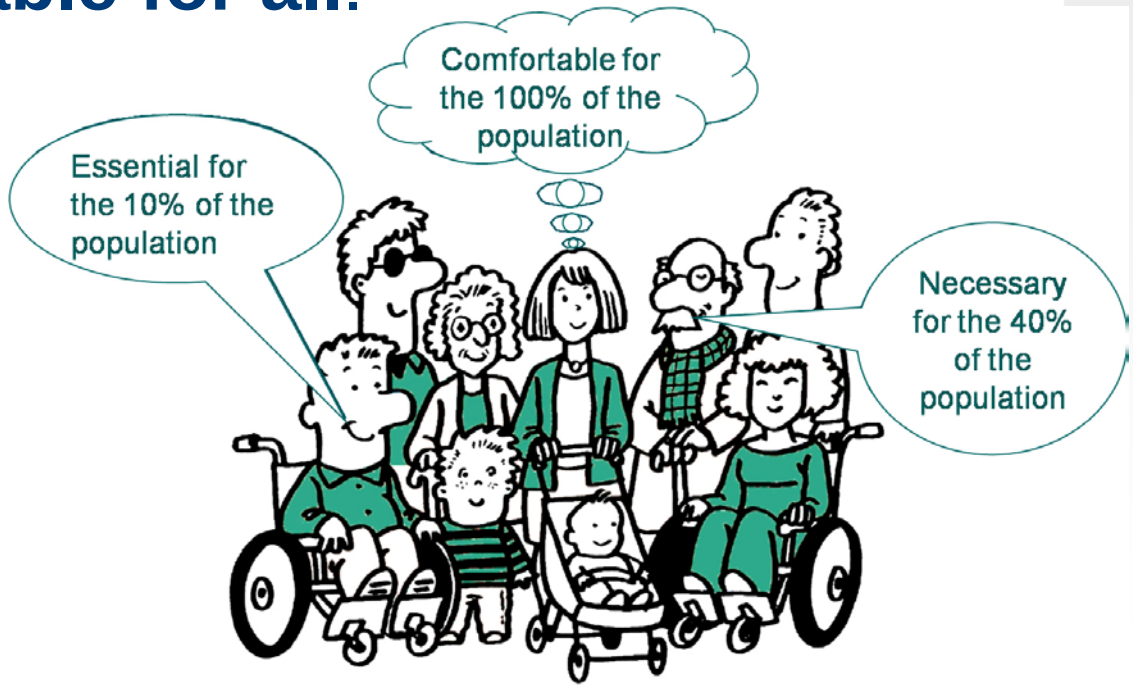
- Nowadays it is well-recognised that an **accessible environment** is **essential** for about **10% of the population** and **necessary** for about **20 to 40%**. And last but not least accessible environments are **comfortable for all**.



Social aspects

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The **10%**: **People with disabilities**

- People with locomotion limitations (e. g. limp, stand or grasp limits)
- People with sensory limitations (e.g. blindness, deafness, visual impairment)
- People with speech limitations
- People with cognitive limitations
- People with mental limitations

Social aspects

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The **20 up to 40%:**

- **People with temporary mobility-restrictions**
  - Pregnant women
  - People with buggies, dogs, heavy respectively lots of luggage
  - People with accident-related limits
  - Overweight people
  - People unfamiliar with the area
- **People with age-related mobility-restrictions**
  - Young children
  - Elderly

Demographic change

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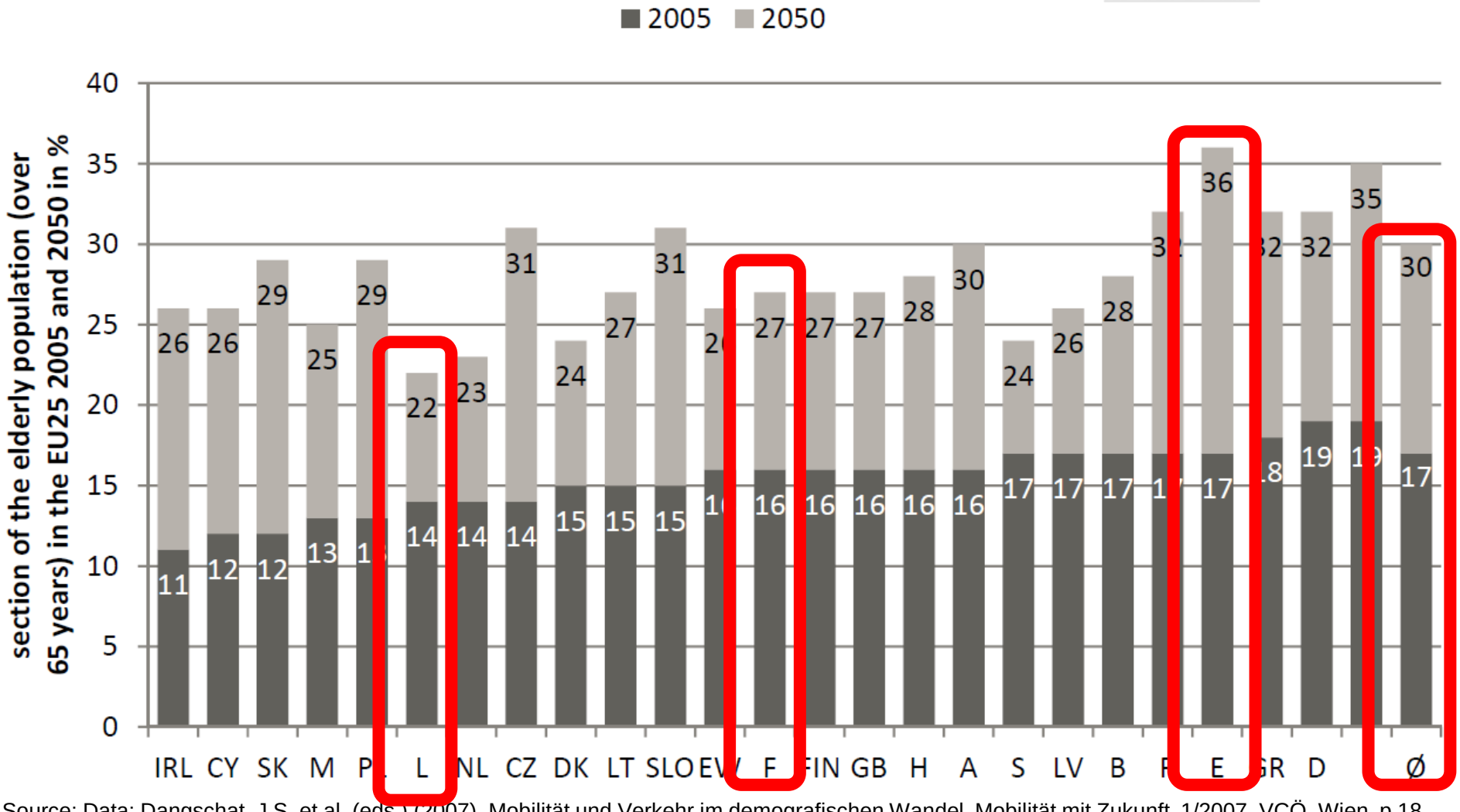
- World population:
  - proportion of **people over 60** years will **double** between 2000 and 2050 (11% to 22%) and **absolute number** will increase from 605 million to **2 billion** (Frye, 2015)
- European Union:
  - By 2050, about half of the citizens will be older than 50 years
  - Proportion of those **aged 80 and over increase** some **180%** between 2005 and 2050
  - Growth of the **65-79** age group is expected to be **44%** in the same period

Demographic change

Elderly in the EU25 2005 and 2050 in %



Source: Data: Dangschat, J.S. et al. (eds.) (2007), Mobilität und Verkehr im demografischen Wandel, Mobilität mit Zukunft, 1/2007, VCÖ, Wien, p.18

Demographic change

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- Successful repression of diseases of civilization will lead to **higher incidences of chronically-degenerative illnesses and physical and mental insecurities**
- In principal **age-related physical restrictions** are **comparable** with those of people with **disabilities**

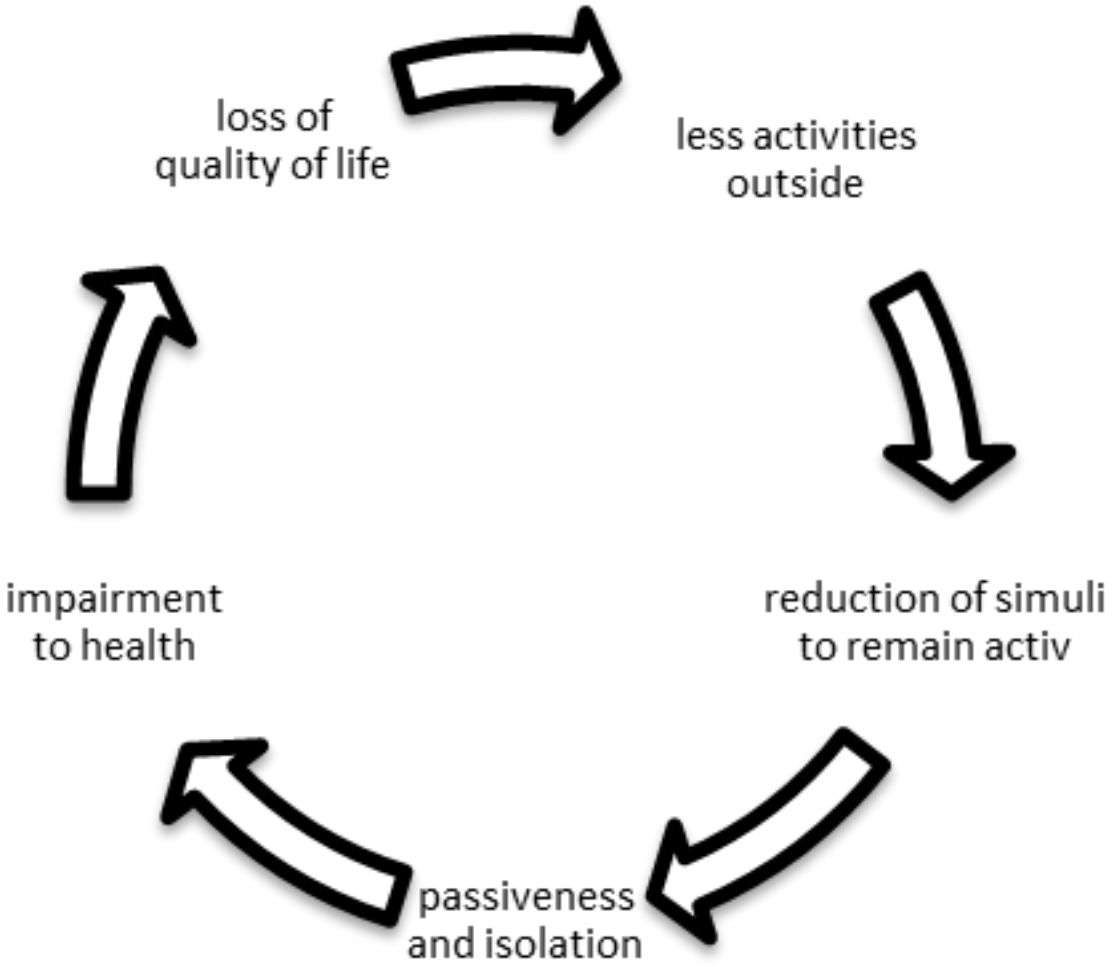
➢ "Strong **correlation between age and** disability, or **loss of mobility**" (Frye, 2015)

  – European Union: In **2020** approximately **120 million** persons will have **multiple and/or minor disabilities**

  – Germany: **7.5 million** people (9.4% of the population) were registered as "**severely disabled**" (2013). ¾ are **55 years or older** and ⅓ are **75 years or older**.

Demographic change

Vicious circle of immobility



Source: Haindl, G. and R. Risser (2007), “Mobilität und Lebensqualität älterer Menschen”, Verkehrszeichen, Vol. 23, No. 3, p.14

Demographic change

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- **Transport systems** have to be **accessible** to a wide range of potential passengers in varying states of health and personal mobility, in order to **avoid immobility** and **exclusion** of a high amount of elderly people from public life as well as a **raise of medical and care costs** of the future elderly!
- Growing proportion of **elderly** people is an **important economic issue** especially related to the **tourism** sector!
- In respect to the **heterogenic** group of **elderly** accessibility in terms of **barrier-freedom** is one of the **preconditions** but insufficient to **satisfy all quality features** of an age-friendly transport system

Demographic change

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Quality features of an age-friendly transport system

System quality	Explanation
Affordable	Use of the transport and mobility system should be possible within older people's financial means.
Available	The transport and mobility system should exist in a way that older people can use it.
Barrier free	The system's facilities should be usable by disabled persons without any specific difficulty and without assistance from third persons[9]. They should as such be designed to take into account the physical, sensory and cognitive impairments more likely to be experienced by older people.
Comfortable	The transport and mobi… it without experiencin…
Comprehensible	Information about the… easy for older …ople t…
Efficient	…t…
Friendly	…n… particular nee…
Reliable	The transport and m… unpredictability cause…
Safe	The transport and mobi… use. They should not feel unsafe while using it.
Secure	The transport and mobility system should be dependable and should not present unnecessary risks to older people. They should feel confident that they are not at risk when using it.
Transparent	Older people should be aware of the existence of the transport and mobility options available to them, and understand how to use them.
Complementary	The transport and mobility system should be supported by policies capable of promoting accessibility for older people by means other than personal transport, e.g. internet access, mobile services.

Design for All

Source: Berding, J. et al. (2015), "Policies for transport and mobility in an ageing society: An evaluation of current practice in Europe and beyond", in Bundesanstalt für Straßenwesen (ed.), Ageing and Safe Mobilitiy: Papers, Bergisch Gladbach, p.4.

Social aspects

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The **100%: All users**

- **Accessibility increases comfort** of the system / **system quality**
  - E.g.: low-floor busses
    - are necessary for wheelchair-users and reduce boarding time and alighting accidents
    - are more comfortable for all users, because it is easier and saver to board without steps at the entrance
- Many measures for people with disabilities also provide **high overall socioeconomic benefits**!

➢ **Design for All / inclusive design / universal design concepts**

Transport Studies

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- **Only** a **few studies** exist, which **investigate** the **economic benefit of accessibility** measures in the **transport** sector

➢ Lack of evaluation of accessibility interventions

- **UK study** analysed several railway stations after improving their accessibility (see **presentation** of **Tony Duckenfield**)
- One **Norwegian study** analysed the passengers' valuation of universal design measures in public transport (see **presentation** of **Nils Fearnley**)
- Another **Norwegian study** analysed **public buildings and outdoor areas**

Transport Studies

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public buildings and outdoor areas

- Usage of **stated preference method** (see **presentation** of **Nils Fearnley**)
- Selection of **18** accessibility **measures**
- Definition of benefit rates based on **internet survey** with about **800 answers**

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Average valuations. NOKs per visitor.

Effort	NOK
Good pedestrian walking surfaces outdoor	3
Visual marking of walkways	9
Visual and tactile marking indoors	9
Stair handrails	7
Automatically opening entrance doors	1
Visual contrast on entrance doors	0,5
Access ramps for entrances	1
Access ramps in swimming pools	1
Access ramps at beaches	1
Visual marking of doors and glass walls	2
Low counters	4
Universal designed toilet facilities	1
Installing elevators	5
Modernisation of existing elevators	2
Indoor lighting	17
Outdoor lighting	17
Assistive listening system / hearing loop	0,9
Floor space for wheelchair access	0,3

Source: Data: Analyse & Strategi AS, WSP Norge and Vista Utredning AS (2011), Tiltak for universell utforming i bygg og uteområder Veileder i samfunnsøkonomisk analyse, Oslo, https://www.regjeringen.no/globalassets/upload/bld/uurapportveileder.pdf, accessed 15 January 2016, p.14

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- **Careful** with **average valuations**!
  - Importance of a single accessibility measure differs in reliance to the **abilities of the current user**
    - Some benefit many different groups of users, but benefit per user is rather low
    - Other affect only some user groups, but for some it`s **indispensable for using the system**
- Interpretation of **average** benefit rates **cannot be separated from non-discrimination** purposes

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European study about the *economic impact and travel patterns of accessible tourism in Europe* (GfK SE, University of Surrey, Neumannconsult and ProA Solutions (2013), economic impact and travel patterns of accessible tourism in Europe. final report, Nürnberg, Surrey, Münster, Barcelona,)

- **no direct link to economic benefits for the transport sector**

- **Transportation** is **part** of the **services and facilities** "which enable persons with special access needs, either permanent or temporary, to enjoy a holiday and leisure time with no particular barrier or problem." (GfK SE et al., 2013)

Accessible tourism

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- **Tourists with disabilities** spent **less money and less nights** during their journey **than high-aged** tourists
  - Economic benefit of “Tourism for All” in the EU produced by people with disabilities is less than the benefit produced by elderly people
  - ➢ **Both need accessibility features** during their holidays!
- In the study **both groups together** spent within the EU27 approximately **EUR 80** per **one-day trip**, about **EUR 700** per **domestic overnight trip** and about **EUR 1 100** per **foreign overnight trip** (2012).

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Direct overall benefits of Tourism for All to the economy of the European Union

- **Gross turnover** of tourism-related service providers **EUR 352 billion**
- Gross value added (**GVA**) **EUR 150 billion**
- **Gross domestic product** (GDP) **EUR 164 billion**
- **4.2 million employees** in the EU tourism businesses

➢ Without effects induced by tourists not travelling alone

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- **Multiplicator effects** = tourism-induced indirect economic effects
  - Indirect / induced **effects on income and employment of up- and downstream economic sectors** coming from expenses and investments (e.g. industries producing goods and services for the tourism sector like wholesalers or the manufacturing industry)
- Under consideration of **all direct, indirect and induced effects and the key inbound markets** the **accessible tourism** sector produced an **economic output** of **EUR 820 billion**, a **GVA** of **EUR 371 billion**, a **GDP** of **EUR 411 billion** and about **9.2 million employees** within the EU

Accessible tourism

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3 scenarios of **improved accessibility measures** to investigate **potential increase of demand for accessible tourism offers** in the EU by 2020

- **Scenario A** (minimum improvements): economic benefit would increase by **18.3 - 19.7%**
- **Scenario B** (medium improvements): economic benefit would increase by **24.8 - 26.6%**
- **Scenario C** (extensive improvements): economic benefit would increase **up to 39.4%**

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- Tourists with disabilities in Germany spent their **one-site tourism expenses**
  - to 39% for accommodation,
  - to 24% for gastronomy,
  - to 14% for other services,
  - to 13% for goods from the local retail sector,
  - to 7% for leisure offers and
  - to **3% for local transportation**.

➢ Without consideration of the journey to a destination and back!

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- By **all journeys between 25% and 60%** of the **travel expenses** account for **changing of location**.

➢ **Significant part of the economic benefits of Tourism for All** to the economy of the European Union **accounts directly for the transportation sector**

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Benefits for transport based on Scenario C:

- **Transport to and from one's destination:**
  - Gross turnover EUR 92 billion up to EUR 130 billion,
  - GVA EUR 39.25 billion up to EUR 55.3 billion
  - GDP EUR 43 billion up to EUR 60.7 billion
- **Local transportation**
  - Gross turnover EUR 11 billion up to EUR 15.6 billion
  - GVA EUR 4.7 billion up to EUR 6.6 billion
  - GDP EUR 5.2 billion up to EUR 7.3 billion

Transport and Tourism for All

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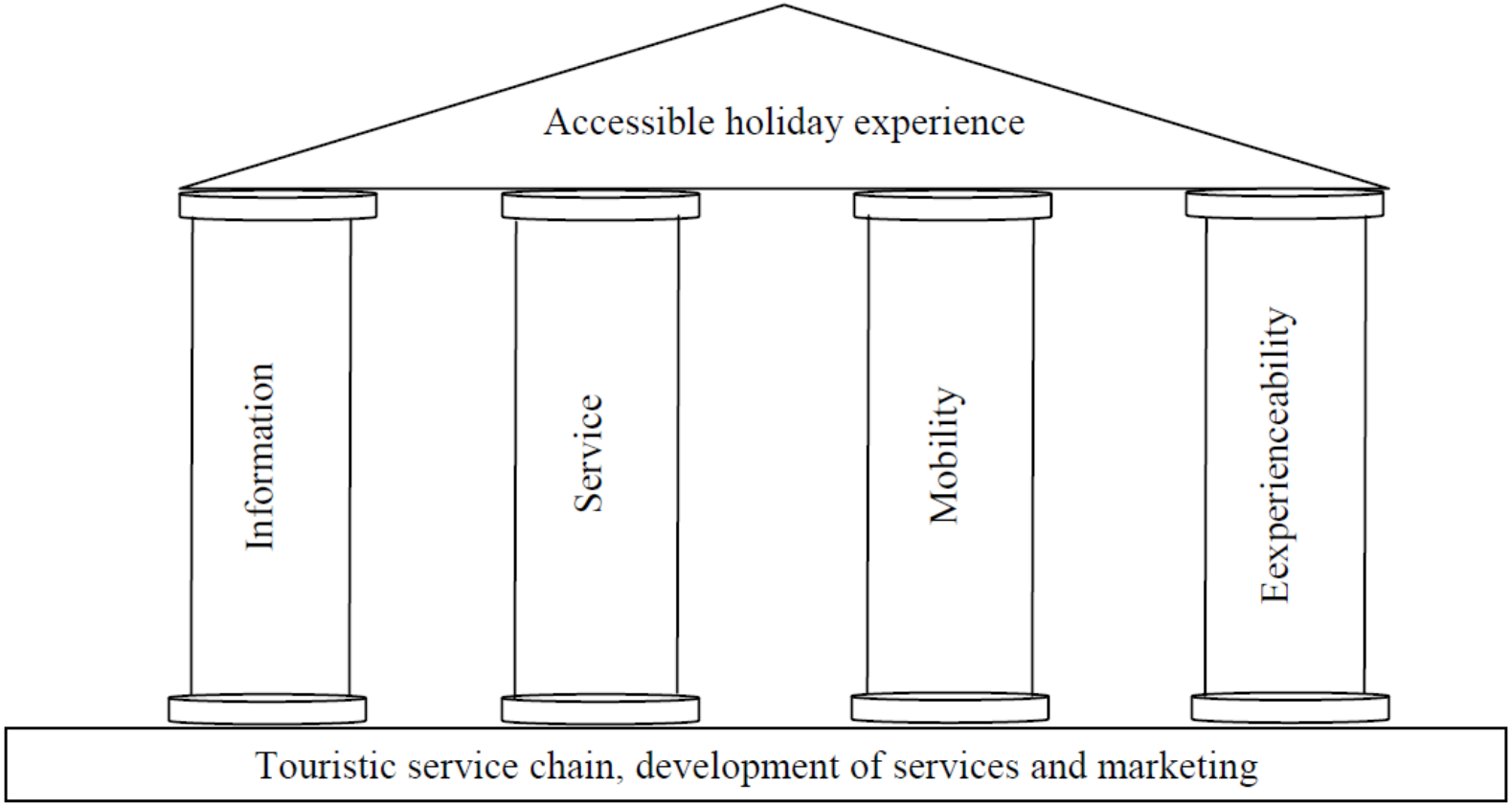
Tourism is **not possible without transportation** and its elements like transport routes and means of transportation!



Source: Neumann / Reuber (2004), Ökonomische Impulse eines barrierefreien Tourismus für Alle. Münster, p.54

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Accessible transportation is one of the **most important** elements of the so-called "**accessible touristic service chain**"!

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Touristic service chain

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Accessible transportation is one of the **most important** elements of the so-called "**accessible touristic service chain**"!

- **All parts** of the touristic service chain have to be **accessible**, because **otherwise** people with disabilities will meet **several barriers** during their holiday activities

➢ "A **journey** is like a **chain** - it is only **as good as** its **weakest link**." (European Commission - Directorate General Transport, 1999)

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- **Accessible transport** systems are an **essential** condition **to reach** the **other accessible elements** of the touristic service chain
  - At least **half of the terms of the touristic service chain** are **directly hooked on barrier-free mobility**:
    - Journey and departure
    - Arrival and orientation
    - Locomotion on location
    - Leisure time and sports
    - Entertainment and culture
    - Tours and shopping

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It`s indispensable to develop the **transport sector** of a destination in a way that it`s **accessible** for all, whenever a region wants to be **successful in** the **accessible tourism** sector!

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Importance of the elements of the touristic service chain for people with disabilities

Relevance

1	accommodation	82%
2	locomotion on location	76%
3	journey to and from one's destination	74%
4	tours	71%
5	travel preparation	71%
6	cultural activities	62%
7	arrival and orientation	61%
8	service on location	58%
9	health care on location	52%
10	catering	51%
11	shopping	37%
12	sports	19%

Source: Neumann / Reuber (2004), Ökonomische Impulse eines barrierefreien Tourismus für Alle. Münster, p.33

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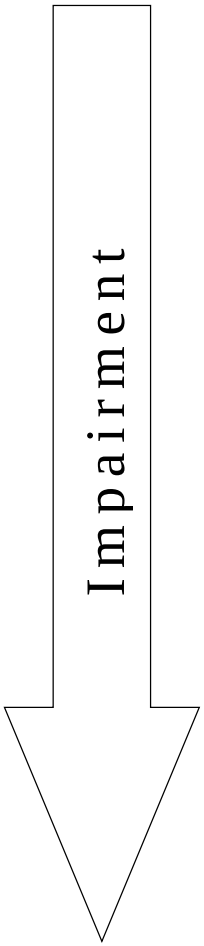
Ranking of impairments during traveling



1	cultural activities	67%
2	locomotion on location	65%
3	tours	63%
4	sports	55%
5	journey to and from one's destination	52%
6	accommodation	47%
7	arrival and orientation	44%
8	shopping	42%
9	service on location	42%
10	travel preparation	40%
11	health care on location	35%
12	catering	24%

Source: Neumann / Reuber (2004), Ökonomische Impulse eines barrierefreien Tourismus für Alle. Münster, p.33

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- **Accessible journey** to the destination and back: **private cars** and **public transport systems**
- **Accessible locomotion on location**: **individual motorised transport**, **local public transport** systems and **local walkway networks**
  - For the transport to and from one's destination or at destination **during** the **last 12 month 80%** of people with special access needs used the **private car**, **50%** used the **airplane**, **40%** took the **train**, **40%** used the **local public transport**, ⅓ used a **taxi** and ⅓ took a **long-distance bus**
  - **People with disabilities** use **public transport** systems **more often** as tourists without special access needs

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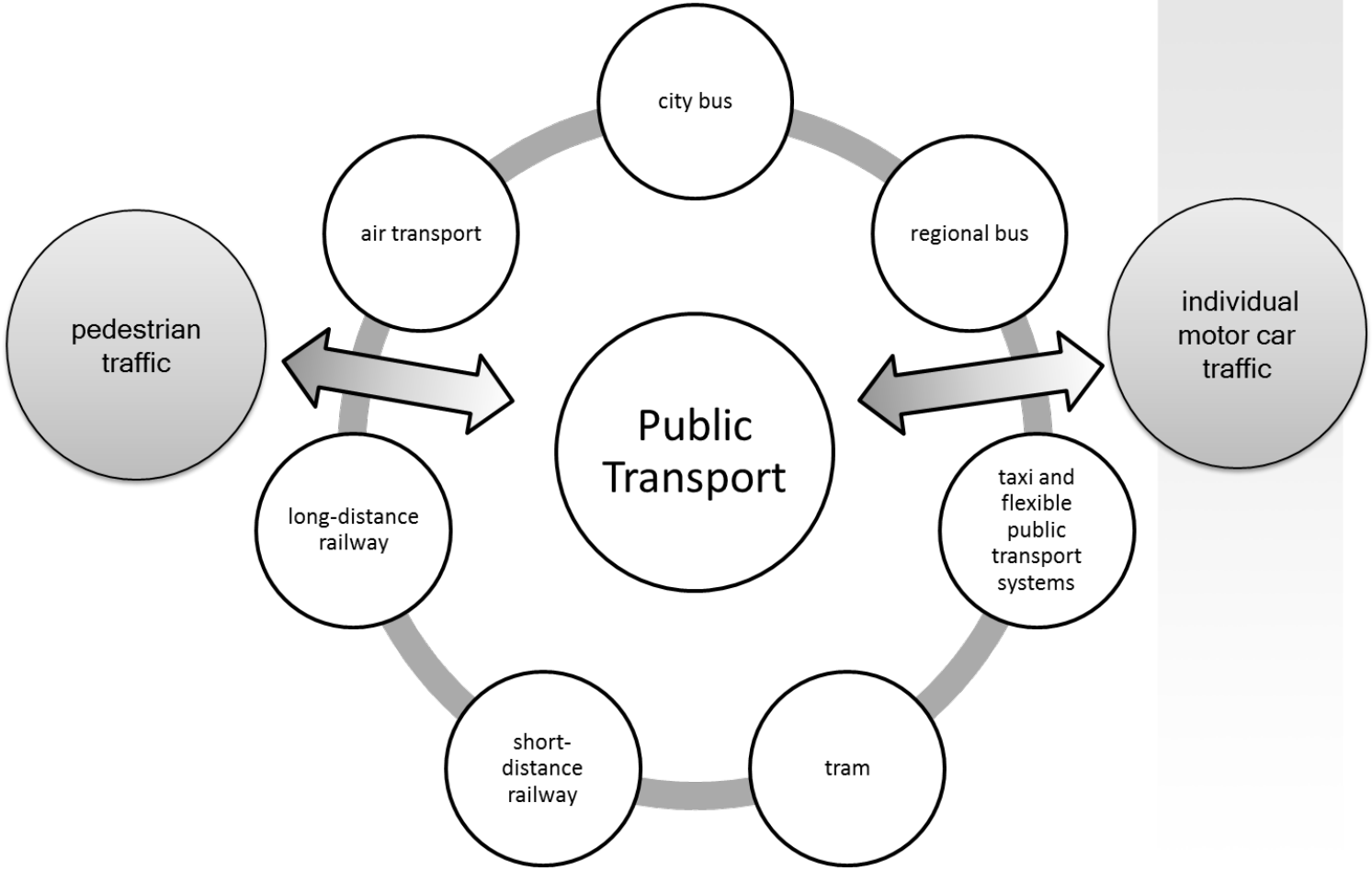
Complexness of public transport



Source: Rebstock, M. (2010), “Success factors for the development of a Tourism for All approach in low mountain ranges - possible solutions and implementation difficulties on the basis of the Thuringian pilot project “model region for a barrier-free Tourism for All””, in Andeas Kagermeier und Joachim Willms (ed.), Tourism Development in Low Mountain Ranges, Studien zur Freizeit- und Tourismusforschung, Mannheim, pp. 70.

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Accessibility for many tourists is expected as a **matter of course** because by now public transport systems are already accessible in many (at least in bigger) cities.

- It`s difficult or maybe **not possible** at all to **convincingly impart an image** of an **accessible destination** without accessible public transport offers

➢ **Accessible public transport** offers are **necessary** also because of **touristic marketing** reasons!

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Example for the **implementation of Tourism for All** in a **touristic marketing strategy**

- City of **Erfurt**, capital of the federal state of Thuringia, Germany
  - Since **1999** the **tourist marketing board** is working on **accessible tourism issues** and **Tourism for All** is part of **marketing plans** and **strategic planning**
  - **Accessible offers** like tours by minibus with wheelchair-access or guided in German Sign Language as well as a special brochure “Erfurt erlebbar für Alle”
  - In **2008** the city of **Erfurt** was one of the **founding members** of the **touristic marketing association “Barrier-free destinations in Germany”**

Conclusion

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- To make **transport systems accessible** mostly is not a voluntary task but a **task bound by law**
- An **accessible environment** is not only **essential for people with disabilities** and **necessary for up to 40% of the population** but also a **matter of comfort for all users**

Conclusion

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- Two studies from Norway used the **stated preference method** to monetise and prioritise different accessibility measures
  - In general this **method seems to work** as a tool for analysing **economic benefits of accessibility measures**
  - The **results** have to be interpreted with **extremely caution in order to avoid discrimination**
    - Especially in reliance to measures valued rather low on average, but are an indispensable condition for specific user groups to use the system

Conclusion

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- **Accessible tourism** produces a **huge economic impact** on the tourism sector and beyond
- By **improving accessibility** in the future a **significant raise of economic benefits** is possible

➢ **Accessible transport systems** will directly **benefit** from an **increasing accessible tourism market**

- **Tourism** is **more dependent on transportation**, because transportation has more fields of action in reliance to passenger and freight traffic

➢ **Without accessible transport** offers **no participation** in the **economic benefits** of Tourism for All!

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Thank you for your attention!

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