



HiReach

innovative mobility solutions
to cope with transport poverty

NEW MOBILITY APPROACHES TO FIGHT TRANSPORT POVERTY AND IMPROVE ACCESSIBILITY IN EUROPEAN CITIES AND REGIONS

Analysis and understanding of the mobility needs
of vulnerable user groups

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Transport poverty: a definition

An individual is **transport poor** if, in order to satisfy their daily basic activity needs, at least one of the following conditions apply:

| | | | | |
|---|---|--|--|---|
|  |  |  |  |  |
| Availability: | Accessibility: | Affordability: | Time budget: | Adequacy: |
| No suitable transport option available | Transport options do not reach destinations and opportunities | High cost burden | Excessive amount of time in travel | Travel conditions are dangerous, unsafe or unhealthy for the individual. |
|  |  |  |  |  |

Source: Own elaboration after Lucas et al 2016

Analysis of geographical and spatial elements affecting transport poverty



Rural



Peri-urban



Urban peripheral



Remote



Deprived

Understanding behavior, mobility needs and capabilities of vulnerable user groups



Children and youth



Elderly



Women



People with reduced mobility



Migrants and ethnic minorities



People living in rural and deprived areas



Low income and unemployed

Low income and unemployed



Low income
and unemployed

- particularly **reliant on local public transport services**, since in many cases they cannot afford a private car or other means of transport
- the **use of cars is closely related to income levels**
- in remote areas often rely on private vehicles, posing a substantial financial burden on households (**forced car ownership**)
- often confronted with the need to **walk and cycle in unsafe conditions** for longer periods and routes
- availability of public transport and **affordable fares** affect **employment opportunities** and access to basic services
- **less mobile**, limiting themselves to those compulsory trips, such as to work, health services or food shops

Elderly



Elderly

- **public transport plays a crucial role**, especially in rural areas, supporting an independent life and access to basic services, and reducing social isolation
- even if elderly travel less than young people, **increased transport demand**, resulting from improved health, more travelling options, better foreign-language skills, and lifestyles (“forever young” megatrend)
- experience mobility limitations caused by **increasing cognitive problems and physical impairments**
- in using public transport, face **many transport-related barriers** linked to difficulties in reaching bus stops or **accessing vehicles**, fear of falling and apprehensions about personal **security**, difficulties in **reading timetables and destinations**
- **high levels of car ownership can hinder the transition to other means of transportation** that could somewhat compensate

People with reduced mobility



People with reduced mobility

- **wide diversity of impairments:** reduced vision, reduced hearing, reduced movement, psychologically/mentally cognitively challenged
- **travel less** than non-disabled even if they have similar needs
- **rely on private transport** and **depend on the support of relatives**
- access to transport has a significant impact on the **quality of life and independence**
- **less likely to benefit from access to standard transport options** if they are not designed taking their needs into account
- **dedicated transportation services** can improve mobility, but lead to the exclusion from regular public transport
- **accessible transport information** systems relevant for people with sensory impairment or learning disabilities

Women and gender related aspects



Women

- **more likely to use public transportation than men** (in general less access to private vehicles)
- **public transport plays a crucial role** in empowerment, access to opportunities and independence
- poor mobility and access to transport can **prevent women from entering the labour market** or lead to choose less profitable jobs because they are closer to home or easier to travel to
- engaged in childcare, domestic work and caring for elderly, sick or disabled relatives and therefore **more likely to work part-time**, take on jobs nearer or better connected to home (even if low-paid), or to decide not to work at all
- **more likely to combine trips/make trip chains** than to make separate trips: commuter services may cater less to women

Migrants and ethnic minorities



Migrants and
ethnic minorities

- **less likely to own a car** than natives, owing to their less favourable economic conditions (buying a car and getting a driver's license is costly)
- **car access is lower among female migrants** than among males, the gender gap being wider than that observed in the case of natives
- **more likely to walk and to use public transport** than natives, even if female migrants may find the latter less comfortable because of **security issues**
- **cycling appears to be more popular among natives** than among migrants, especially women
- **language barriers** and racial/religious **discrimination**

Children and young people



Children and youth

- **independent mobility has seemingly declined:** negative impacts on children's health and safety of increased traffic and reduced independent mobility and walking
- especially pupils and students, are the **most frequent users of public transportation**
- **car use is increasing less than before**, or even declining, for young people who seem to be less car-oriented than previous generations
- new status symbols are not cars but **internet and phones - cycling** is more fashionable amongst young urban professionals than driving
- poor availability of public transport and high fares may **prevent young people from having access to education**, work and social interactions, especially for those living in rural areas and /or low-income families

People living in rural and deprived areas



People living in rural
and deprived areas

- wide variation in PT use with respect to the level of urbanisation: **residents in large towns are almost twice as likely to use urban public transport** as those in small to middle-sized or in rural villages
- observed differences in the use of public transport reflect not only the **availability**, but also the **accessibility**, of public transport in terms of proximity to bus, metro or tram stations
- in rural areas **mobility needs are mostly satisfied by the use of cars**
- people living in remote and low-density rural areas usually have to cope with **poor and infrequent public transport services**

Main mobility barriers affecting vulnerable to exclusion user groups

Depending on the needs of different social groups, some conditions are more important than others

| SOCIAL GROUPS | AVAILABILITY (AND TIME BUDGET) | ACCESSIBILITY | AFFORDABILITY | ADEQUACY | AWARENESS |
|---|--------------------------------------|---------------|---------------|----------|-----------|
| Low income and unemployed | | | ✓ | ✓ | |
| Elderly people | | ✓ | | ✓ | ✓ |
| People with reduced mobility | | ✓ | | ✓ | |
| Women | ✓ | ✓ | | ✓ | |
| Migrants and ethnic minorities | | | ✓ | | ✓ |
| Children and young people | ✓ | | ✓ | ✓ | |
| People living in rural and deprived areas | ✓ | | ✓ | | ✓ |

Our project: what we are doing



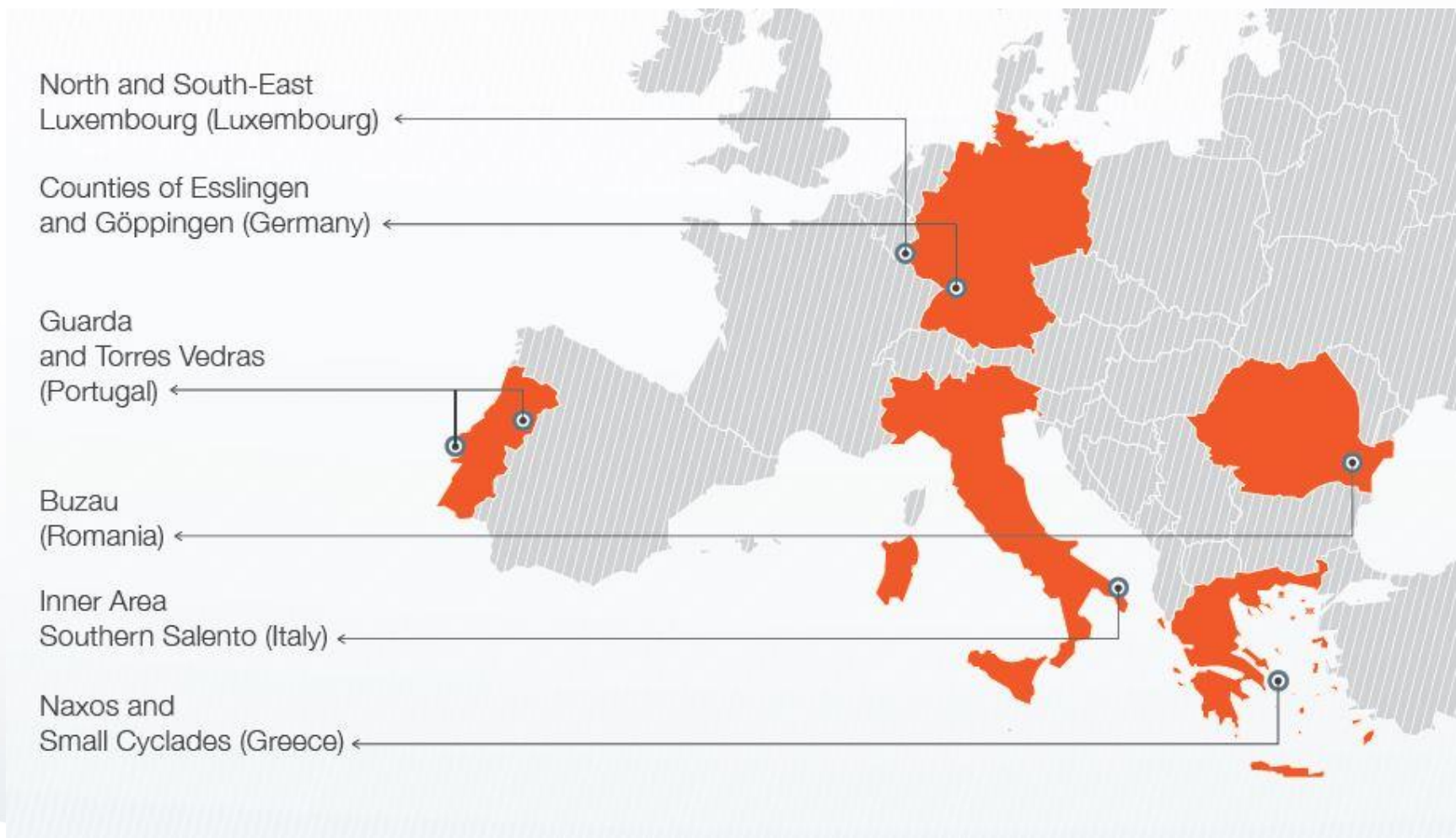
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H2020 Research and Innovation Action (RIA) - Topic MG-8.4-2017,
“Improving accessibility, inclusive mobility and equity: new tools and business models for public transport in prioritised areas”



3-years: **Oct 2017- Sept 2020**

Fieldwork in 6 study regions across Europe



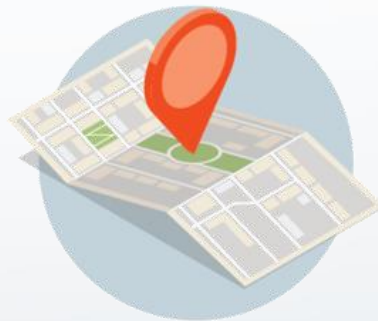
Final goal: explore and develop new business models for collective passenger transport

USER-ORIENTED and not a technology push approach

- Small scale, modular and easily replicable mobility services provided at affordable prices or with minimum subsidies
- Bundling and mixing dispersed, special and non-coordinated trip requests and needs



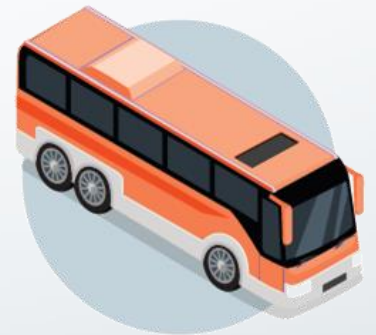
Informal ride-sharing and van pooling



Community transport services



Innovative ride-hailing mobility services



On demand flexible public transport

Key outputs and how to get involved



18 Focus Group workshops



Insights package
Solutions to transport poverty for startups



European multidisciplinary workshop



Showcase event

Startup Lab



20

startups to benefit from a one-week follow-up period

5

startups to benefit from an in-depth three-month follow-up period

4

new inclusive mobility solutions being tested

Follow us

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www.hireach-project.eu/content/newsletter



HiReach

innovative mobility
solutions to cope
with transport poverty

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