



HiReach

innovative mobility solutions
to cope with transport poverty



Transport poverty and EU SPI

www.hireach-project.eu

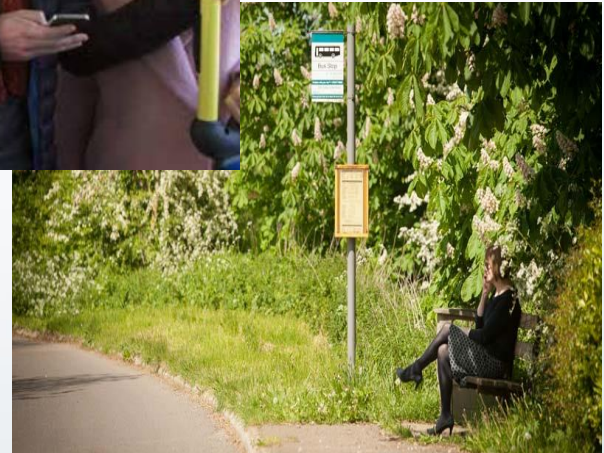


This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement no. 769819.

The problem - Rationale

Inadequate transport infrastructure has a direct impact on our daily lives, affecting us at multiple levels such as:

- Work
- Education
- Entertainment
- Health
- Sociality etc.



What is Transport Poverty?

A term that still needs to be fully defined and refers to the **social effects of transport-related deficiencies.**

Transport access  Social inclusion












Social exclusion + a vicious cycle that further disadvantages those in need



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

HiReach project



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”***



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

Addressing the needs of potentially vulnerable to exclusion 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

Transport Poverty and User Groups

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

Geographical and spatial elements affecting mobility poverty

Target areas



Rural



Peri-urban



Urban peripheral

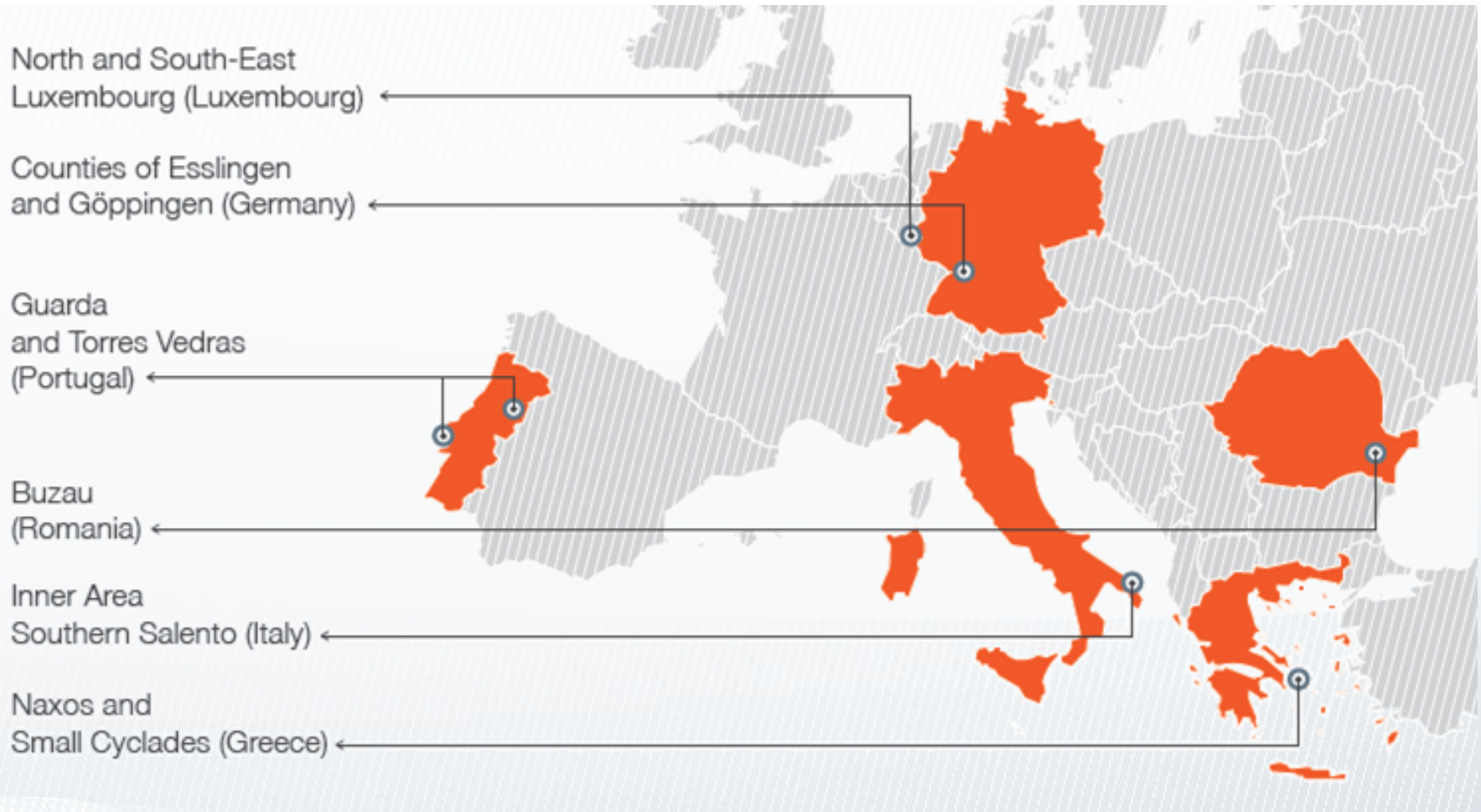


Remote



Deprived

HiReach Study Regions



Study regions' selection criteria

1. Opportunities to involve mobility needs of different social groups
2. Assessment of socio-demographic negative factors
3. Geographical characteristics
4. Assessment of geographical negative factors
5. Mobility system and its characteristics
6. Ongoing initiatives that could be connected to HiReach
7. Presence of key stakeholders
8. Other aspects: start-ups being active in the field, social innovation initiatives, etc.



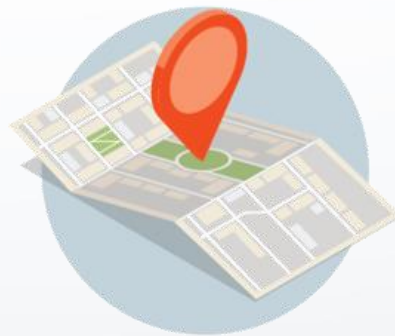
Final Goal: Explore and develop new business models for collective passenger transport

Small scale, modular and easily replicable mobility services provided at affordable prices or with minimum subsidies

USER-ORIENTED and not a technology push approach



Informal ride-sharing and van pooling



Community transport services



Innovative ride-hailing mobility services



On demand flexible public transport

First step: Setting the problem

- Analysing mobility attitudes of vulnerable social groups via desk research and fieldwork activities

The work in study areas

- involvement of local communities and policy makers
- Interviews with local experts
- 1st Focus Group



Differentiated study areas



Micro-analysis



18 Focus Group workshops

Second step: Exploring ideas



20 handpicked innovative transport solutions assessed according to 4 dimensions:

- ICT interoperability
- Sharing economy principles
- Attractiveness
- New organizational and business models



Generation of ideas

- European multidisciplinary workshop
- 2nd Focus Group in study areas

Interviews with key players



Recommendations



Advantages and limitations associated with mobility solutions

Main Drivers

- ✓ strong interinstitutional commitment
- ✓ well-established and simple organisational schemes
- ✓ voluntarily commitment of initiators
- ✓ support (financial or other)
- ✓ IT systems
- ✓ flexible operational model

Principal Barriers

- ☐ convince people to use different mobility services
- ☐ increase the usage of the service
- ☐ get permanent funding from a public authority
- ☐ coordinate all the tasks if many stakeholders are involved
- ☐ instalment of technology

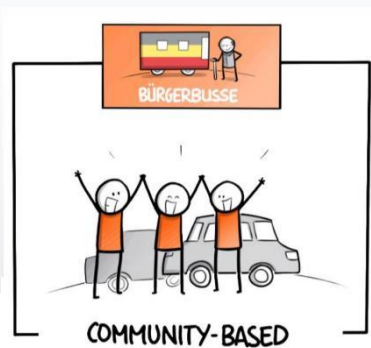
Inclusive mobility solutions



- delivered by **public transport** operators or
- **local businesses** (e.g. taxi companies receiving subsidies in rural areas), but may also be directly organised by a **public entity**



- are of a **commercial nature resulting in a profit to the entity** (that owns it or has invested in it).
- include more **traditional options** - street taxis and pre-booked private hire vehicles other solutions offered - vehicle sharing and ride hailing



- Provided by **non-profit entities** receiving minimum subsidies
- Offering informal or **peer-to-peer** ride-sharing services (carpooling) or shared “village cars”
- Operating **community-owned** bus services often referred to as “citizen buses”

20 handpicked solutions

Publicly contracted

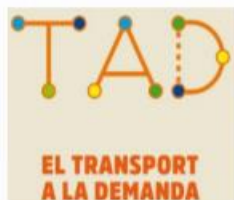


Bummelbus

Flextrafik



local link
Your Local Bus Service



TÁXIS COLECTIVOS



Community-based



Village House Service
Nordregio



Fairfahrt



Market-based



Shortlisted services that were more compliant for the areas under study

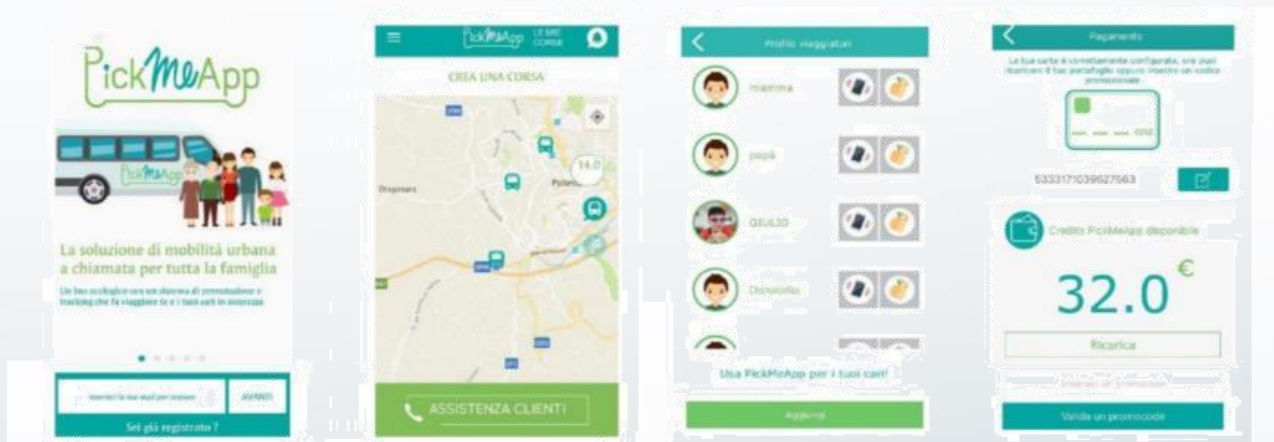
PickMeApp

Market based Service



CHARACTERISTICS

- ✓ Ride Hailing Service
- ✓ Smartphone app and call center in assisting users with special needs - important as a communication channel and creates trust between the transport operator and the final user
- ✓ Strong suitability especially for elderly people for whom it is a good way to be more autonomous and independent
- ✓ Willingness to use the service also for commuting trips
- ✓ Willingness to pay for this service as the prices are not a barrier or an increase in the travel budget



Shortlisted services that were more compliant for the areas under study

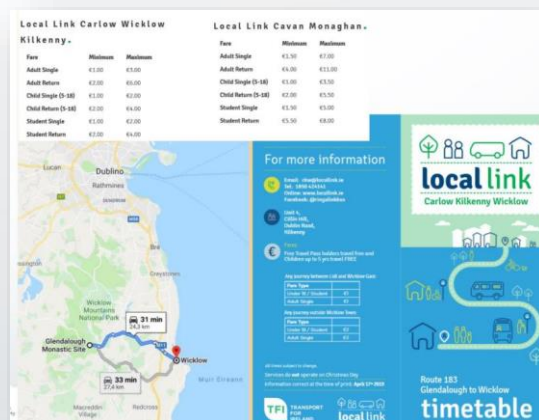
Local Link

Publicly contracted
Service



CHARACTERISTICS

- ✓ Service which can be adapted or built around the effective needs/demand
- ✓ Substantial trust in relation to the visual identity, clarity of the timetables and communication campaigns.
- ✓ The aspect that the local offices are managed by the communities was seen as positive.



Shortlisted services that were more compliant for the areas under study

Dörpsmobil

Community Based
Service



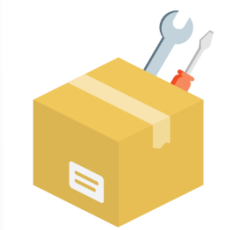
CHARACTERISTICS

- ✓ Based on an e-car sharing approach and an associated rental car service, it increases the sharing culture
- ✓ It would be used more as an additional mobility service and not “substitutive” mobility service
- ✓ The fact that someone is available to drive and chauffeur was seen as positive, especially for elderly people



Third step: Developing solutions

- Pre-acceleration for ideas involving startups, innovative entrepreneurs and local communities



- Open software tools/APIs
- Insights package “Solutions to transport poverty for startups”
- Integration with the European transport startup ecosystems
- HiReach Start-up Lab



Selection of 4 new inclusive mobility solutions for testing



Transferability of the proposed and tested solutions

HiReach Start-up Lab

Explore and test new solutions based on the creative work of startups, innovative entrepreneurs and local communities



Provide open source tools, guidance and support to developers as well as testbeds for new inclusive mobility solutions

Open call for startups



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

HiReach Start-up Lab three stages

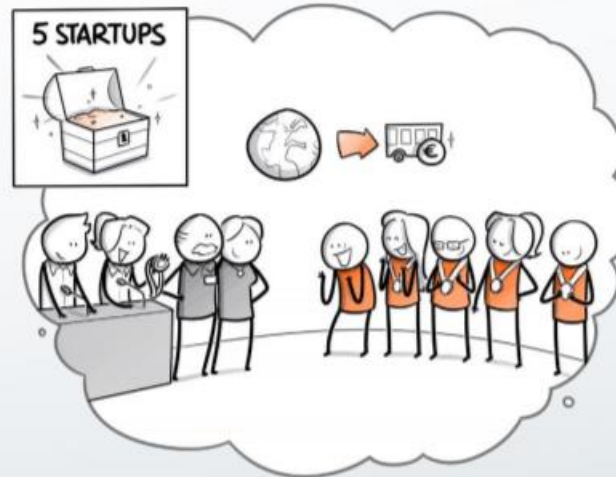


1 Startup Bootcamp

- 20 startups
- 1-week bootcamp
- Ideas and prototypes evaluated based on market-potential

2 Startup Acceleration

- 10 startups
- 3-month programme
- Detail the technical solutions
- Open toolbox for new mobility products



3 Testing and Transferability

- 5 inclusive mobility solutions for testing
- Transferability of tested solutions



HiReach Start-up Lab: one-week bootcamp



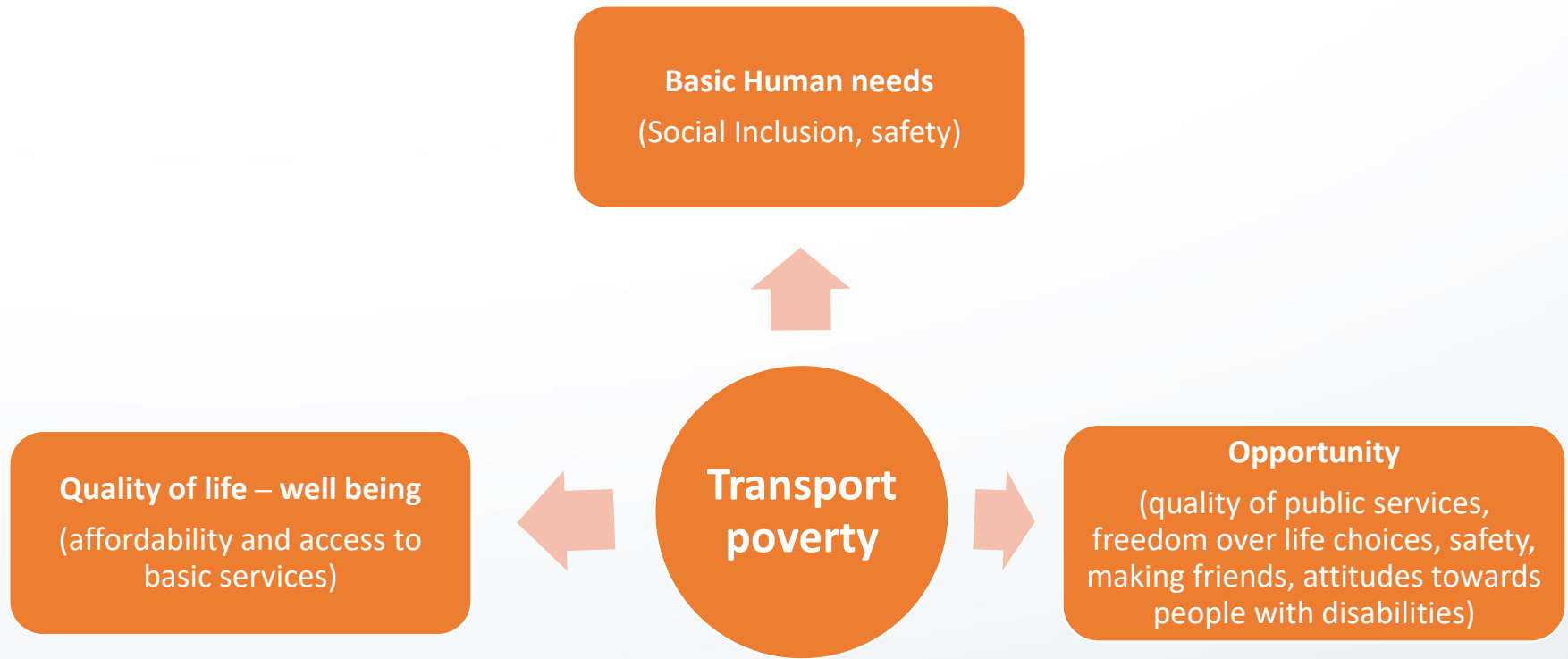
The HiReach Take-Up Group



Transport poverty and EU SPI



Transport poverty – Societal aspects: Links



Transport (poverty) impact on SPI indicators

Dimension	Component	SPI indicator	Impact*
Basic Human Needs	Nutrition and Basic Medical Care	Mortality rate before age 65	*
		Infant mortality	
		Unmet medical needs	
		Insufficient food	
	Water and Sanitation	Satisfaction with water quality	
		Lack of toilet in dwelling	
		Uncollected sewage	
		Sewage treatment	
	Shelter	Burdensome cost of housing	
		Satisfaction with housing	
		Overcrowding	*
		Lack of adequate heating	
	Personal Safety	Homicide rate	*
		Safety at night	***
		Traffic deaths	***

Transport (poverty) impact on SPI indicators

Dimension	Component	SPI indicator	Impact*
Foundations of Wellbeing	Access to Basic Knowledge	Secondary enrolment rate	**
		Lower secondary completion only	**
		Early school leaving	**
	Access to Information and Communications	Internet at home	
		Broadband at home	
		Online interaction with public authorities	
	Health and Wellness	Life expectancy	**
		General health status	**

Transport (poverty) impact on SPI indicators

Dimension	Component	SPI indicator	Impact*
Opportunity	Personal Rights	Trust in the political system	**
		Trust in the legal system	*
		Trust in the police	*
		Quality and accountability of government services	***
	Personal Freedom and Choice	Freedom over life choices	***
		Teenage pregnancy	
		Young people not in education, employment or training	*
		Corruption	
	Tolerance and Inclusion	Impartiality of government Services	***
		Tolerance for immigrants	***
		Tolerance for minorities	***
		Attitudes toward people with disabilities	***
		Tolerance for homosexuals	*
		Gender gap	***
		Community safety net	***
	Access to Advanced Education	Tertiary education attainment	*
		Tertiary enrolment	*
		Lifelong learning	*

How can stakeholders be part of the policy agenda to address transport poverty

Key stakeholder	Involvement		
Local administration			
Public transport users and citizens			
Public transport operator			
Schools			
Research institutions			
Private companies			

Discussion - Questions

- Do you meet transport poverty issues in your regions? Which sub concepts of transport poverty applies in your region.
- Which vulnerable groups are more affected in your region?
- Are there any policies and/or initiatives addressing transport poverty in your region?
- Which stakeholders are more involved in your region to take the necessary policy initiatives for addressing transport poverty?
- Could the solutions we presented be replicated in your region?
- Startup lab – Could you work in such a way with the startups in your region?



HiReach

innovative mobility
solutions to cope
with transport poverty

Vivian Kioussi

Mariza Konidi

INTRASOFT International

THANK YOU



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