

# How to make MaaS work?

Insights from H2020 MyCorridor project

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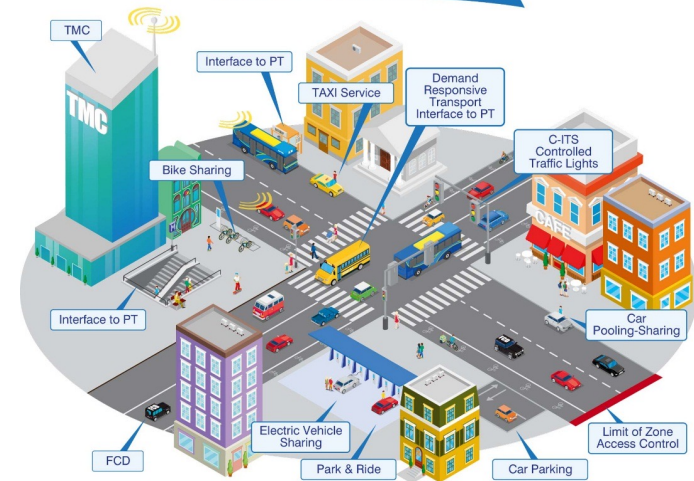
PriMaaS & CISMOB  
Main Interregional Exchange of Experience Event  
26th to 28th January 2022

- Italian ITS Association founded in 1999 as a no profit association with the mission to foster a user-centric development and deployment of ITS and increase awareness and spread knowledge and information on ITS
- Membership activities: coordination of Working Groups on strategic issues concerning ITS, with the aim of producing useful and incisive documents to relevant Authorities; promoting the interoperability of ITS applications; supporting the updating and further development of the National Plans on Telematics applied to Transport; long-standing cooperation with *Italian Ministries and sister ITS Associations*
- EU-funded transport research – FP7, H2020, CEF, Interreg Europe, etc.
  - Multi-stakeholder engagement, dissemination & communication
  - Mobility use case design, demo/pilot coordination & monitoring
  - Evaluation & impact assessment, evidence-based policy making



Mobility as a Service in a multimodal European cross-border corridor

## Our World with MaaS



To facilitate *sustainable travel in urban & interurban areas & across borders*

replace *private vehicle ownership by private vehicle use*,  
 • one element in an *integrated/multi-modal MaaS chain*

- provision of an *innovative one-stop-shop platform*
- combine connected traffic management, ITS and multi modal mobility, infomobility and added value services
- thus facilitate modal shift.

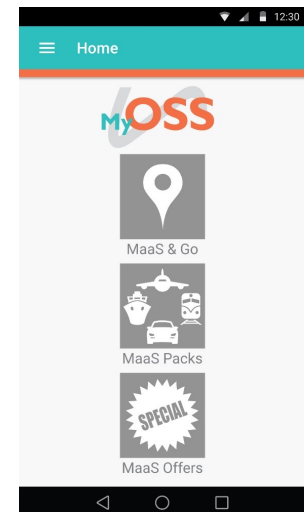
• Building a **one-stop-shop** for MaaS!

• **Services (multimodal):**

- Mobility services
- Infomobility services
- Traffic management services (TM2.0 → TM2.1)
- Added value services (cultural, sports, etc.)



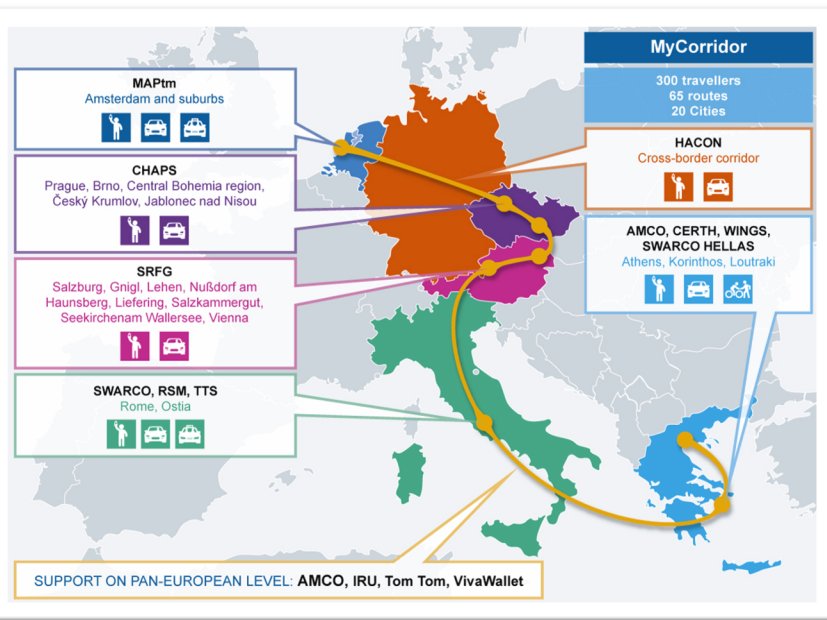
*Integrate several types of services to offer in a MaaS pattern.*



## MyCorridor: real-life user trials



### The idea



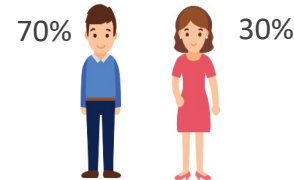
### Targets



### Overall pilot results



25 transportation services integrated into the one-stop-shop platform:  
 6 mobility services  
 11 infomobility services  
 4 traffic management services  
 1 aggregated added value service  
 3 external trip-planners, provided also as an aggregated hybrid trip planner.



80% users are highly educated (higher or postgraduate education) and 60% between 25-45



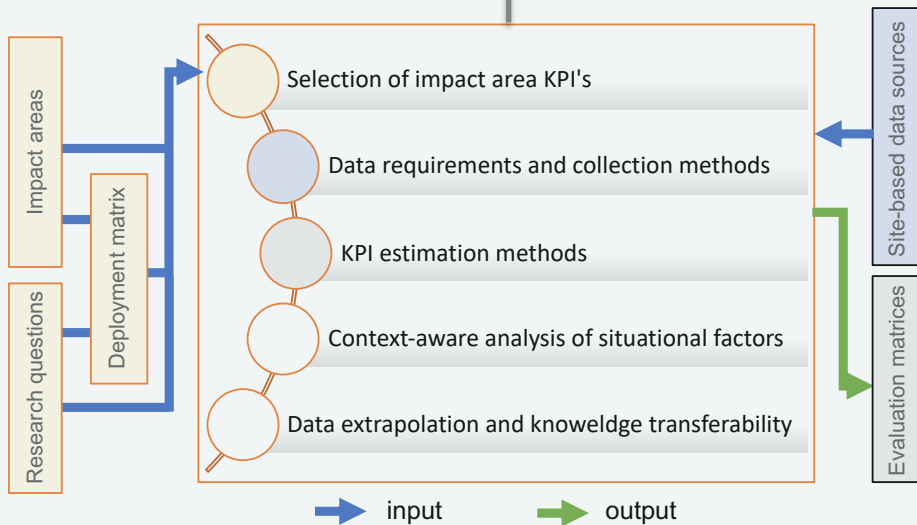
60% users have at least one car in the household



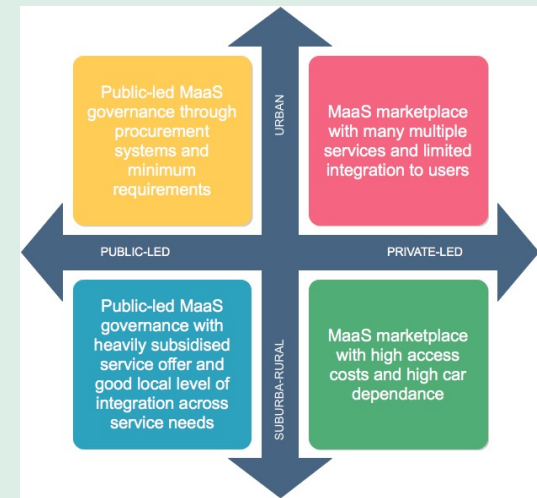
60% users are family members, living with partners and/or with children

# MyCorridor: two-stage impact assessment

KPI levels: Individual/user level; business/organisational; societal



- Definition of alternatives
- Stakeholder criteria and weighting factors
- Evaluation and ranking of alternatives



*Semi-quantitative assessment to assess impacts on environment, economy, society using semi-quantitative data (both objective and subjective ones)*

*Simple MCA to evaluate future deployment paths of MyC; potential impacts on businesses, service providers and operators; req. changes to practices, policies and regulations*

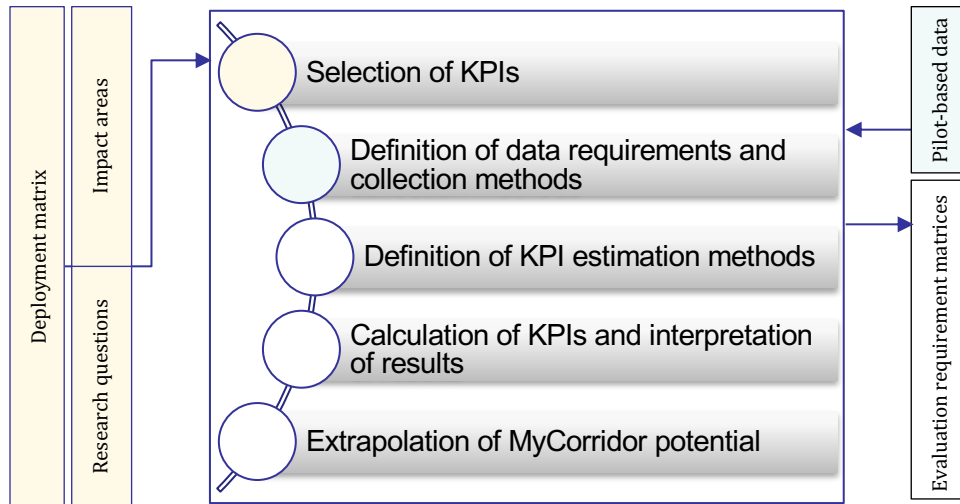




## Objective & work performed



Core Impact Assessment (CIA) methodology (quantitative, both objective & subjective)



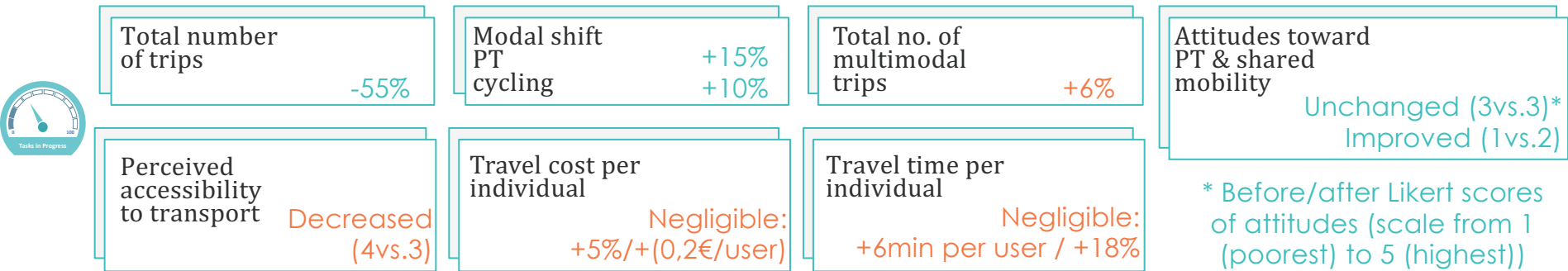
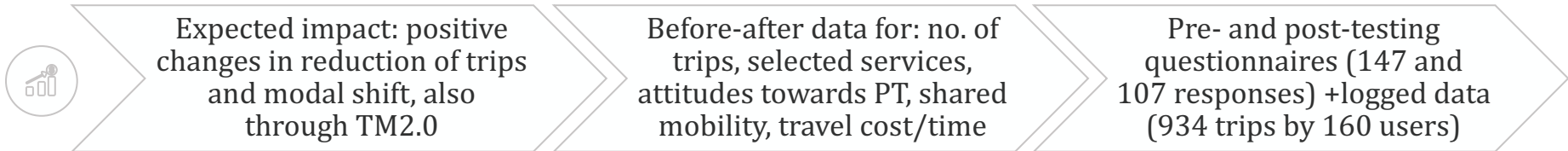
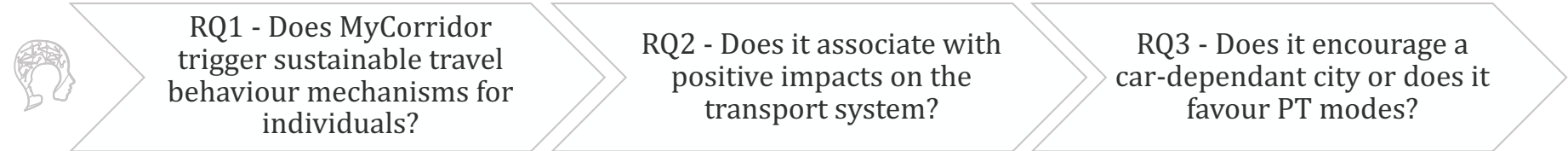
## KPIs and data needs by assessment level

	Assessment level	KPI description	KPI qualitative result
KP1	Individual/user level	Number of trips	
KP2		Modal shift	
KP3		Multimodal trips	
KP4		Attitudes towards PT and shared mobility	
KP5		Perceived accessibility to transport	
KP6		Travel cost	
KP7		Travel time	
KP8	Business/organisational level	No. of customers	
KP9		Customer segments	
K15	Societal level	CO <sub>2</sub> emissions reduction	
K16		Resource efficiency	
K17		Citizens accessibility to transport services	
K18		Citizens' overall comfort & well-being	
K19		Trustworthiness in transport	
K20		Security and safety of citizens	
K21		Modification of the vehicle fleet	

Positive impact	
Negligible impact	
Minimum negative impact	
Not possible to assess	

MyCorridor impacts on the environment, the economy and society by different assessment levels, i.e. individual, business and societal levels

# MyCorridor: core results at user level



# MyCorridor: core results at business level



RQ8 - What type of impacts can be expected for individual company business operations?



Expected impact\*:  
service providers  
increase in their  
customer basis

Before-after data  
for: use of specific  
services, modal  
split

From baseline  
traveller  
questionnaires  
(147)

From MyCorridor  
logged data (934  
trips by 160  
users)



Number of customers **Improved**

- +15% (101) bus users
- +10% (62) cyclists

Customer segments

- males, 26-45
- highly educated
- for family members, with partners and/or children (60%)

\*: additional impacts regarding organisational changes, novel business models and the instauration of data sharing practices are addressed as part of stakeholder consultations



# MyCorridor: core results at societal level



RQ4 - Does MyCorridor result in positive societal changes?

RQ5 - Is the wide general public going to benefit from the intended positive impacts or is it only attractive to a niche group of users?



Expected impact: positive changes in CO<sub>2</sub>, comfort, trustworthiness, safety and security

From baseline and post-trial traveller questionnaires (147 and 107 responses)

From MyCorridor application logging trip data (934 trips by 160 users)



Road-based CO<sub>2</sub> emissions (TM2.0)

-23%

General comfort and wellbeing

Decreased (4vs.3)

Transport trustworthiness

Unchanged (4vs.4)

Personal safety

Unchanged (4vs.4)

Transport security

Unchanged (4vs.4)

# To wrap up...

## Operational:

- Integration of a **large number of mobility services - dense, frequent and integrated**
- **Not only innovative functionalities** (booking & payment) but also serving basic needs (mapping and routing)
- The **MaaS App has to show a clear added value** (compared to pure navigation apps for example) and has to be easy to use, clearly structured and intuitive.
- **TM features** valued by car drivers as MaaS users

## Technical:

- An open, fair and transparent data governance system
- **Larger volumes of user group specific data** are needed for more focussed evaluation of MaaS uptake
- **Awareness raising of key benefits** and supporting policies
- MyCorridor triggered **sustainable travel** and generated positive economic and social impacts **despite the challenging context**

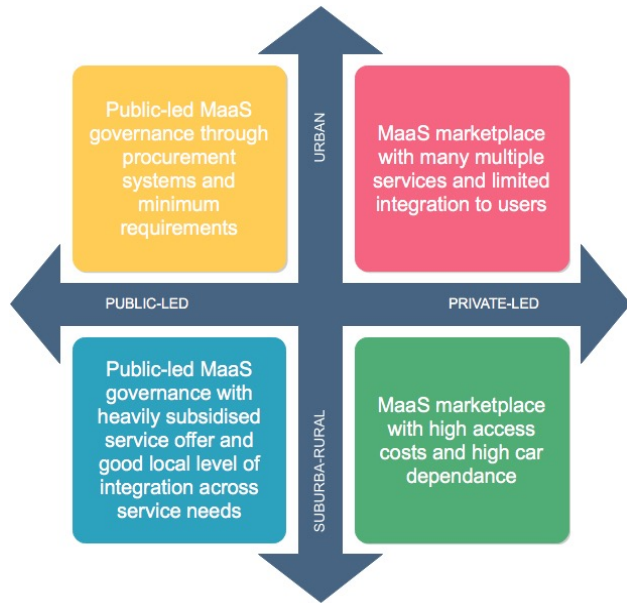


WHAT HAVE  
YOU  
LEARNED?

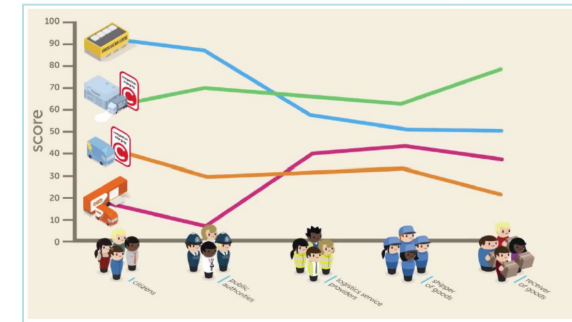


WHAT HAVE  
YOU  
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**Objective**



**Method: simplified multi-criteria analysis**

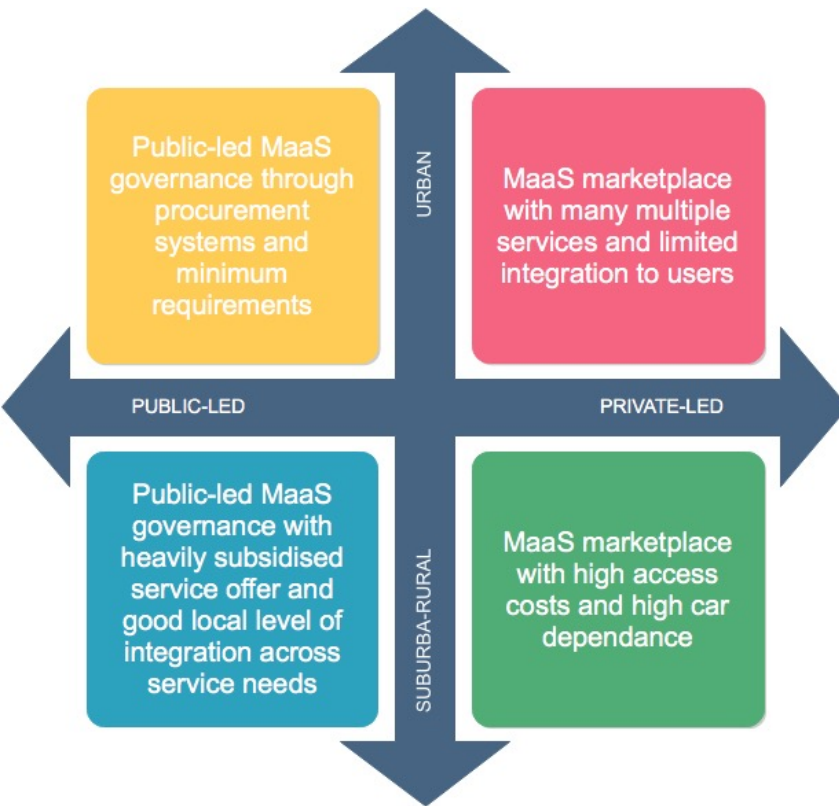


*average weighted criteria by stakeholder group and overall*

*expected impact of each scenario across the criteria for each stakeholder group and by average*

**Multi-stakeholder weighted evaluation chart (across criteria and by stakeholder group)**

Evaluating **future deployment** paths addressing overall perceived impact of MaaS and relative contextual factors; how impact would vary in accordance with business model and **deployment setting (public vs private; urban vs rural)**

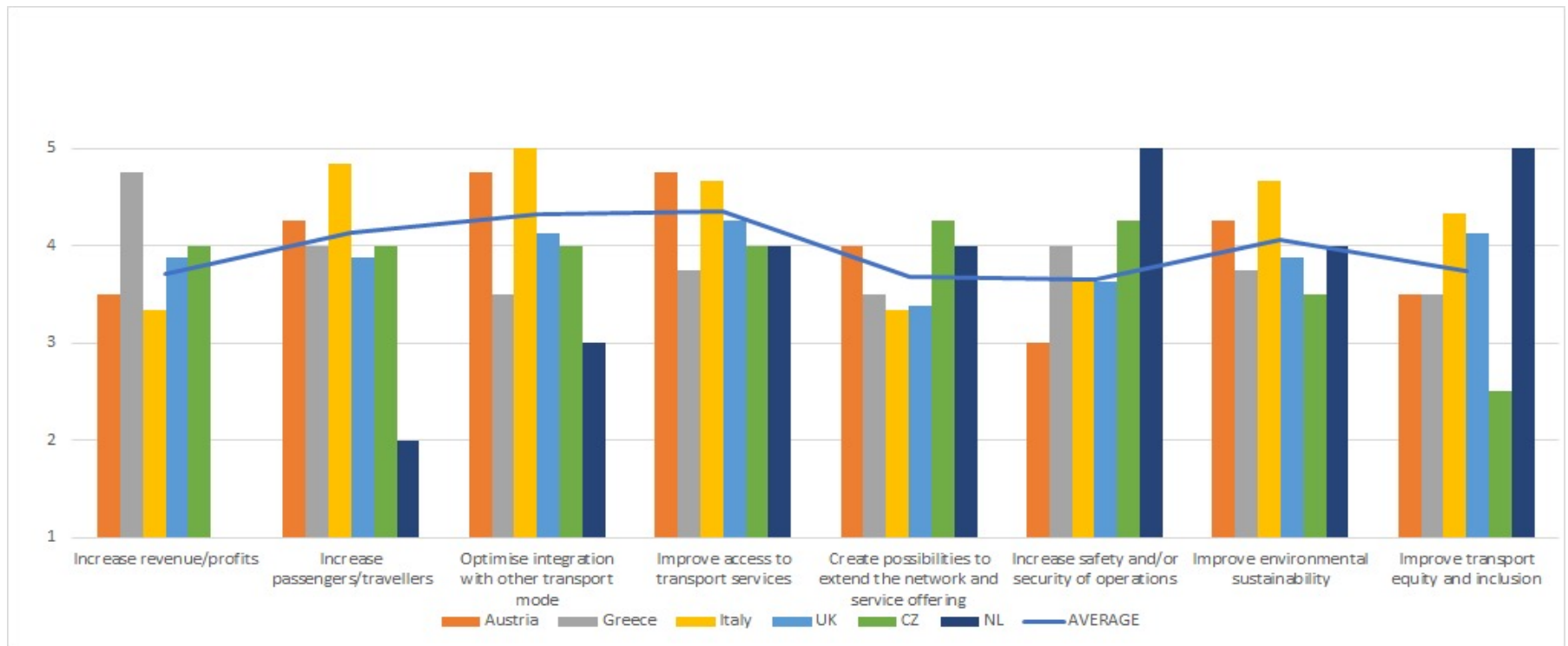


- **Urban – Private-led:**
  - Strong competition among players over profitable customer demand segments
  - Services integration potentially low restricting wide adoption
- **Suburban – Private-led**
  - High access cost due to low population density
  - Lack of critical mass produces low QoS and dependency on private car
- **Urban – Public-led:**
  - Services delivery is heavily driven by procurement systems and minimum requirements
  - MaaS offer seamlessly meeting diverse needs of customers
- **Suburban – Public-led:**
  - Heavily subsidised services offering service at no more than satisfying levels
  - Public-led nature does provide a good level of integration such as school trips, hospital visits, etc

# Simplified MCA: key results

31 focus group participants:

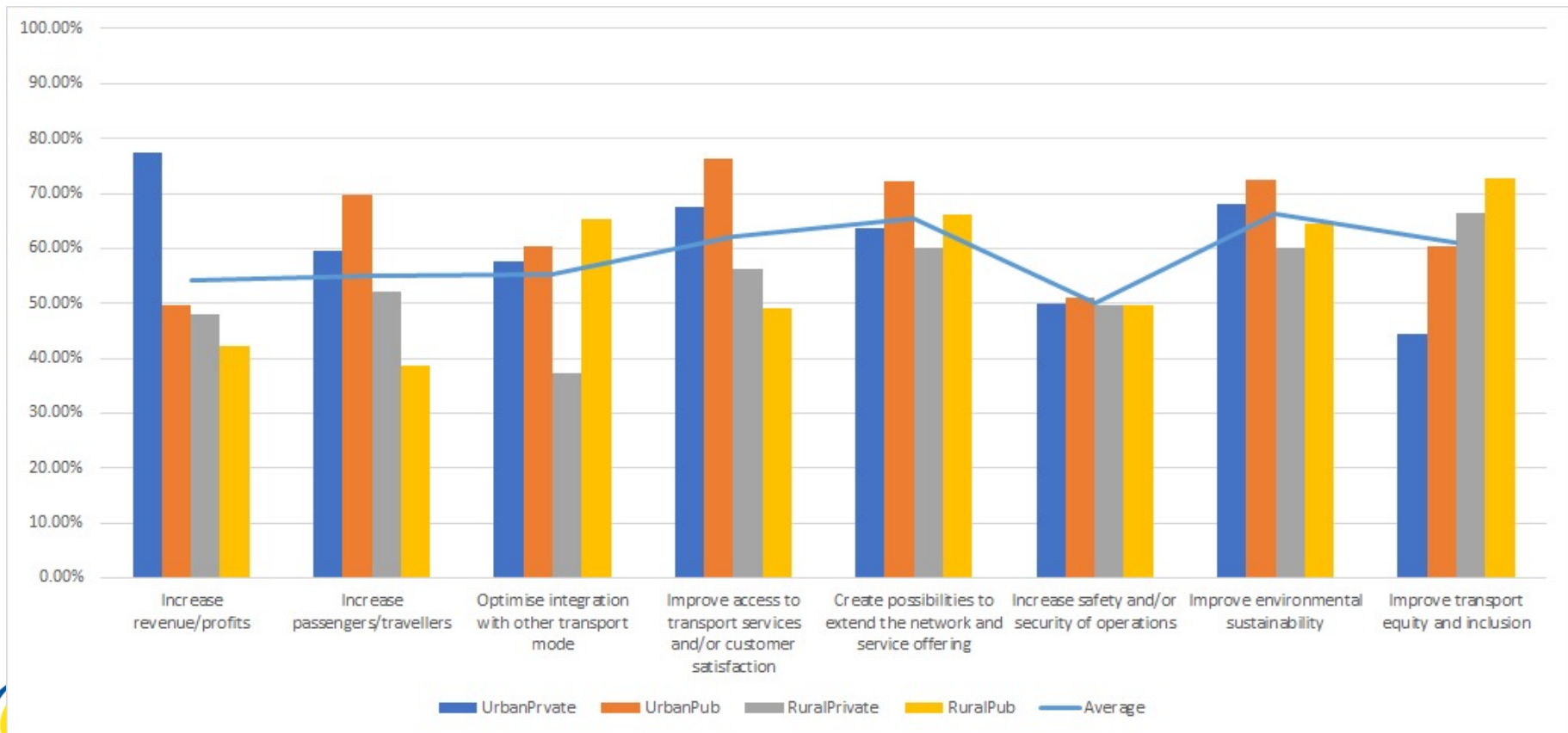
- Country (AT = 8; CZ = 4; GR = 4; IT = 6; NL = 1; UK = 8);
- Role (Policy = 5; Mobility and transport = 14; MaaS ICT and aggregators = 9; others = 3)



# Simplified MCA: key results

31 focus group participants:

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- Optimising services and improving access are the highest rated impact criteria
- Urban public is the most amenable context for change
  - MaaS offers a means for integration and expanding service
- Rural private is the most challenging scenario
  - But potential market opportunity for niche providers
- Reasonable consistency of findings across countries – Austria and Italy value rural more than others
- Not a private / public distinction, but public-private partnership
- Greatest barriers are around data, data policy and equitable data / revenue sharing
- Covid-19 has reset transport, leading to new opportunities

**TTS**  
**ITALIA**

Associazione Italiana  
della Telematica  
per i Trasporti e la Sicurezza

**Thank you for your kind attention!**

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