The SEAMLESS project

Presented by Mia Xiaoyun Zhao & Bhavana Vaddadi

Cismob Conference 18th May 2022

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The KOMPIS project – a first step

KOMPIS: Kombinerad Mobilitet som tjänst i Sverige (Combined mobility as a service in Sweden)

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- ✓ Formulate a roadmap

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- ✓ Stimulate new mobility service pilots

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- ✓ Develop an evaluation framework to support structured data collection

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- ✓ Stimulate new mobility service pilots
- ✓ Develop an evaluation framework to support structured data collection
- ✓ Develop a database where data from different pilots could be collected for later analysis

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MaaS is depicted as a means to achieve desirable societal goals for a more sustainable transport system, but... **what are the actual impacts of MaaS?**

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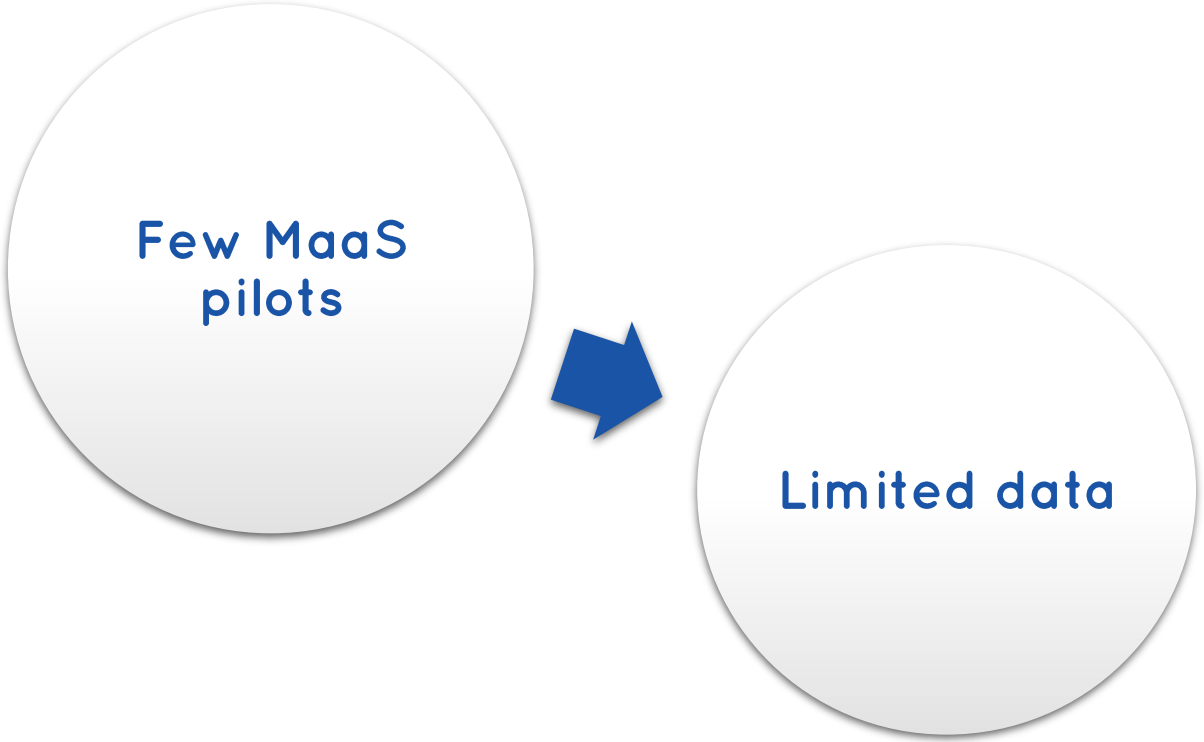
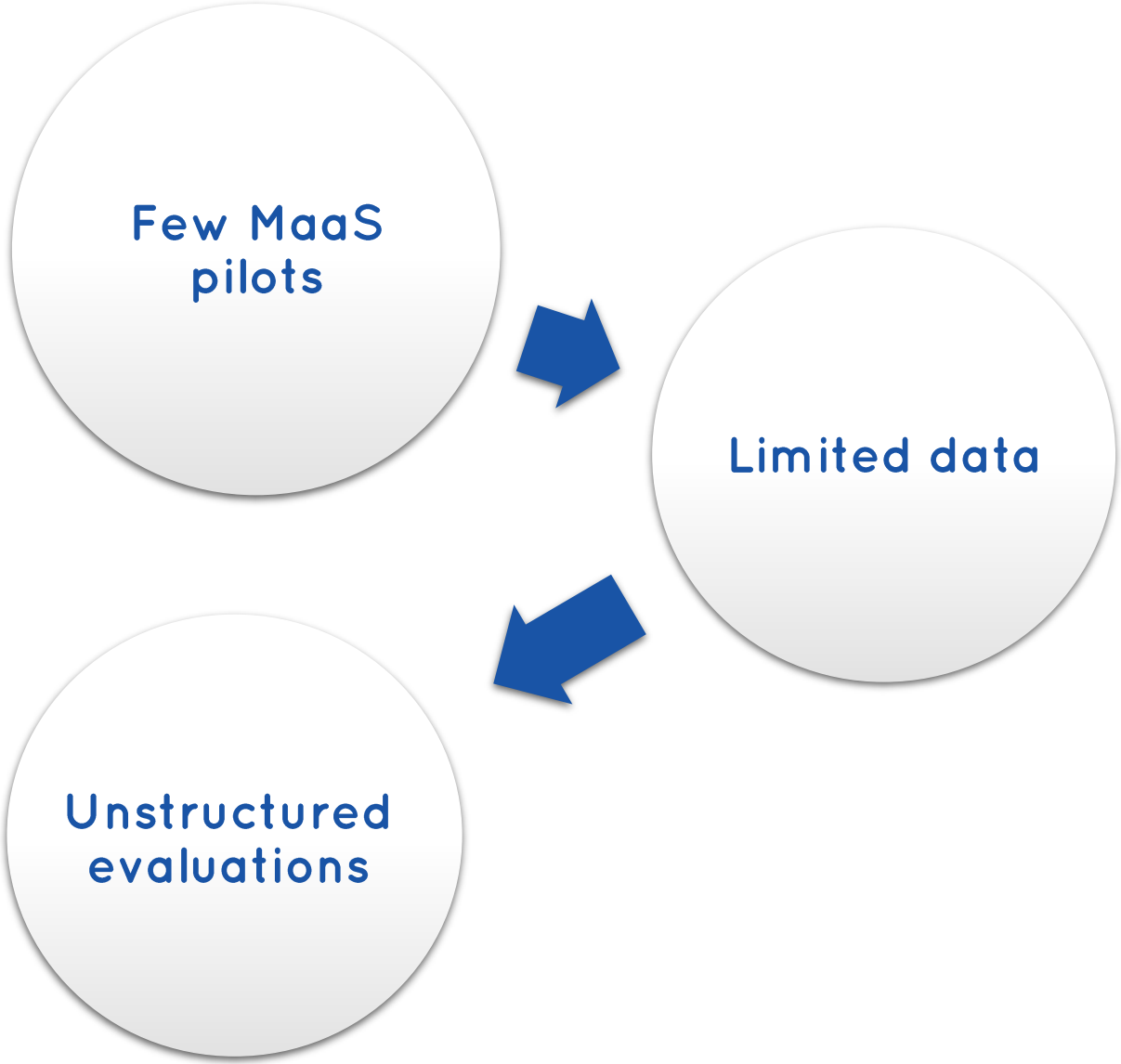
Few MaaS pilots


Few MaaS pilots
Limited data


Few MaaS pilots
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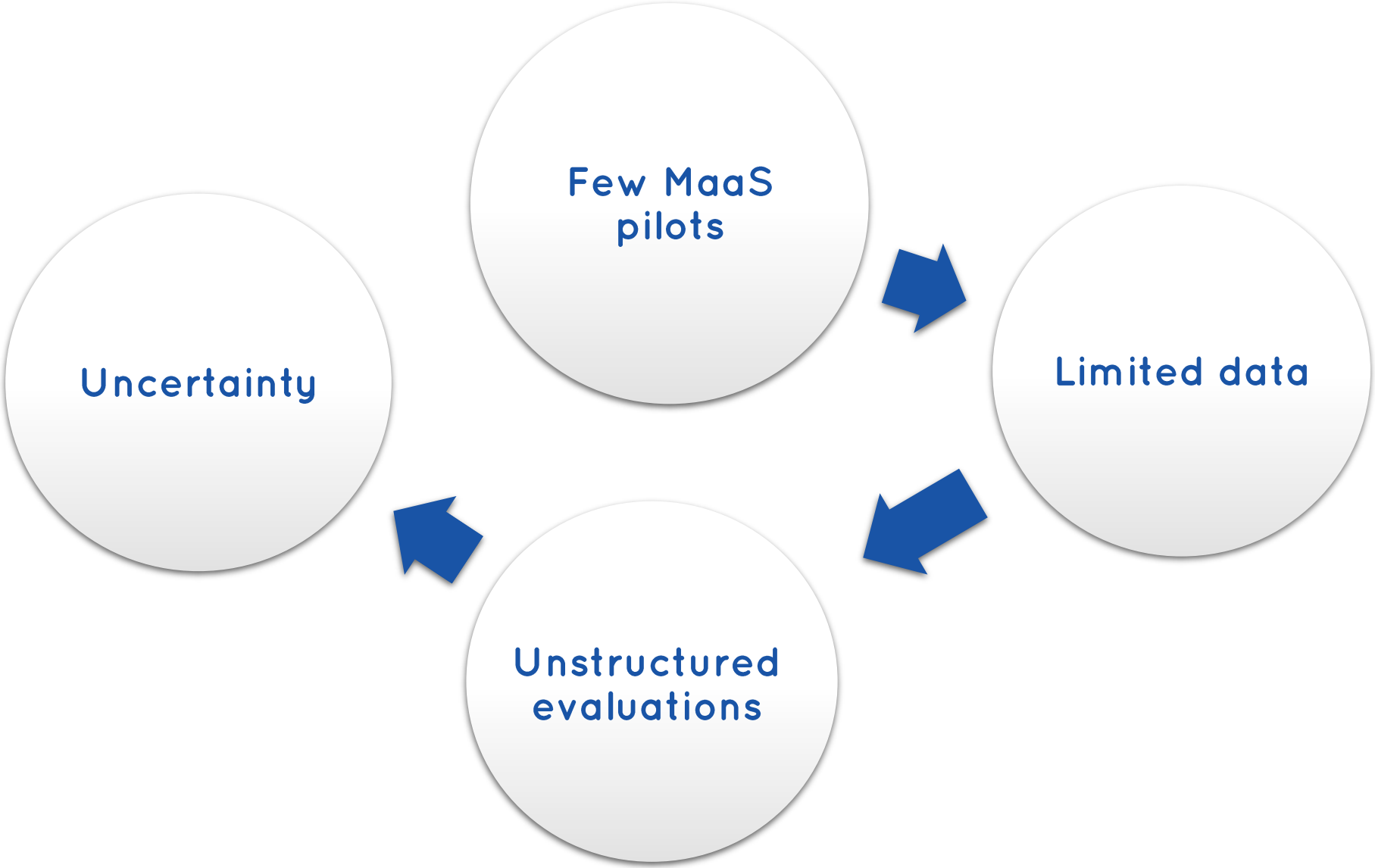
Unstructured evaluations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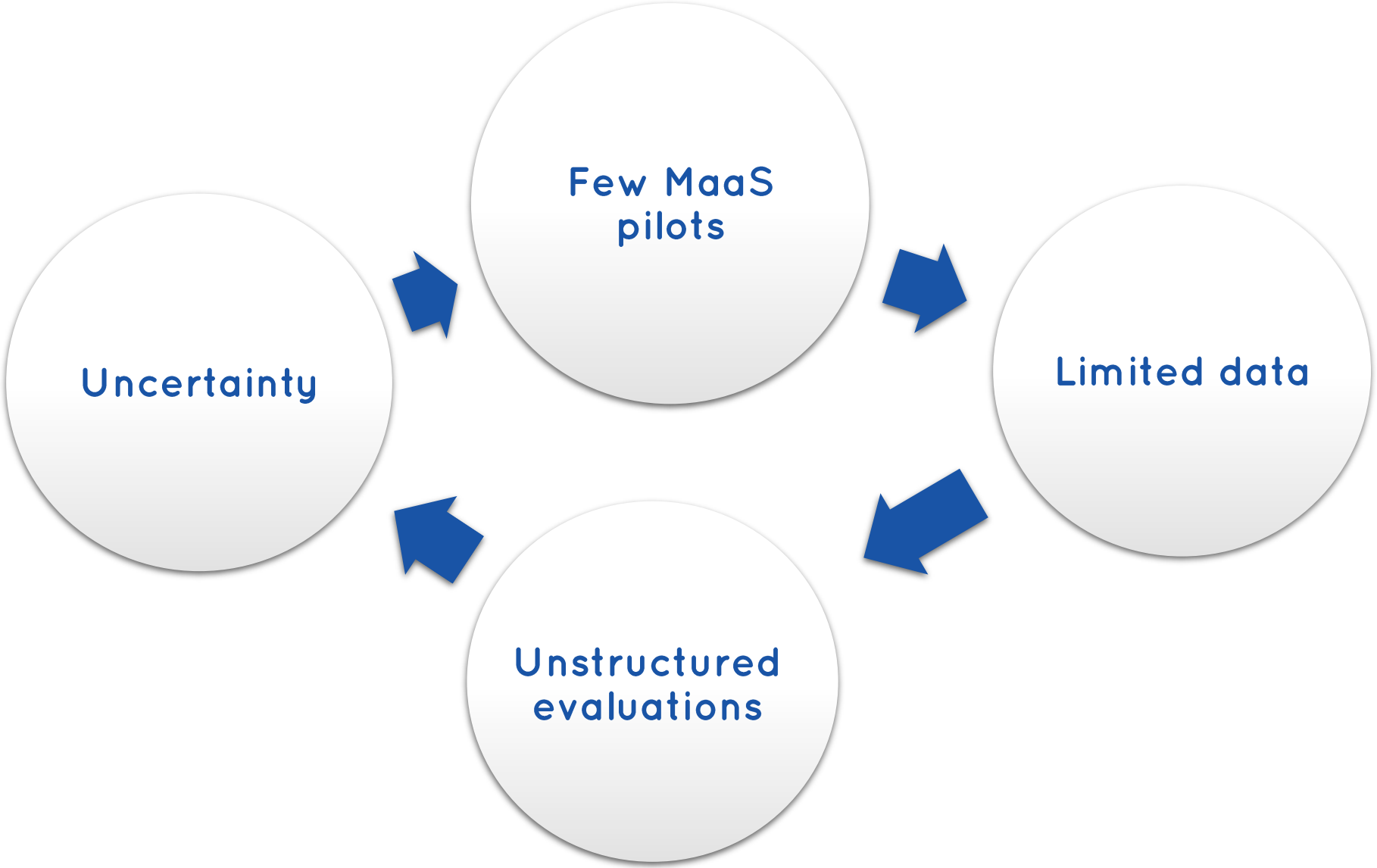
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Systematic Evaluations and Assessments of MaaS : Leading towards Sustainable Solutions (SEAMLESS)

- Runs from 2020-2023
- Funded by the Swedish Energy Agency

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SEAMLESS – the core team

- Researchers from RISE (project mgmt.), Chalmers University of Technology and KTH, all with knowledge and experience of MaaS

Micro-level perspectives


Jana Sochor &
MariAnne Karlsson

Meso-level perspectives


Göran Smith & Steven Sarasini

Macro-level perspectives


Bhavana Vaddadi & Mia Xiaoyun Zhao

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SEAMLESS – the opportunity

- A lack of **robust and systematic** ways to **assess** the sustainability of MaaS poses problems:

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SEAMLESS – the opportunity

- A lack of **robust and systematic** ways to **assess** the sustainability of MaaS poses problems:
  - At all levels of government: **"Is MaaS good for society? Can it help to fulfil transport policy goals?"**

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- A lack of **robust and systematic** ways to **assess** the sustainability of MaaS poses problems:
  - At all levels of government: "Is MaaS good for society? Can it help to fulfil transport policy goals?"
  - In the private sector: "What is an attractive MaaS service? How can we promote behavioural change? Is our service sustainable and legitimate?"

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  - Different organisational arrangements
  - Different geographical settings

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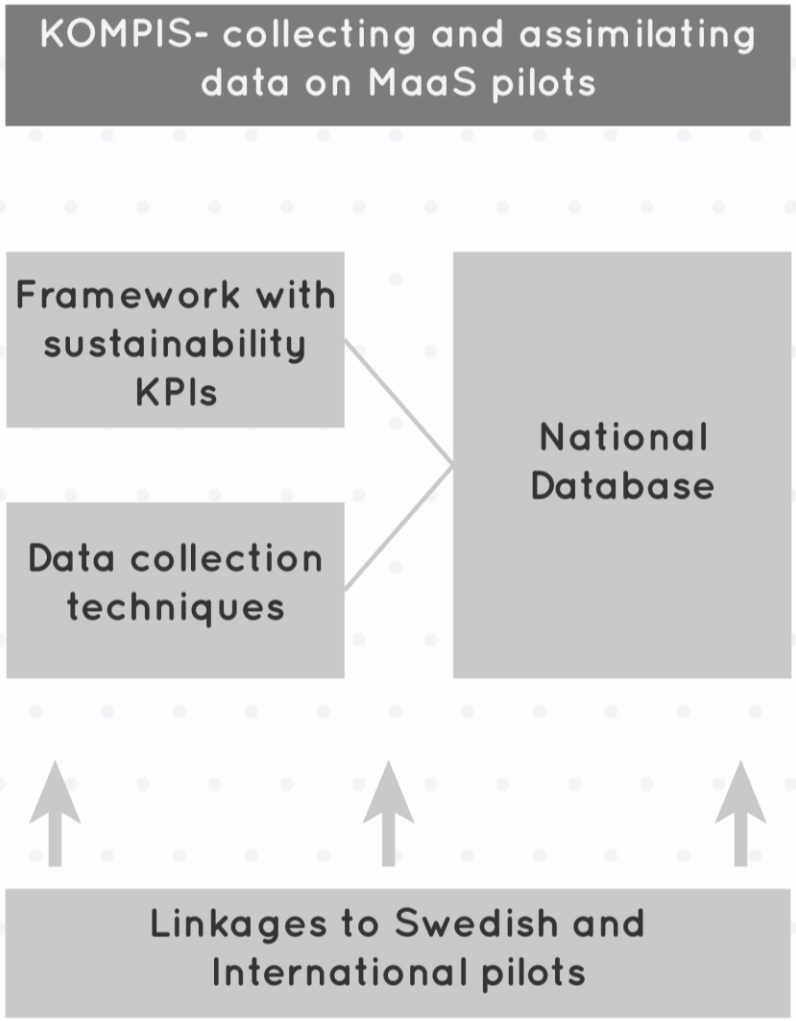
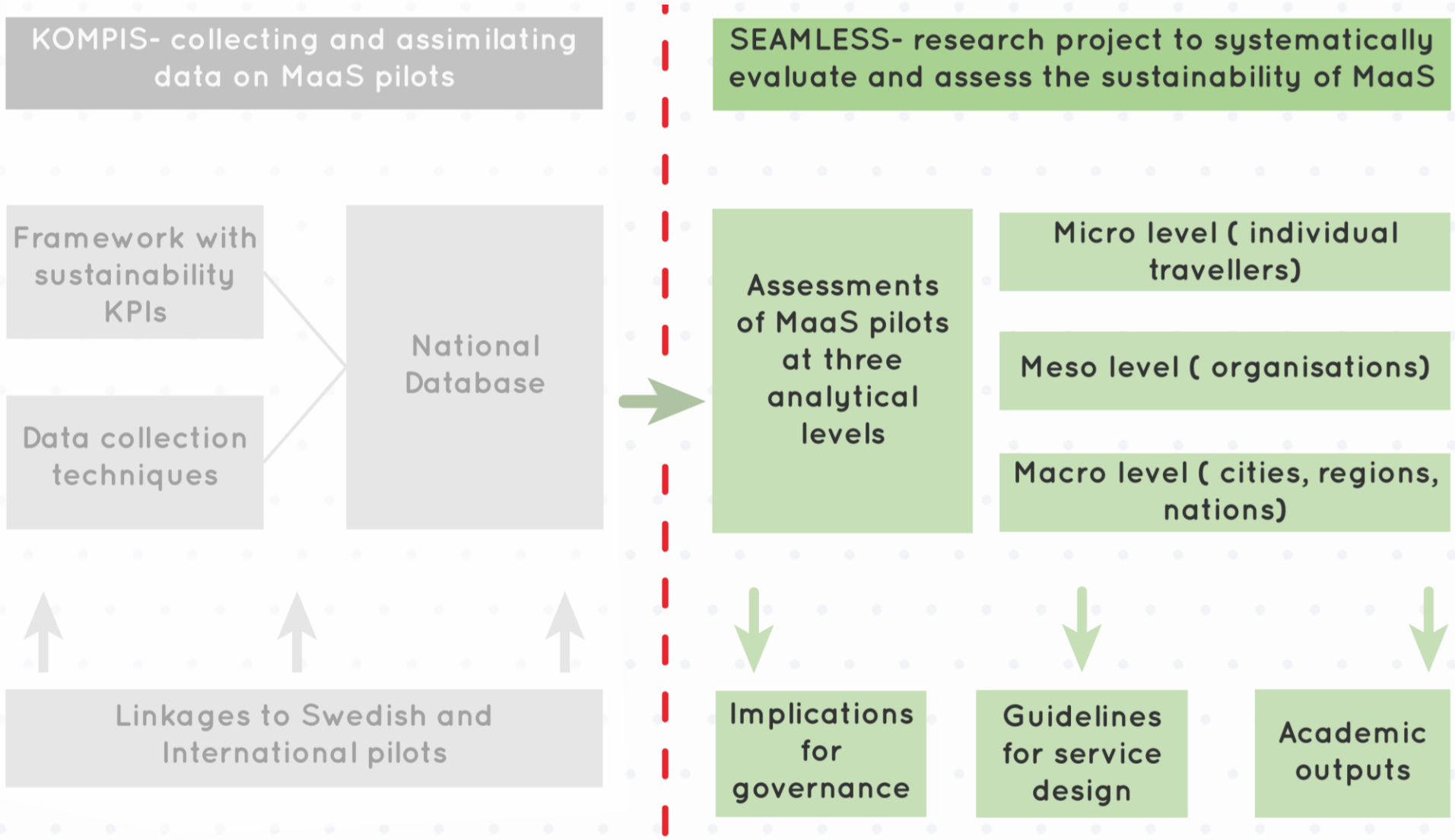

KOMPIS- collecting and assimilating data on MaaS pilots
Framework with sustainability KPIs
Data collection techniques
National Database
Linkages to Swedish and International pilots



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SEAMLESS – different MaaS

Different target customers

- B2C (private persons)
- B2B – Employers/Employees
- B2B – Tenants
- Tourists
- Vulnerable users

SEAMLESS – different MaaS

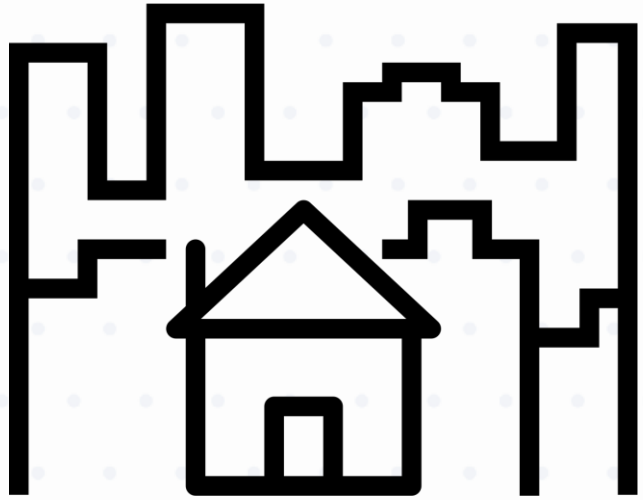
Different geographies

- Urban
- Peripheral/Suburban
- Rural
- Cross-border
- Regional / inter-city

SEAMLESS – different MaaS

Different pilots

- UbiGo, MaaSiFiE, IRIMS, ScaniaGo, KOMPIS, LIMA, MoJo, IMOVE, Stronger Combined, NOMAD…



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SEAMLESS – our goals

To utilise

- empirical data from different pilots/trials

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- the KOMPIS framework and its key performance indicators

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- environmental, economic and social impacts on three analytical levels
  - ✓ micro (individual travelers, users)

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  - ✓ meso (organisations, service providers)

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  - ✓ micro (individual travelers, users)
  - ✓ meso (organisations, service providers)
  - ✓ macro (cities, regions, nations)

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SEAMLESS – new knowledge

Generate knowledge on how MaaS can:

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Generate knowledge on how MaaS can:

✓Reduce transport emissions

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SEAMLESS – new knowledge

Generate knowledge on how MaaS can:

- ✓Reduce transport emissions
- ✓Improve energy efficiency of the transport system

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- ✓Improve accessibility to transport and to societal services

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- ✓Improve energy efficiency of the transport system
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- ✓Stimulate changes in travel behaviour and modal shifts
- ✓Be translated into sustainable business and innovation opportunities

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- ✓Be translated into sustainable business and innovation opportunities
- ✓Contribute to innovation and economic growth

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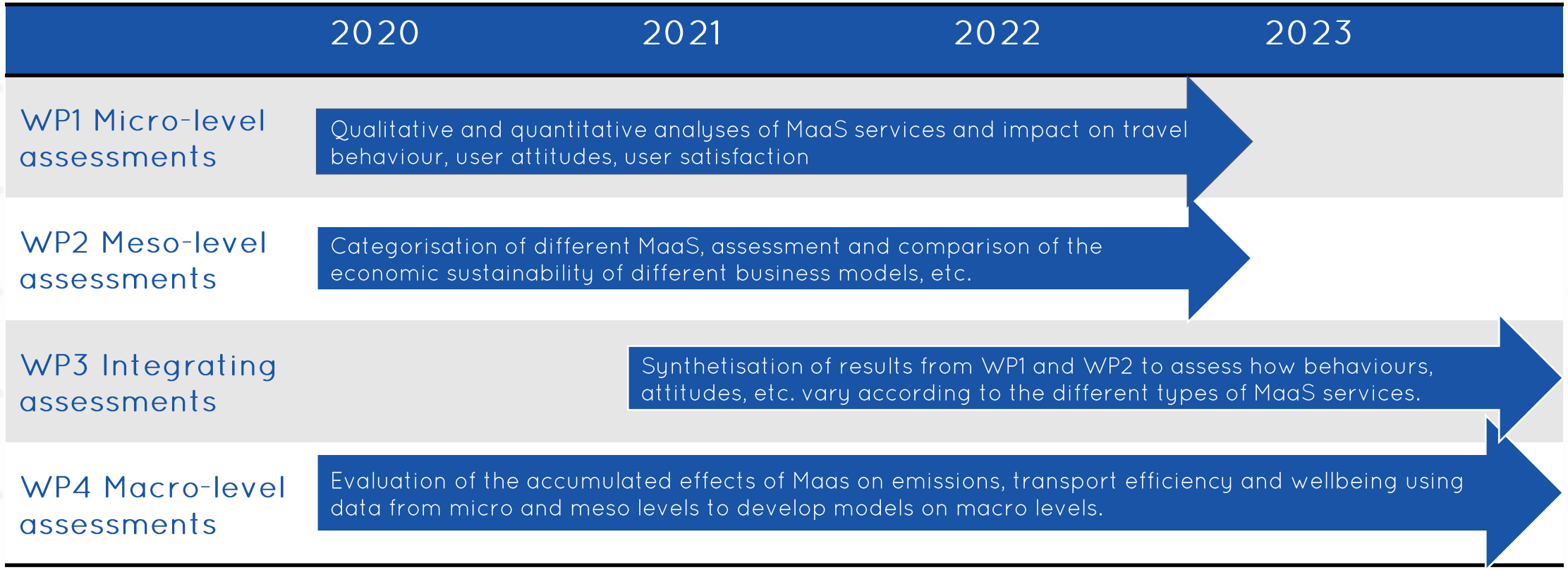
SEAMLESS – the schedule



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SEAMLESS – dissemination

Academic outputs

- Six conference papers
- Three journal articles

Policy & Regulation

- A white paper

Service Design

- A design handbook

Debate and Opinion

- Four opinion pieces in industry journals
- Five stakeholder seminars and workshops
- Four newsletters

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SEAMLESS- current findings

- Two stakeholder workshops
- Micro and Meso level

- Comparing the 4 MaaS pilots in Gothenburg (UbiGo, BRF Viva, LIMA and MoJo)
- Focusing on financial sustainability of MaaS business models
- Interviews and questionnaires with MaaS providers and project leads within and beyond Sweden

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  - Focusing on financial sustainability of MaaS business models
  - Interviews and questionnaires with MaaS providers and project leads within and beyond Sweden
- Macro level
  - One internal workshop (co-constructing scenarios)
  - Identifying potential evaluation models for MaaS at a macro level
  - Co-constructing scenarios for MaaS futures

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SEAMLESS- challenges

- Data Availability
- Needed, ongoing or planned assessments
- Possible collaborations

Interested? For more information:

Contact

Mia Xiaoyun Zhao

Researcher and SEAMLESS Project responsible for KTH

Email: mia.xiaoyun.zhao@itm.kth.se

Bhavana Vaddadi

PhD student at KTH

Email: bhavana@kth.se

Resources

- The KOMPIS project (https://www.youtube.com/watch?v=6E45YdG_9dc)
- The European Roadmap 2025 for Mobility as a Service (https://research.chalmers.se/en/publication/253593)
- A National Approach to Assessing the Impacts of Mobility-as-a-Service (MaaS) (https://kompis.me/wp-content/uploads/2021/10/Karlsson-et-al-2019.pdf)
- Measuring system-level impacts of corporate mobility as a service (CMaaS) based on empirical evidence (https://doi.org/10.3390/su12177051)
- Potential values of MaaS impacts in future scenarios (https://doi.org/10.1016/j.urbmob.2021.100005)

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