PART OF RISE

WP2 activities and findings

Paper 2: **Business models for car sharing in urban, sub-urban and rural contexts**

WP2: Stimulating the transition towards a low-carbon, energy efficient transport system

The leap from system modelling to actual transformation requires in-depth knowledge of factors that influence the development and diffusion of low-carbon transport technologies and organisational innovations in the Nordic region. To build this knowledge, a series of comparative case studies will seek to identify what actually drives or inhibits change. This work will also characterise the dynamic interplay of actors and innovative activities in successive phases of system transformation, and identify the policy measures, tools and targets that can promote sustainable transport innovation.

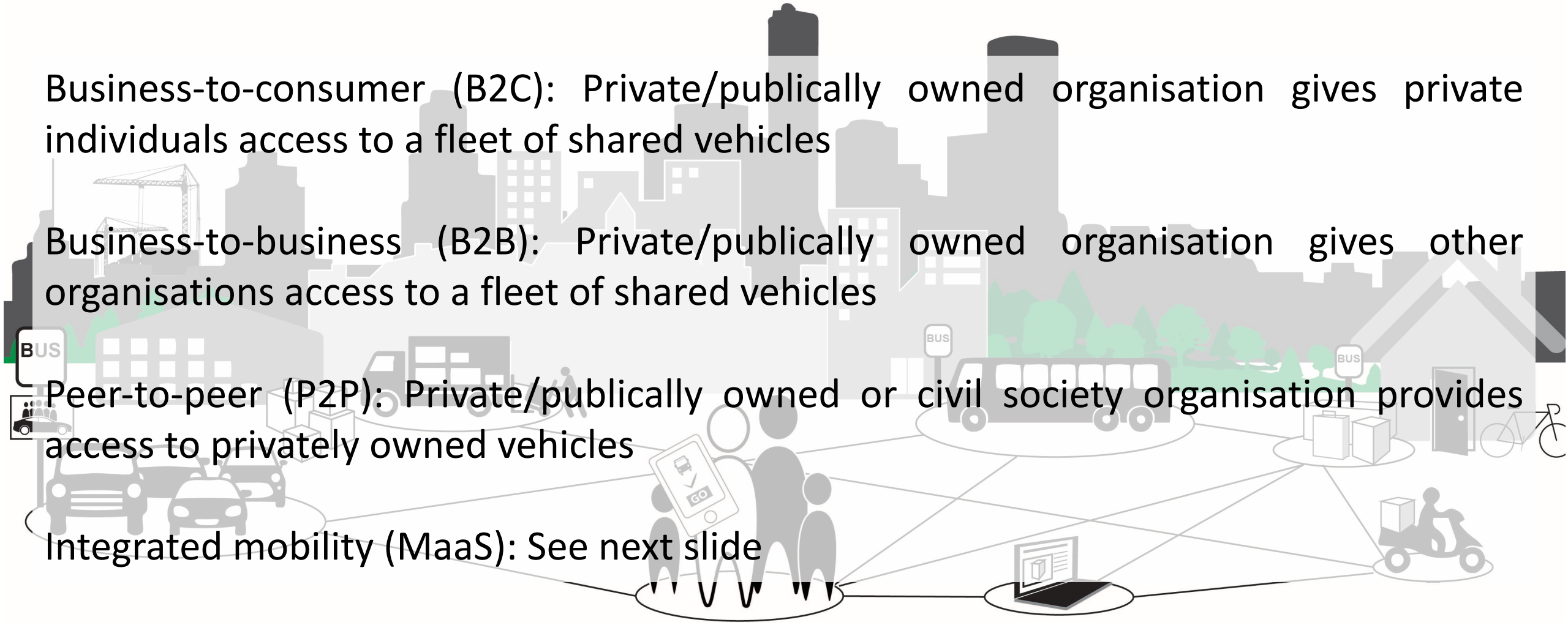
Different forms of car sharing business models

Business-to-consumer (B2C): Private/publically owned organisation gives private individuals access to a fleet of shared vehicles

Business-to-business (B2B): Private/publically owned organisation gives other organisations access to a fleet of shared vehicles

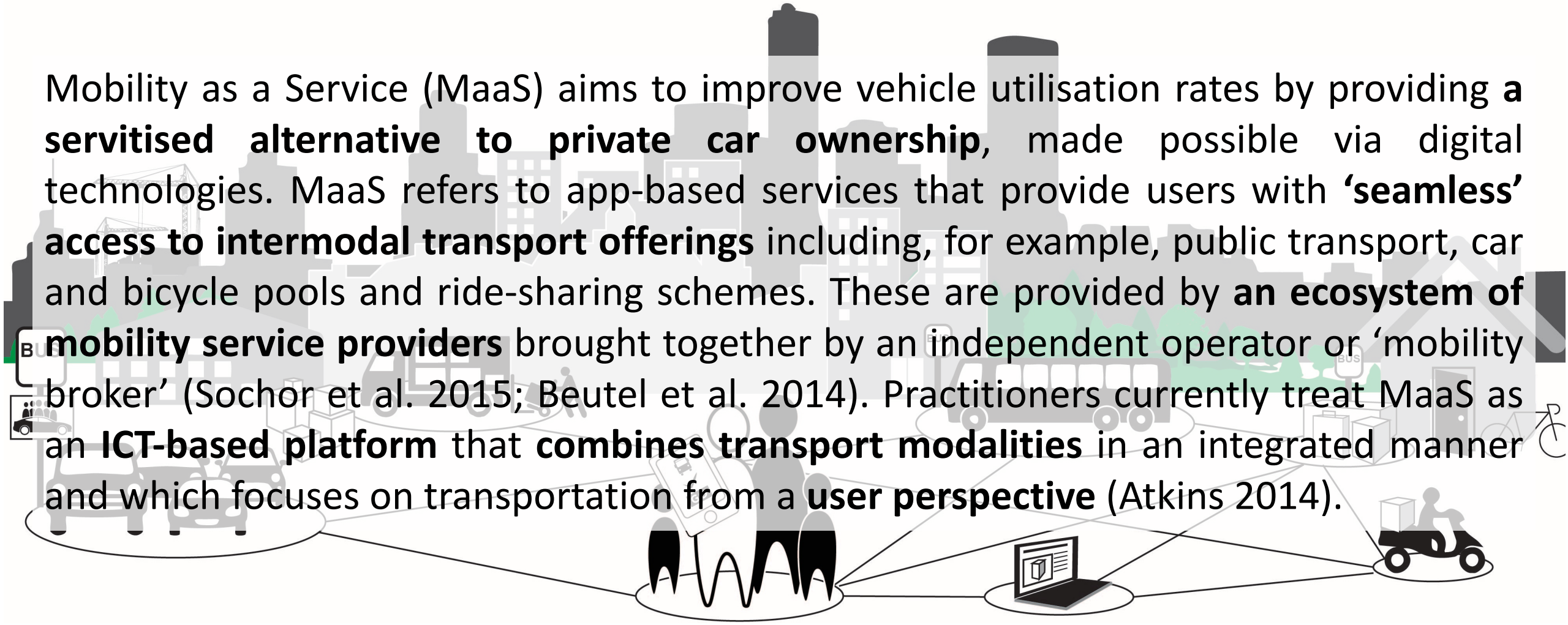
Peer-to-peer (P2P): Private/publically owned or civil society organisation provides access to privately owned vehicles

Integrated mobility (MaaS): See next slide



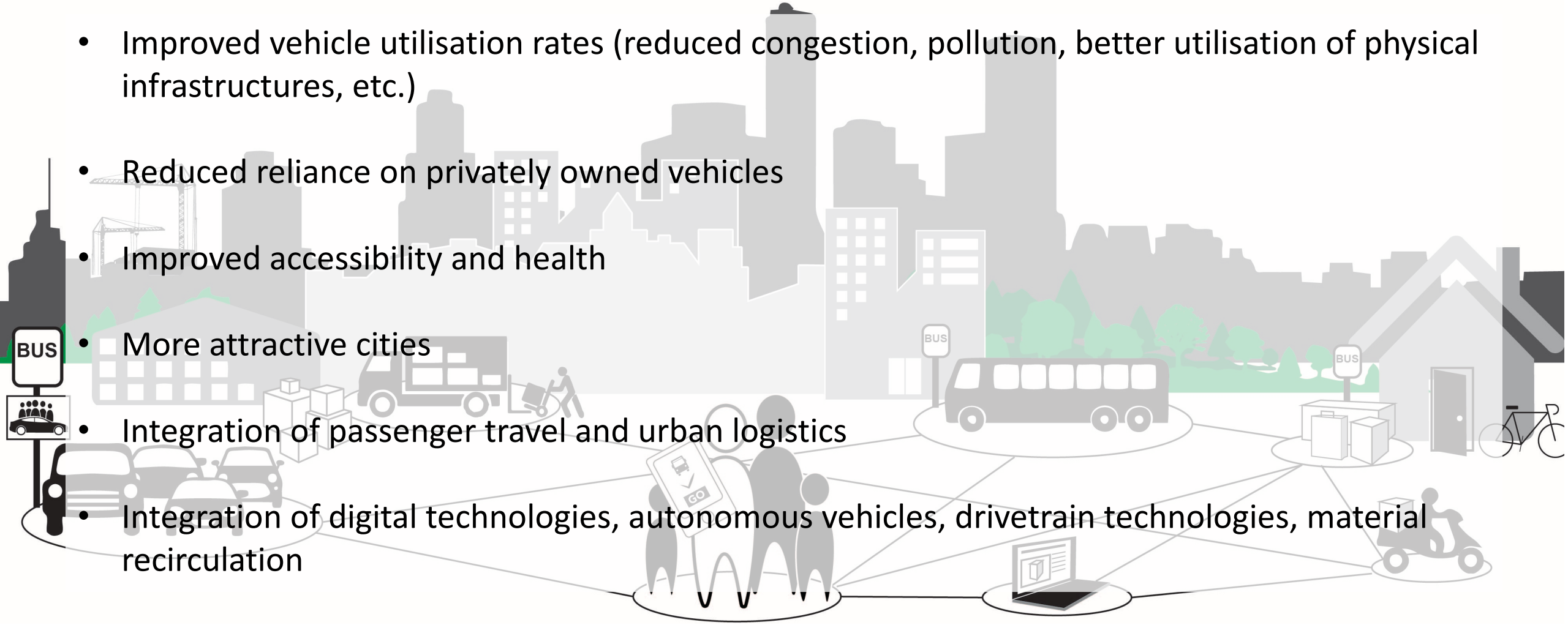
Mobility as a Service

Mobility as a Service (MaaS) aims to improve vehicle utilisation rates by providing **a servitised alternative to private car ownership**, made possible via digital technologies. MaaS refers to app-based services that provide users with **'seamless' access to intermodal transport offerings** including, for example, public transport, car and bicycle pools and ride-sharing schemes. These are provided by **an ecosystem of mobility service providers** brought together by an independent operator or 'mobility broker' (Sochor et al. 2015; Beutel et al. 2014). Practitioners currently treat MaaS as an **ICT-based platform** that **combines transport modalities** in an integrated manner and which focuses on transportation from a **user perspective** (Atkins 2014).



Sustainability potential

- Improved vehicle utilisation rates (reduced congestion, pollution, better utilisation of physical infrastructures, etc.)
- Reduced reliance on privately owned vehicles
- Improved accessibility and health
- More attractive cities
- Integration of passenger travel and urban logistics
- Integration of digital technologies, autonomous vehicles, drivetrain technologies, material recirculation



Sustainability potential

Achieving these potentials is not easy

Changes required in multiple dimensions

Enabled by, among other things, new business models

Paper 2: **Business models for car sharing in urban, sub-urban and rural contexts**

Research questions addressed in the paper:

- What types of business models underpin car sharing?
- What are the drivers and barriers of business model innovation?
- What are the drivers and barriers of the adoption of car sharing (households)
- What types of business models can facilitate car sharing in different geographical (e.g. urban, suburban, rural) settings?
- What is the relationship between car sharing and technological renewal?

- Cases: interview study with ca. 20 car sharing organisations in Norway, Sweden, Denmark and Finland

- Delivery: paper to be presented at the 2017 IST conference in Gothenburg (June 2017)