RAE FOR SMART MOBILITY GENERAL ROADMAP



DATA & TRAFFIC

MANAGEMENT SYSTEMS

Sustainable behaviour

Sustainable organisation

Occasional interoperability of

data sources ifferent data sources (open, privat raffic) are occasionally combined means of open protocols.

new, disruptive mobility services, e.g. Uber, mytaxi, car2go.

Small-scale logistics solutions Small-scale solutions to make citu gistic streams more efficient, e.c pick-up points.

Supporting sustainable and

towards healthy behaviour and

awareness, e.g. through educatio

and incentives.

Active role of government

Public parties take the lead to ensure

sustainable mobility

New incentives and measures

services.

2016

(e.g. in tendering procedures).

peration among all parties in the

transition towards smart and

logistic service providers.

citizen) to speed innovations in

Ethical recalibration

Public parties take the lead in an

ethical discussion of privacy and

scale-up new mobility solutions and security to safeguard public interest.

ployment through media

aditional media (critical journalism

and social media are used to

mediate in the transition towards a

sustainable society.

Enhanced traffic managemen Smart infrastructure enables fast

lightweight vehicles, e.g. electri

real-time) information managemen and control of traffic flows and crowds.

services across multiple public transport solutions (e.g. one city ca for all public transport services).

erging of diverse data sources (e.g. eather forecast and diary) enables more reliable user information and customised services.

Optimising logistics flows ising time slots (e.g. night deliveries nd usage rate of infrastructure (i.e

sustainable, cooperative solutions.

Dynamic innovation network

Dynamic innovation networks

(including all parties necessary for

smart and sustainable mobility) to

enable active response to suitable

new mobility systems.

Framework for liability

nsurance for new ownership(s) an

sharing of assets (e.g. 'who is

responsible?') to promote the

adoption of sustainable mobility

modes.

nnecting vehicles for more critico

urposes, such as platooning and

controlled zones.

Small-scale initiatives Encouraging green behaviour

wide range of models of full-elect

ehicles provide freedom of choice

Sharing of private data for

Sharing of personal data is

ensidered valuable, and enables

narket uptake for sharing initiatives

orivate transport blurs due to the

change in ownership (first signs of

Mobility as a Service).

urban spaces).

added value

active mobility options by (re-)designing the urban space with more attractive green areas.

Responsible sharing of assets Public parties ensure access by othe orivate) parties to public assets, e. public transport data and infrastructure.

and mobile devices enable the shift

Solutions for privacy and

New technologies, e.g. block chain

Proactive local regulations nsustainable solutions, e.g. by julating time slots or flexible use of of national privacy issues.

New protocols

New protocols to connect system

and enable roaming of services (e.g

ntegrated billing, booking and

dynamic pricing over multiple

mobility modes).

Integrated services

onnected and integrated mobilit

system offer a range of mobility

services in an open information

options.

tegration of resources f

city logistics

Conscious decisions

will change, reducing the urge to

travel and increasing the choice to

use alternative forms of travel.

Internet of Things allows real-time

nitoring of locations and status o

Self-learning traffic

One integrated smart system for

intermodal transport (private and

public, passengers and goods) base

on different data sources.

(F)actual advice across different

odality platforms based on shared

services creates a more efficient

Reduced logistics flows

waste, due to developments in

3D-printing, retail, urban farming

onal grids and system

enerate, store, use and exchange

dedicated bus stops.

Demand-driven solutions

demand sustainable, flexible

solutions.

New value systems

Attractive economic systems to

enhance the creation of integrated

mobility services and products.

Personal influence

measures provide evidence of the

consequences of people's choices

and influences.

rivacy and legislation at a

global level.

All vehicles are zero-emissi All available vehicles and mobi modes are clean, zero-emission fit f

Urban autonomous driving ehicles with all modes of traffic a and cooperative driving.

ata sources to dynamically respo

Open and connected platforr with sufficient availability o services (e.g. based on widespread use of dynamic pricing) matching ansport of people and goods for a diversity in needs and lifestyles.

The 'next economy

society at large.

Total value

society' instead of purely by

economic value — this creates a level

playing field for sustainable

ata is valued based on 'value for

The 'next economy' based on value

models and integrated value for

needs, distances and lifestyles. Solutions in circular economy New solutions, e.g. up-cycling, aimed

and materials.

Public living area

infrastructure for other purposes.

Physical internet d value of products, components

Open logistics system based o

in which energy and mobility

solutions are shared and exchanged

interconnectivity, through encapsulation, interfaces and

· A wide range of (interconnected) alternative routes and modes of transport to suit different lifestyles

Systems support users in making optimal choices (e.g. balancing costs,

Comfortable, accessible, high-quality living environment that encourages

Sustainable accessibility (e.g. for the elderly and disabled)

Inviting people to spend time outdoors

Reducing the need for travel

· Healthy lifestyles with efficient activity levels

· Poly-centric cities with decentral service hubs

Local production (food, 3D-printed goods)

Seamlessly connected networks

Smooth, seamless transport ('single route')

Networks for quick, easy access

· Human scale urban planning: all daily needs are nearby

Smaller-scale ecological solutions (e.g. goods delivery)

Integrated system to provide 'door-to-door' service

· Smooth, seamless transition between (regional) networks

· Integration of new modes of transport and innovative vehicles

· Remote services (health, education, public services, working)

Flexibility and freedom of choice An enjoyable and convenient travel experience

Mobility à la carte

Desired future scenario EINDHOVEN Comune di Palermo METROPOLITAN

Demand-driven diversity (blending public and private)

Accessible, affordable and convenient mobility

· Convenient and easy-to-use ('one-click' reservation, flexible payment,

pick-up/drop-off at any point) • Easy transfer at intermodal transport hubs

personal needs at that moment · Smart adjustments based on people's profiles and needs

· Accurate, up-to-date, real-time, cross-modal information

· Personalised advice accessible through multiple applications and devices

analysis and prediction · Automated systems for smooth (public) traffic flows

Communication between drivers, vehicles and infrastructure · Safe and secure, in both the physical and virtual worlds

Version 28 August 2017 — Final version for public distribution

2020

