Metropolitan mobility trends>Main results of SMART-MR project regarding ICT

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1. Introduction into project SMART-MR

2. Need for ICT: supporting sustainable mobility in metropolitan regions

3. Good practice examples
1. INTRODUCTION INTO SMART-MR

https://www.youtube.com/watch?v=Q2sSHwrQXac&feature=youtu.be
Interreg as interregional exchange of experiences
Cooperation for a change and improvement of our policies

- Managing change means:
Defining sense of urgency
Defining sense of urgency

CO₂ emissions per capita vs GDP per capita, 2014
Carbon dioxide (CO₂) emissions per capita, measured in tonnes per person per year, versus gross domestic product (GDP) per capita, measured in 2011 international-$. 

Source: Global Carbon Project, Maddison (2017) OurWorldInData.org/co2-and-other-greenhouse-gas-emissions/ • CC BY-SA
Defining sense of urgency

Creating a guiding coalition

MODEL 3

Policymaker
  Stakeholder group 1
  Stakeholder group 2
  Stakeholder group 3

MODEL 4

Mix of previous models
Outlining vision and strategy

- Role of SUMP and designing a process
- State of the art and main challenges
- Regional SUMP
- Vision
- Action plan
- Implementation and learning from experience

- 2014: Public Transport: 45%, Passenger Car Transport: 35%, Walking: 18%, Cycling: 2%
- 2030: Public Transport: 50%, Passenger Car Transport: 20%, Walking: 20%, Cycling: 10%
Generating short-term wins
Generating short-term wins

AIR QUALITY
- Air quality measurement station

NOISE
- Installation of four sonometers

CAPACITY MEASURES
- Installation of four manual traffic counters
- Installation of seven automatic traffic counters

ACCIDENT RATE
- Data collection in the Superblock area and its surroundings

Legend:
- Red circle: Quality measurement
- Blue line: Automatic traffic counter
- Purple circle: Sonometer
- Green circle: Manual traffic counter
Generating short-term wins
Paving the way to long-term effects
Paving the way to long-term effects

DEVELOPED LAND

- >0.25 e-number in small urban areas
- >0.5 e-number in large urban areas

30-40 % developed land

10-40 % office floor area

40-60 % office floor area

WITHIN 500 METRES

>1.0 e-number in large urban areas

WITHIN 1000 METRES

PUBLIC SPACE

< 10 % other land

STREET

20-30 % public street zone

> 15 % public space zone
Paving the way to long-term effects
Paving the way to long-term effects

- Local walkability
- Connected cycling possibilities
- Local cycling possibilities
- Priority for public transport
- Public transport
- Sharing cars
- Cars
Integrating measures to build better liveability in metropolitan regions

- Supporting the change of behaviour
- Support reducing the need for travelling
- Supporting Transit oriented development
- Developing land use according to LOAD principles
- Developing mixed land use
- Creating a holistic mobility strategy (SUMP)
- Creating multifunctional buildings and integrating business with housing
- Increasing energy-efficiency of building stock
- Supporting walking and cycling with direct accesses towards a station
- Offering safe and adequate Bike&Ride services closest to a station
- Reducing car parking possibilities near station
- Prioritization of Bike&Ride in relation to Park&Ride
- Prioritization of shared and combi-travel
- Offering last mile transport services within a station
- Offering low-carbon city logistics services within a station
- Smoothing trip chains in public transport with good urban logistics
- Supporting businesses and services within stations, with incentives from the municipality
- Creating circular and sharing economy businesses and services
Climate change challenges call for immediate action.

Visions and strategies must lead to more liveable and sustainable metropolitan regions.

A win-win future exists for greater liveability and the planet.

Alternative solutions are here; willingness to apply them is what is missing.
TRANSFORMING EUROPEAN METROPOLITAN REGIONS

Smart mobility for better liveability

SMART-MR: Sustainable Measures for Achieving Resilient Transportation in Metropolitan Regions

http://www.interregeurope.eu/smart-mr/
2. NEED FOR ICT: SUPPORTING SUSTAINABLE MOBILITY IN METROPOLITAN REGIONS
The shift to climate friendly low-carbon future requires new approaches and new technologies, tools and apps, that would optimize the use of resources and ensure efficient organisation of the (public) transport.

Transition to low-carbon mobility requires a behavioural shift that can be fruitfully supported by media and particularly social media.

Platforms for stakeholders‘ involvement and participation are of crucial importance.
Use of web-GIS for collecting people‘s initiatives.

Decisions must be data and evidence based – the role of big data in mobility.

Using ICT for improving public transport management.

Autonomous vehicles.

New technologies allow remote control and better efficiency of transport systems.
Mobility as a service.

Sharing economy. Sharing solutions, real time data

Last mile and low-carbon logistics – quick responses are needed.

Innovative tools, ICT platforms, booking systems in low-carbon logistics.

ICT as a low-cost short-term win.
Various measurements – noise, pollution …

Ticketing, parking …
3. GOOD PRACTICE EXAMPLES
Public consultation, Budapest

Public consultation obligation

- Min 60 days in advance
- Min 14 days for suggestions

Direct online access was created (www.bkk.hu/te/m4-felszin)

- Conventional information given in text form and with static maps
- A new, dynamic map was also created

Consultation principles

- Planned changes published 80 days in advance
- Leaving 25 days for remarks
- Important bodies consulted separately
Public consultation, Budapest

Evaluation
- 18% agreed on the proposed changes
- 56% proposed alternatives
- 26% had other remarks

Processing
- All remarks were worked up
- Proposals with large public support were accepted
- Proposals with high costs or other reasons were rejected

Decision
- BKK made a professional summary and a proposal
- The Municipality took the final decision
Planning together

Costruiamo insieme il Piano

Un Piano a misura di persona. In comunicazione costante con il cittadino durante tutto il processo di elaborazione.

Scopri di più »

http://www.pianomobilitatalazio.it/
Pages from the web site

Planning phases

Scenarios

Vision

Measures
Page of Citizen Proposals
Make a proposal
Predlagam vladi, Slovenia
TOLL CORDONS – Oslo

Bærum toll cordon
Price NOK 16 appr. € 1,70

Oslo toll cordon
Price NOK 32 appr. € 3,40

Same price 24/7
Trucks: 3 times normal price
Free of charge:
- Electric vehicle
- Crossing the same toll cordon within 1 hour
- Crossing more than 60 times/month
Sensors for parking/loading bays
Traffic Oslo - APP

APP for vehicle related traffic
  o  Pay for parking
  o  Pay for winter – driving with studded tyres

  o  Scale up planned
     o  Messaging for diesel prohibition days

  o  Extended for availability of street loading bays
     Status for street clearance
     Parking sensors information
     Parking status
Free loading/unloading places for city logistics, Helsinki
SEVERAL PLATFORMS IN THE EU

+40 MILLION USERS

Charge commissions per trip to cover platform management and transaction costs
VIA VERDE BOLEIAS

100% DIGITAL PLATFORM

- New features and improved user experience
SIMPLE USER EXPERIENCE

01 Register
02 Share and search rides
03 Make a reservation or accept one
04 Let us know that the ride has started
05 Pay through the app
06 Rate the users you’ve travelled with
ANDA ticketing system, Porto
4. **APP Anda – How does it work?**

At any time, client can consult

- ✓ **Trips made**
  - September 2018
  - Wednesday, September 19: 2 trips
  - Wednesday, September 19: Marquês 20:18, Trindade 20:33
  - Monday, September 18: 6 trips
  - Sunday, September 16: 2 trips
  - Thursday, September 13: 13 trips
  - Wednesday, September 12: 6 trips
  - Saturday, September 8: 13 trips
  - Friday, September 7: 4 trips
  - Thursday, September 6: 7 trips

- ✓ **Incurred cost**
  - September 2018
  - 2x Andante 24 Z2: 8.30€
  - 1x Andante 24 Z3: 5.50€
  - 9x Título de Viagem Z2: 10.80€
  - 1x Título de Viagem Z5: 2.40€

- ✓ **Inspector’s screen**

  Inspection equipments recognize the App as a valid ticket.

  **Optimal value**

  Invoices (0)
Mobi.me - platform for smart mobility

- connects all types of mobility devices in real-time
- integrates all modes of mobility services
- quantifies emissions on real-time
LET’S MAKE THIS SHIFT TOWARD BETTER LIVEABILITY IN METROPOLITAN REGIONS TOGETHER!