



Vlaanderen
verbeelding werkt

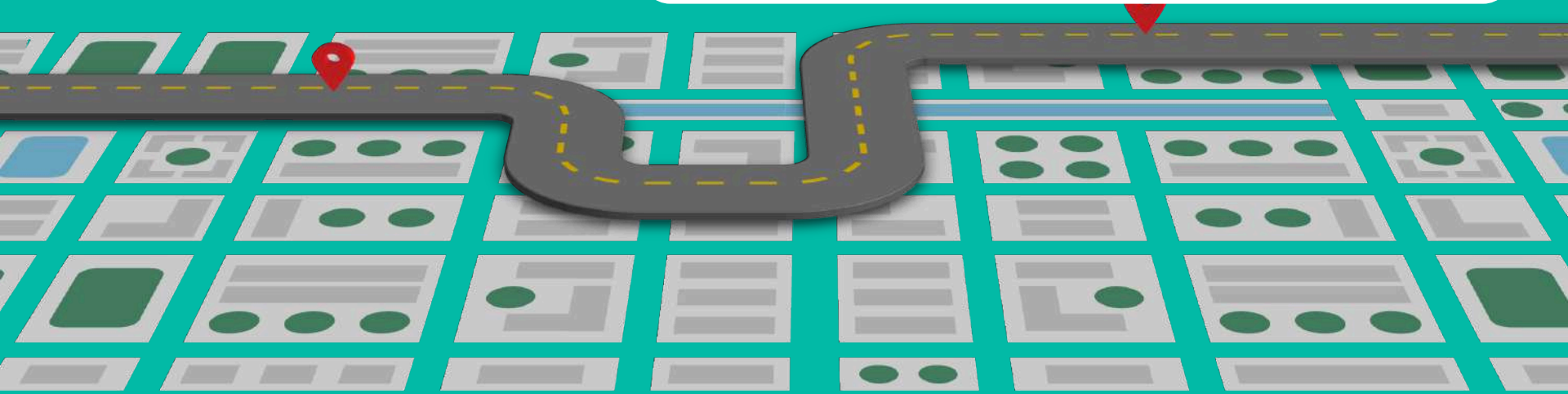


Open
Transport Net



Make your city smart using open data, the use of transport related open data in Flanders

Best practices and policies
CISMOB Stockholm - Sept 16



Smart cities in Flanders

Smart shopping

Smart mobility

Smart sensors

Social inclusion

Sensors & IoT

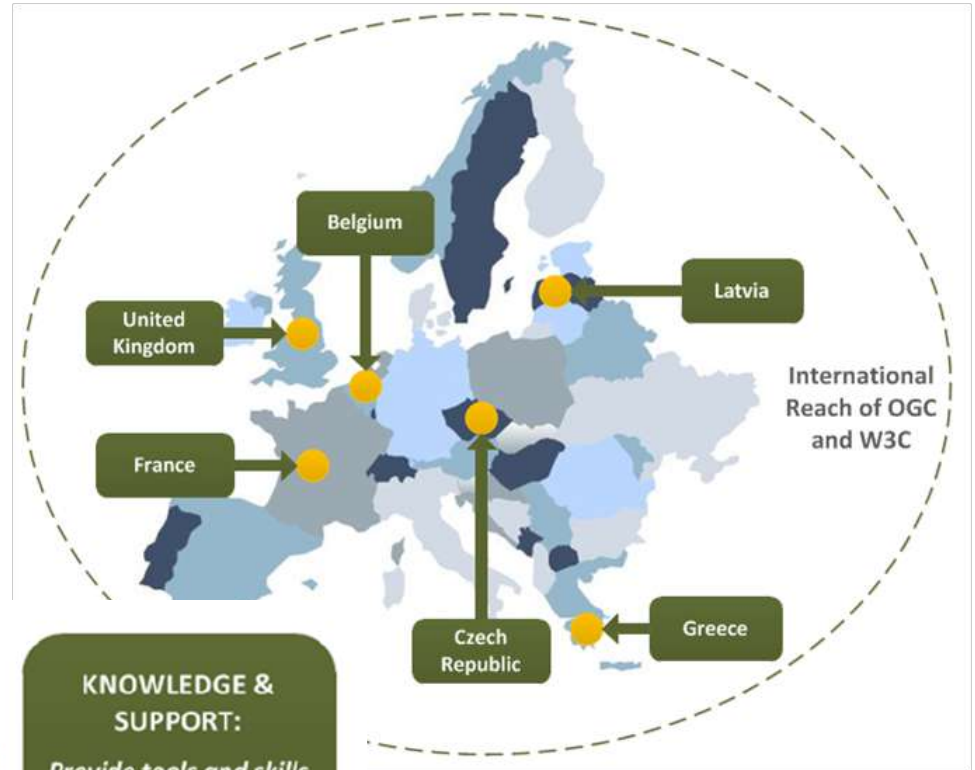
Smart cities policy

Intro

Information Flanders

Open Transport Net Project

Open Transport Net Project



ACCESS:
Harmonise data from a wide range of sources

+

ANALYSIS:
Combine spatial data & non-spatial data to extract new info and insights

=

KNOWLEDGE & SUPPORT:
Provide tools and skills for using GI and OD in rapid service creation

Data

Technology

Innovation



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**Open
Transport Net**



Open Transport Net Project

Antwerp (BE)



Traffic intensity: App measuring the use of cycling infrastructure, road quality, and reporting road issues

Birmingham (UK)



Road safety: Building interactive road safety maps & app to report traffic accidents, road safety data as open data

Issy-Les-Moulineaux (FR)



Traffic planning: Providing transport data as open data & concept multimodal traffic planner app

Liberec (CZ)



Crisis management: Flood management dashboard & crisis management app

Smart shopping

Case 1: Hands-free shopping

ghent: so much city



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CISMOB
Interreg Europe

Open 
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Case 1: Hands-free shopping

- Ghent - Largest car free shopping zone in Benelux (350.000 m²)
- Competition
 - Online
 - Shopping boulevards



Case 1: Hands-free shopping

- From shop to delivery
- Eco friendly transport
 - Bike
 - Electric
 - CNG



Case 1: Hands-free shopping

- Storage in a locker
- Pick-up your goods
- Home delivery



Smart mobility

Case 2: Car sharing



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Case 2: Cambio car sharing

- Started in 2003
- Wide scale use – 25.000+
- Public transport involvement
- New: Free float (Brussels - 80km² zone)
- Competition



Case 2: Cambio car sharing

- 35 Cities involved
- 378 Car sharing locations
- 894 Dedicated cars

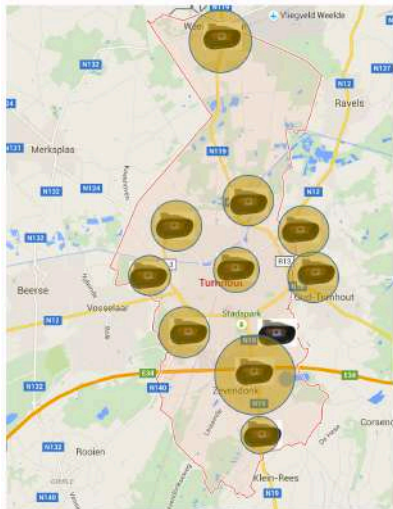


Smart mobility

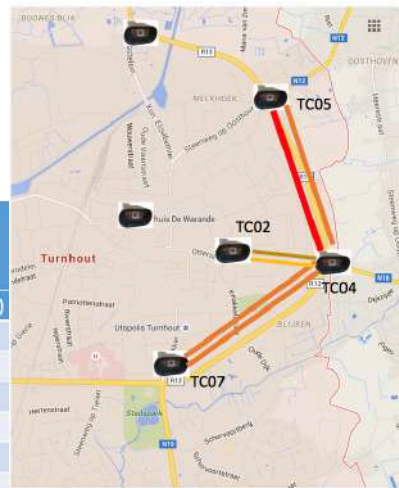
Case 3: OTN ANPR Cameras

Case 3: OTN ANPR Cameras

- Using police camera data to make your city smart
- Congestion
- Traffic flows



Nr	Location	Intensity (car/h)
1	Stadspark	450
2	E34 (East)	1108
3	E34 (West)	1205
4	Zwevendonk	320
5	Gerechtsgebouw	230
6	N12	456
7	N19	745



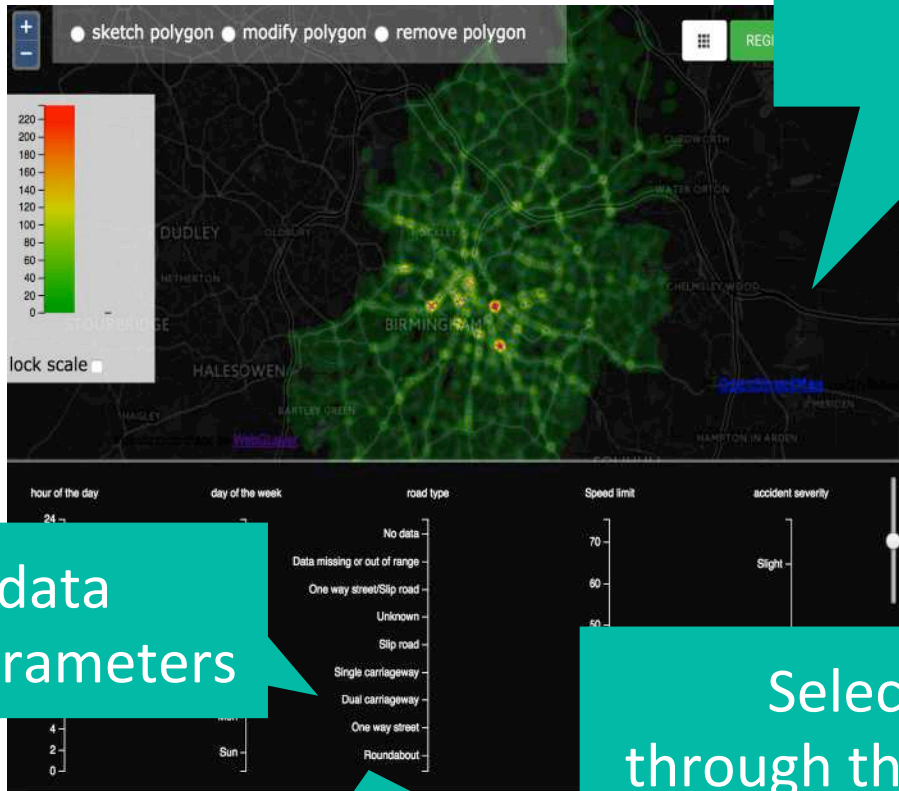
Traffic flows –between ANPR camera's

Congestion (nr. of cars/hour)

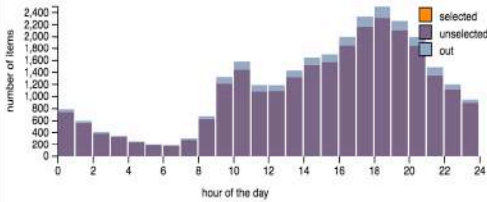
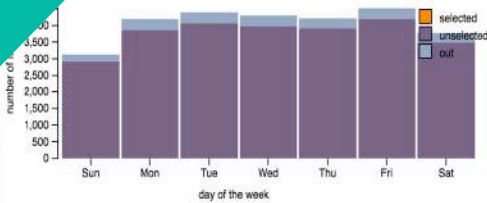
Case 3: OTN ANPR Cameras

- Traffic accidents

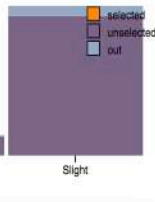
Where are the hotspots of traffic accidents



Select data through parameters



Select data through the histogram



<http://www.opentransport.net.eu/>

Social inclusion

Case 4: ZWERM (Swarm)



Case 4: Zwerm

- Social inclusion project in Ghent
- How to use sensors to enhance the community cohesion?

<http://www.zwermgent.be/>



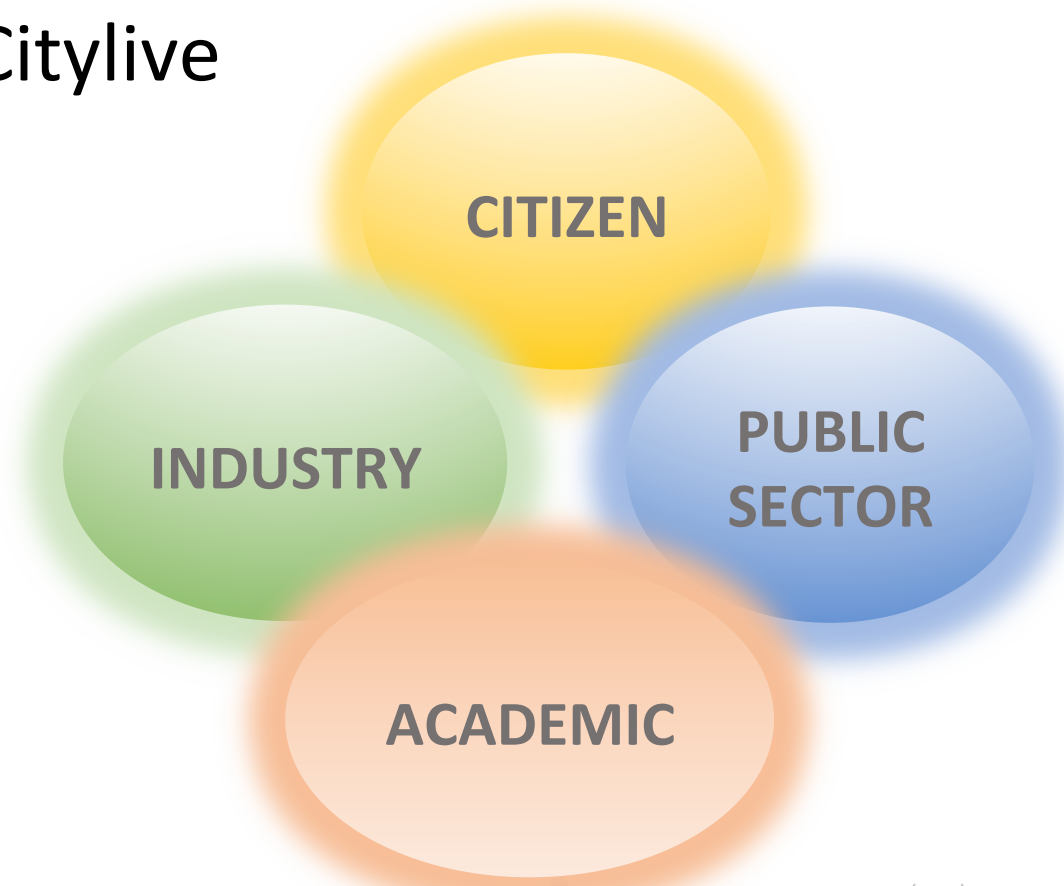
Smart sensors

Case 5: City of things



Case 5: City of things

- The city as one interactive lab - IOT project
Antwerp, iMinds, Citylive
- 4 main domains
- Quadriple helix
- 200.000 testers
- 34.000 sensors
- Neutral platform
- Privacy by design



Case 5: City of things

[https://
www.iminds.
be](https://www.iminds.be)

- City wide network technologies
- Big data – data mining (environment, traffic flows,...)
- Citizens test and optimize (co-creation)

- Personal health, air quality
- Social interaction & local initiatives
- Mobility apps
- Tailored multi media



Smart cities policy

Smart city ingredients



Smart cities ingredients

Policy

1. The city as a permanent living lab
2. Strategy based on social and economic priorities
3. Internal change manager (CTO, CIO, CSO)
4. Overcome internal silo's
5. Act in a network of cities 'conurbation'
6. Quadriple helix



Technology

1. Open, available and anonymized data
2. Open architecture and platforms
3. Linked open data & application sharing
4. Personalized services
5. Support for startups



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<http://project.opentransportnet.eu/>

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