INTERPARLIAMENTARY CONFERENCE ON URBAN POLICIES IN THE EUROPEAN UNION

BELGIAN PRESIDENCY OF THE EUROPEAN UNION

PARLIAMENTARY DIMENSION

4th SESSION:

URBAN MOBILITY ISSUES

Introductory speech by
Mrs Anne-Charlotte d'Ursel,
President of the Mobility Committee of the Parliament of the Brussels-Capital Region

Speech by **Mr Bruno Clerbaux,**
regional and urban planner, former Secretary
General of the European Council of Town Planners,
Honorary President of the Belgian Chamber of Town
Planners,
full member of the Regional Development Commission
(Mobility section) and Director of the ACPGroup
consultancy firm.

INTER-PARLIAMENTARY CONFERENCE ON EU URBAN POLICIES
Parliament of the Brussels-Capital Region ("BCR"), January 22, 2024

Fourth session / The challenges of <u>urban</u> mobility

- **SOME PRELIMINARY GUIDELINES: 4 TYPES OF ISSUES (slides 1 > 4)**
- **IN BCR: "GOOD MOVE", THE REGIONAL MOBILITY PLAN (slides 5 > 10)**

Bruno Clerbaux, Former Secretary General of the European Council of Spatial Planners (ECTP-CEU), Honorary President of Frenchsp.Planners of Belgium (CUB), Foundation For Urban Environment (FFUE)

1ST TYPE OF ISSUE : THE ENVIRONMENTAL ISSUE
(in relation to climate emergency, limitation of resources and loss of biodiversity)

➤ *Assume transition:*
- *Transport decarbonization, taking into account real environmental costs (embodied energy, (de)localization, etc.)*
- *<u>AND</u> less travel (= reduction of demand, upstream) = interaction of land use planning/mobility*

2nd TYPE OF ISSUES: SOCIETAL ISSUES

- **Management of time** : **3 predominant criteria raising questions**
    - **Maximum speed**
        - ➢ *Avoid unnecessary speed (overperformance) if high environmental costs*
        - ➢ *Increase multifunctionality of transport modes (for work, relaxation, etc.)*

    - **Standardization of hours** (work, teaching, vacation) > peak occupancy with supply sizing on peaks (= artificial oversizing of needs) in relation to new lifestyles
        - ➢ *Smooth/remove peaks via a "schedule (days, hours) of teleworking or physical presence per spatial zone" coupling; frame/legislate to cancel the "natural" remaining of peaks (Tuesday Thursday…)*

    - **Future unpredictability**
        - ➢ *Light, reversible/reconvertible infrastructures (e.g.:motorway lane > train)*

- **Ownership reference, social status**
  - **Change from ownership to sharing (e.g. car = immobilized 95% of the time)**
    - ➤ *Pooling of vehicles, parking lots (buildings, motorway bridges) and journeys*
  - **Social status (standing, emancipation)**
    - ➤ *Changing paradigms ("Switchers") : mode of transport, vacations, vehicle size*

- **Efficiency (in mobility and/or environmental) vs. social equity**
  - ➤ *Corrections in pricing systems, taxes, bonuses according to social status*

- **Good governance**
  - **Reliable assessment of investment choices (opportunity, environmental impacts)**
    - ➤ *Moral (><lobbies) & technical competence (quantity quality) of Administration and Politicians; 2nd or even 3rd independent opinions for major decisions*
    - ➤ *Management contracts for PT*
    - ➤ *Evaluation before the decision and during use*
  - **Citizen involvement**
    - ➤ *Educational effort, citizen participation, transparency*

4	4 TYPES OF ISSUES (not exhaustive…)

3rd TYPE OF ISSUES: TECHNICAL ISSUES

- **Technological advances:** data collection/use, real-time dynamic traffic management ("smart" roads = modular roads), driverless vehicles, drones, etc. **> Questions:** technological dependance (bugs, geostrategic), privacy, environmental impact, etc.
  - ➢ *Smart Cities vs Lowtech Cities (High vs Low Technology), GDPR adaptation*
- **Supply logistics:** external and internal accessibility; last mile
  - ➢ *Location, scale of distribution centers; vehicle types*

4th TYPE OF ISSUES: EUROPEAN ISSUES

- **European subsidiarity scale** in relation to local/national : level of standardization of objectives, training, standards (economies of scale, reference industry/market efficiency)
  - ➢ *Ex.: European synergy and convergence in the railway sector*
- **Problems and solutions replicability**
  - ➢ *Benchmarking, collaborations, sharing of experience and expertise*
- **Transversal approach**
  - ➢ *Link with European policies: Green Deal, Territorial Cohesion, etc.*
  - ➢ *Create links between DGs (social affairs, transport, digital transition, etc.)*

PARADIGM CHANGE

From sectoral plan <u>for</u> mobility to transversal plan aiming, <u>through</u> mobility ("Mobility Vision") to respond to 7 challenges for a quality city ("City Vision"), that is to say:

- **Environmentally friendly: "GREEN"**
  - ➢ *- 35% GHG 2005-2030, resilience*
- **Inclusive: "SOCIAL"**
  - ➢ *easy travel, - expensive (12%>8% 2030) for all*
- **User-friendly: "PLEASANT"**
  - ➢ *quality of life, "peaceful zones"*
- **Healthy: "HEALTHY"**
  - ➢ *positive for physical and mental health*
- **Socioeconomically efficient: "PERFORMING"**
- **Optimizing resources for mobility: "EFFICIENT"**
- **Safe: "SAFE"**
  - ➢ *0 killed/seriously injured on the move in 2030*

MOBILITY VISION: 6 axes

- **1st axis: act on travel demande : (65% residents 35% commuters) : fewer, shorter, better distr. time**
  - ➤ *Territorial policy: poles on PT nodes, "city 10 minutes away"; teleworking, part-time*
- **2nd axis: fewer indiv. cars: 33% self-drive > 24%**
  - ➤ *Modal transfer: walking and cycling < 5km, cycling and PT 5 > 25 km, shared cars*
- **3rd axis: strengthening mobility via service offering ("Maas: Mobility as A Service")**
  - ➤ *Integration of all travel services via user-friendly software to determine and pay for the better intermodal travel chain*
- **4th axis: well-structured and efficient transport networks**
  - ➤ *Improvement or creation of lines and infrastructure*
- **5th axis: manage delivery logistics (e-commerce): reduce journeys**
  - ➤ *Aid for goods regrouping, route determination, modal transfer to canal and train, cargo bike for last mile; specific effort for construction sector*
- **6th axis: parking policy (Parking as a Service)**

7	**"GOOD MOVE" REGIONAL MOBILITY PLAN (2020 > 2030)**
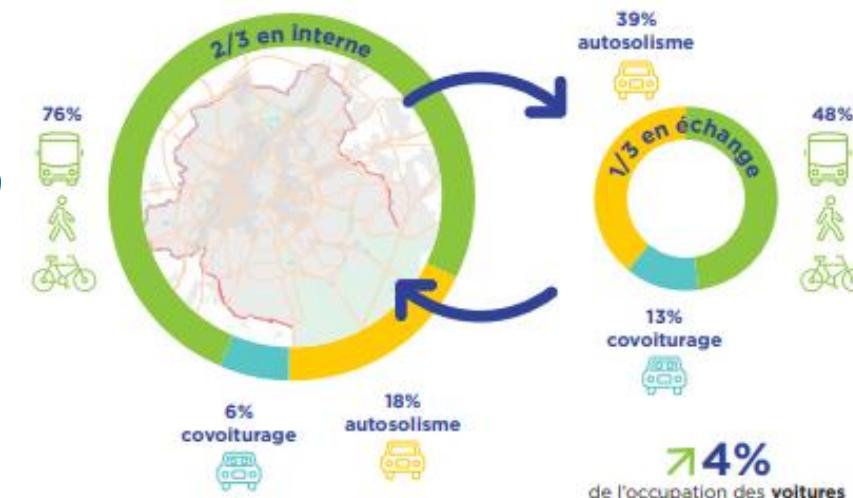
ACTION PLAN IN 6 TRANSFOCAL ACTION PLAN

- **"Good Neighborhood": marking mobility for quality of life**
  - *30 km/h everywhere except few main roads 50 km/h*
  - *Creation of "peaceful neighborhoods" between these main roads: no car transit, pooled off-road parking, public transport, bicycles routes, friendly public space*
- **"Good Network": efficient network in all modes BUT walking/cycling/PT/vehicle priority.**
  - *Multimodal road specialization according to 3 levels for each mode: metropolitan scale, inter-district, local > e.g. a road can be level 1 for walking level 2 for PT etc.*
  - *Related developments, adjustment of lights, signaling etc.*
- **"Good Service": integrated mobility services (shared cars, taxis, bicycles, scooters, public transport, parcel collection, parking, etc.)**
  - *Digital applications and platforms AND physical meeting places ("Mobility hubs")*
- **"Good Choice": creating awareness of mobility choices**
  - *Information, incentives (e.g."Bike for Brussels"), bonuses (e.g."Bruxell'Air"); pro-active towards businesses, schools, activities/deliveries ("Targeted Travel Plans")*
  - *Constraint: modulated car taxation, electrification in 2035, Low Emission Zones, etc.*

| 8	**"GOOD MOVE" REGIONAL MOBILITY PLAN (2020 > 2030)**
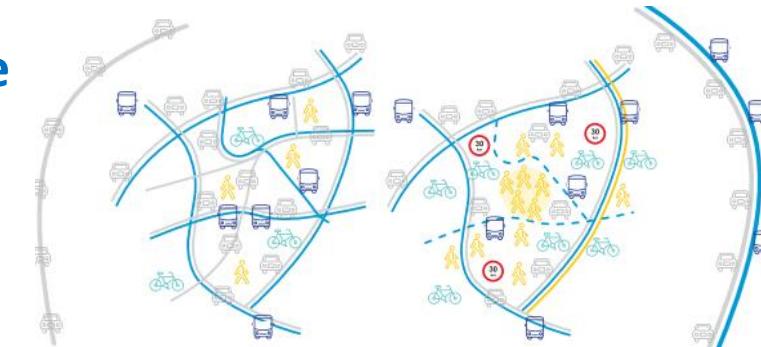
- **"Good Partner": open-ended consultation with all stakeholders**
  - *Regional Mobility Commission (public, private, associative), contacts organized by Bruxelles-Mobilité with municipalities, other Regions, federal state, Europe*
  - *Items: harmonizing regulations, processes, standards, and labelling*
  - *Appointment of "Mobility Advisers" in each municipality*
- **"Good Knowledge": permanent updating of data for periodic evaluation Plan**
  - *"Observatory": open data collection & analysis (including technological monitoring)*
  - *"Mobility Barometer": regular surveys on users perception of the Plan*

TRANSVERSAL &TRANSPARENT ASSESMENT DEVELOPMENT PROCESS OF THE PLAN

- **Development : 3-year co-construction with stakeholders**
  - *Survey by experts: benchmarking and challenges*
  - *Co-construction Plan with all sectors (picture)*
  - *Citizen participation : Citizen panels in Parliament,   i*
    platform ("Good Move by Citizens"), forums, meetings,
    public inquiries, etc.
- **Periodic evaluation : see Good Knowledge**

Transport public 5%
Politique 8%
Entreprise 12%
Administration régionale 18%
Chercheur 3%
Journaliste 1%
Syndicat 1%
Association 19%
Commune 25%
Fédération d'entreprises 8%
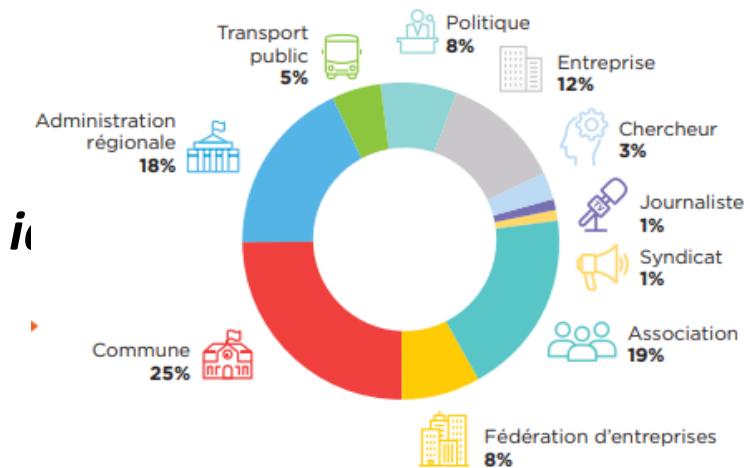
STATE OF THE ART AFTER 3 YEARS (early: Covid impact, delay)

- **Main achievements (2022):**
    - **Good Neighborhood:**
        - *90% roads 30km/h, 4 peaceful neighborhoods (Center)*
        - *Adaptation of public spaces (Rond-Point Schuman)*
   - **Good Network:**
        - *83% intersections with remote controlled lights*
        - *Bicycles: +/- 33% internal network, 7/25 interregional*
    - **Good Service: implementation of the Maas (e.g."Floya") +**
        - *Cars: 2700 P+R places at Region entrances; 785 car sharing; 1,123 rental cars in open service; 1,250 taxis; 1,170 Uber and similar*
        - *PT: 55 out off 69 metro stations accessible to handicaped*
        - *Bicycles: 6,500 (2,000 electric); 41,000 bicycles parking spaces*
        - *8,000 self-service scooters*
    - **Good Choice:**
        - *School travel plans 278 schools/746; 2000 auto bonuses for stopping using car*
        - *Implementation of Low Emission Zone (progressive ban of thermic vehicles)*
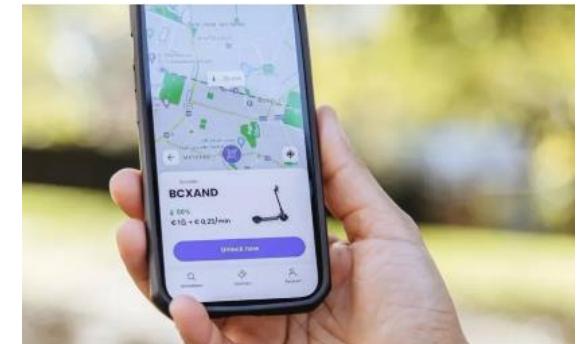
- **Main impacts (2022):**
  - **Strong increase of bicycles (9% modal share), cargo bikes (9%), electric bikes (30%)**
  - **No reduction in traffic congestion: roadworks, adjustment of lights for PT priority, reduction of physical capacity of roads, increase of homedeliveries**
  - **Environment : significant reduction in atmospheric and noise (1.5 to 4 dBA) pollution**
  - **User perception gap (Barometer): vehicle drivers vs others**
  - **Peaceful neighborhoods: support or rejection depending on lifestyles**
- **Questions:**
  - **Technical errors : neighborhood sizing; too much road signs, unneed tree fellings…**
  - **Insuffisant account of social diversity: most multicultural city in the world > 182 languages, digital divides, cultural practices**
  - **Insuffisant taking account of social acceptance : exemplary co-construction but authoritarian or even dogmatic implementation**
  - **Denial of periodic assessment of socio-economic consequences : relocations of people or companies, loss of accessibility to the city for suppliers and customers…**
  - **Budget : in a limited regional budget, overinvestment in Mobility hardware to the detriment of other issues (building insulation, security, cleanliness)**

Thank you for your patient ☺ listening

- **https://mobilite-mobiliteit.brussels/fr/good-move** (then choose F, NL, E)

- **https://ectp-ceu.eu**
- **https://www.ffue.org**

- **bclerbaux@acpgroup.be**

Speech by **Mr Kris Vanherle,**
researcher at the University of Leuven's
Transport and Mobility Centre and founder of
Telraam.
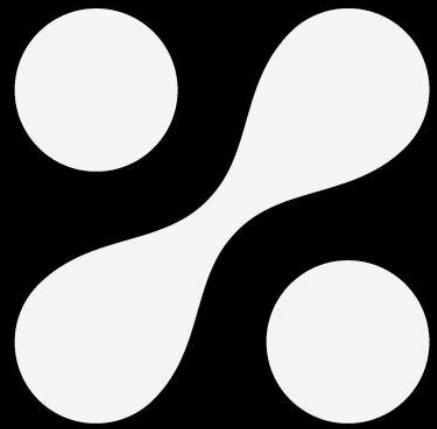
DE UITDAGINGEN VAN DE STADSMOBILITEIT

✔ Mobiliteitsbehoefte evolueert

✔ Verschillende gebruikers hebben verschillende (tegenstrijdige) wensen

✔ De Ruimte Is Schaars

✔ Mobiliteit ligt extreem gevoelig bij bewoners. "Politieke zelfmoord" ligt om de hoek…

Van conflict…

Boze bewoners van de Rozemarijnstraat en Papegaaistraat bezetten zondag de Rozemarijnbrug als protest tegen het circulatieplan waardoor zij veel meer verkeer dan vroeger te slikken hebben. © James Arthur

Meer dan helft Gentse ondernemers vraagt aanpassingen aan circulatieplan

In Gent vraagt meer dan de helft van de ondernemers aanpassingen aan het circulatieplan, dat sinds begin april van kracht is. Amper 27,7 procent is uitgesproken positief over het plan, meer dan de helft (52,5 procent) van de zaakvoerders is ontevreden.

ADN 06-11-17, 16:14   Bron: Belga

⊞ MOBILITEIT

Waarom de fiets in Brussel nog lang geen koning is

In Schaarbeek trokken tegenstanders van het circulatieplan verkeersborden uit de grond. — © belga

Gesaboteerde verkeersborden en gejoel op gemeenteraden … Het gaat hard met het protest tegen het Brusselse mobiliteitsplan Good Move. De tegenstand is divers, kop van Jut zijn Ecolo en Groen: 'Weg met de groene dictatuur!'

Binnenland Mobiliteit

Twee politieagenten en een brandweerman gewond bij nieuw protest tegen circulatieplan Schaarbeek, gemeentebestuur stuurt plan bij

In Schaarbeek zijn twee politieagenten en een brandweerman gewond geraakt bij nieuw protest tegen het nieuwe circulatieplan in de Berenkuilwijk. Zowat 200 betogers hebben verkeersfilters gesaboteerd en verkeersborden verwijderd. Er werd ook vuurwerk afgestoken en er werden brandjes gesticht. Het gemeentebestuur voert meteen een kleine wijziging door aan het plan en lijkt zo deels toe te geven aan het geweld.

BRUZZ, Pieterjan Huyghebaert
Update wo 26 okt 2022 ⏱ 07:48
di 25 okt 2022 ⏱ 20:11

...naar samenwerking

Telraam @TelraamTelraam · Oct 10, 2021
Traffic volumes around schools are a major concern for citizens in Dublin. The Dublin case study is providing traffic and air quality monitors to local schools to help them collect objective measurements outside the school gate. @WecountH
we-count.net/news/dublin-sc...
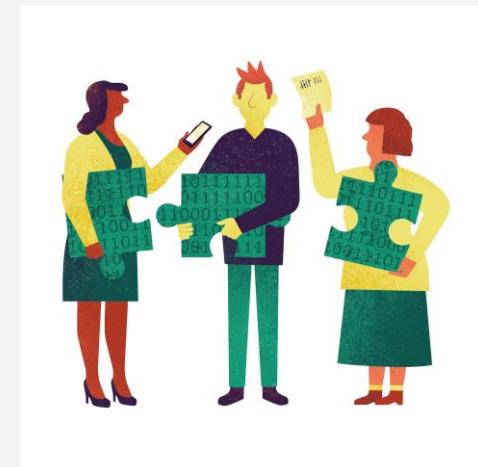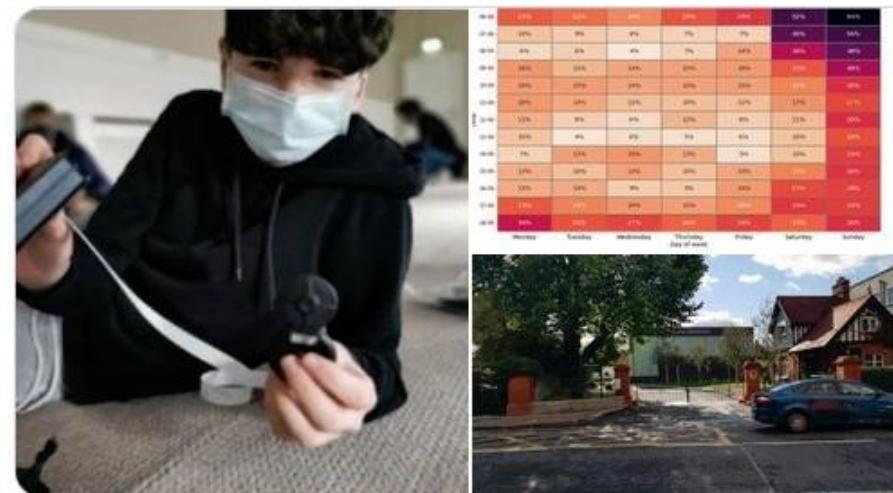
Nood aan (veel) data om beleidsplannen te kunnen maken
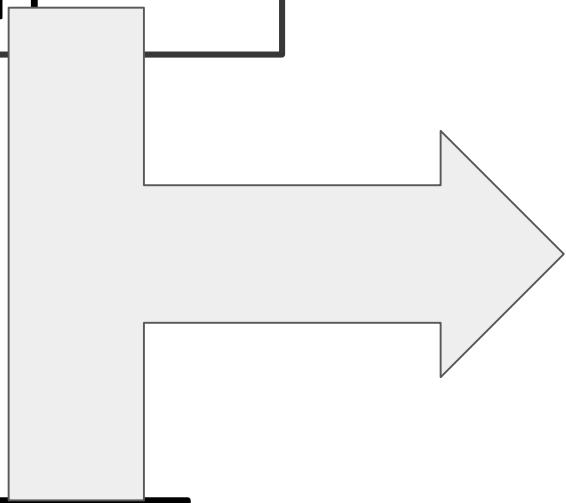
Nood aan draagvlak bij bewoners

Telraam, een sensor achter het raam

- Een sensor achter je raam met een camera die permanent telt (bij daglicht) e **categorieën** te onderscheiden en **snelheid** (*) voor sommige daarvan:

  - voetgangers
  - tweewielers
  - auto's *
  - zwaar verkeer

Compact
All-in one & elegant design
LCD interface

Easy to install
10' installation process
Plug in & don't worry

AI generated counts
Ability to improve through
machine learning

Night counts
Counting motorised
vehicles in darkness

More traffic data
Expanding to more modes
15' typical traffic

Voordelen van "citizen science" in stedelijk mobiliteitsbeleid

Mogelijkheid om een metingen van onderuit
(buurtcomité) of bovenaf (stad/gemeente/regio)
op te zetten.

✔ Geeft burgers een sleutelrol, door hen te betrekken in het beleidsproces

✔ Telraam objectiveert het buikgevoel van burgers. *("Er rijden hier 's ochtends veel te veel auto's..." Wat is "veel te veel" en wat zegt de infrastructuur en de categorisering?)*

✔ Biedt de mogelijkheid om de gewijzigde omstandigheden op lokaal niveau te monitoren en op langere termijn te controleren.

Transparantie! - Open Data om vertrouwen te creëren
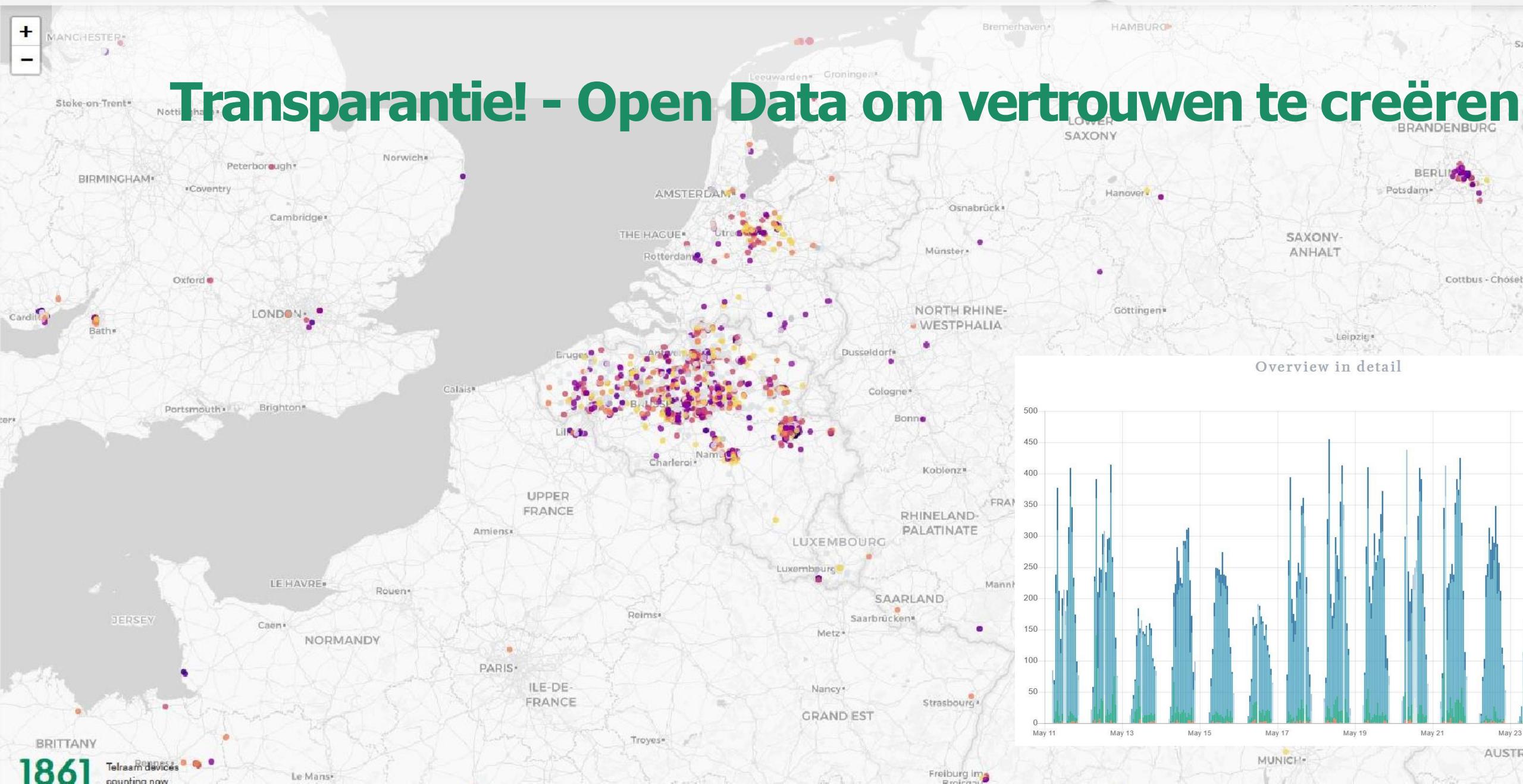
Covid-19 lockdown impact op Belgisch verkeer

Source: Péter I. Pápics - Transport & Mobility Leuven - telraam.net
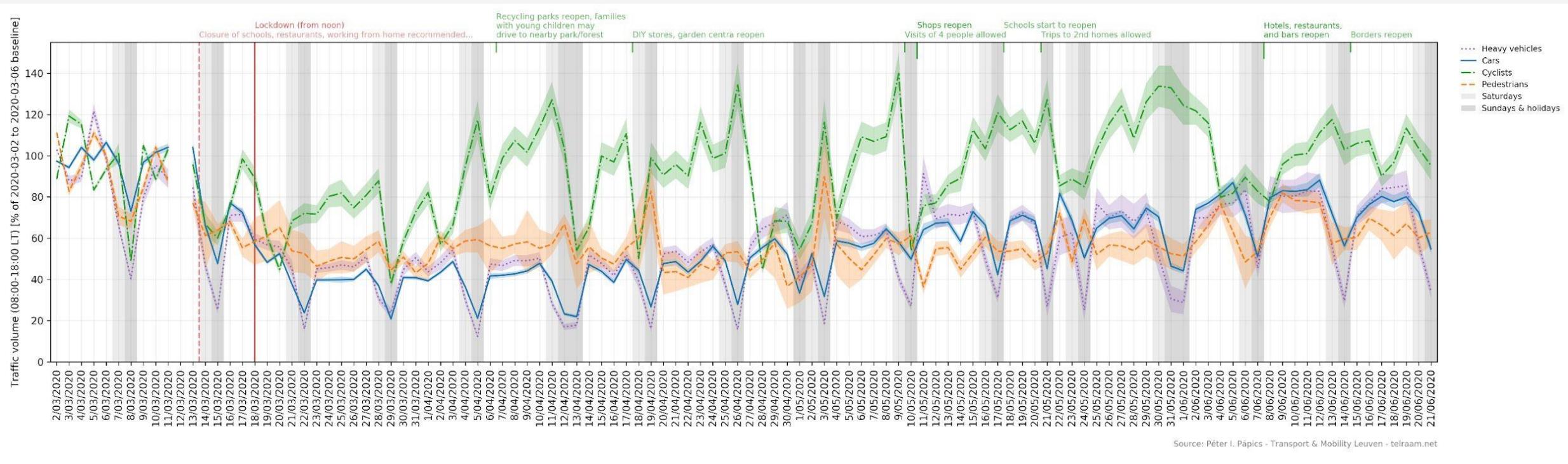
Snelheidsverlaging na Telraam-meting
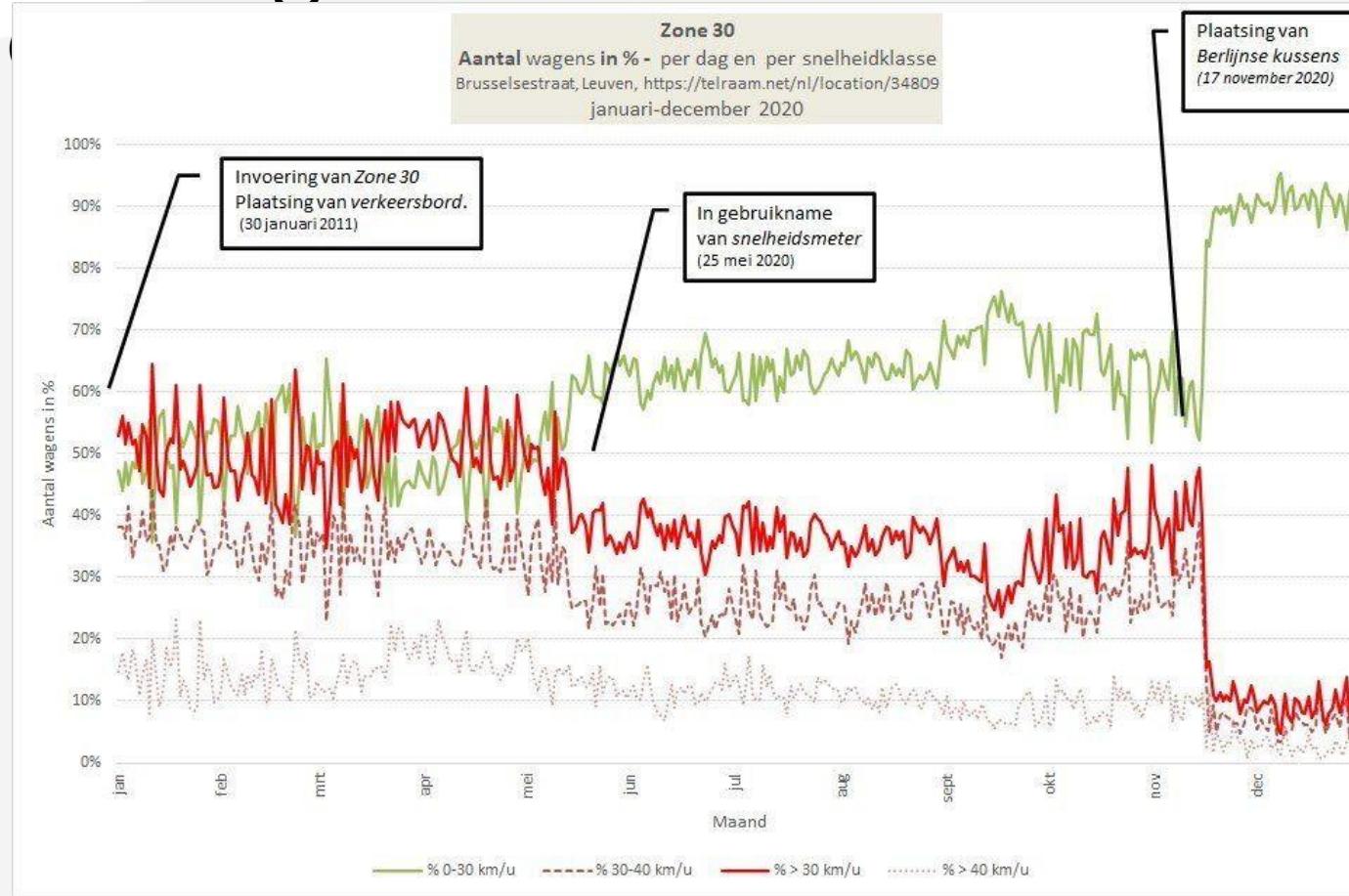
Impact van:
a) plaatsing digitaal snelheidsbord
b) plaatsing Berlijnse kussen op gemiddelde snelheid in zone 30.

Onofficiële omleiding
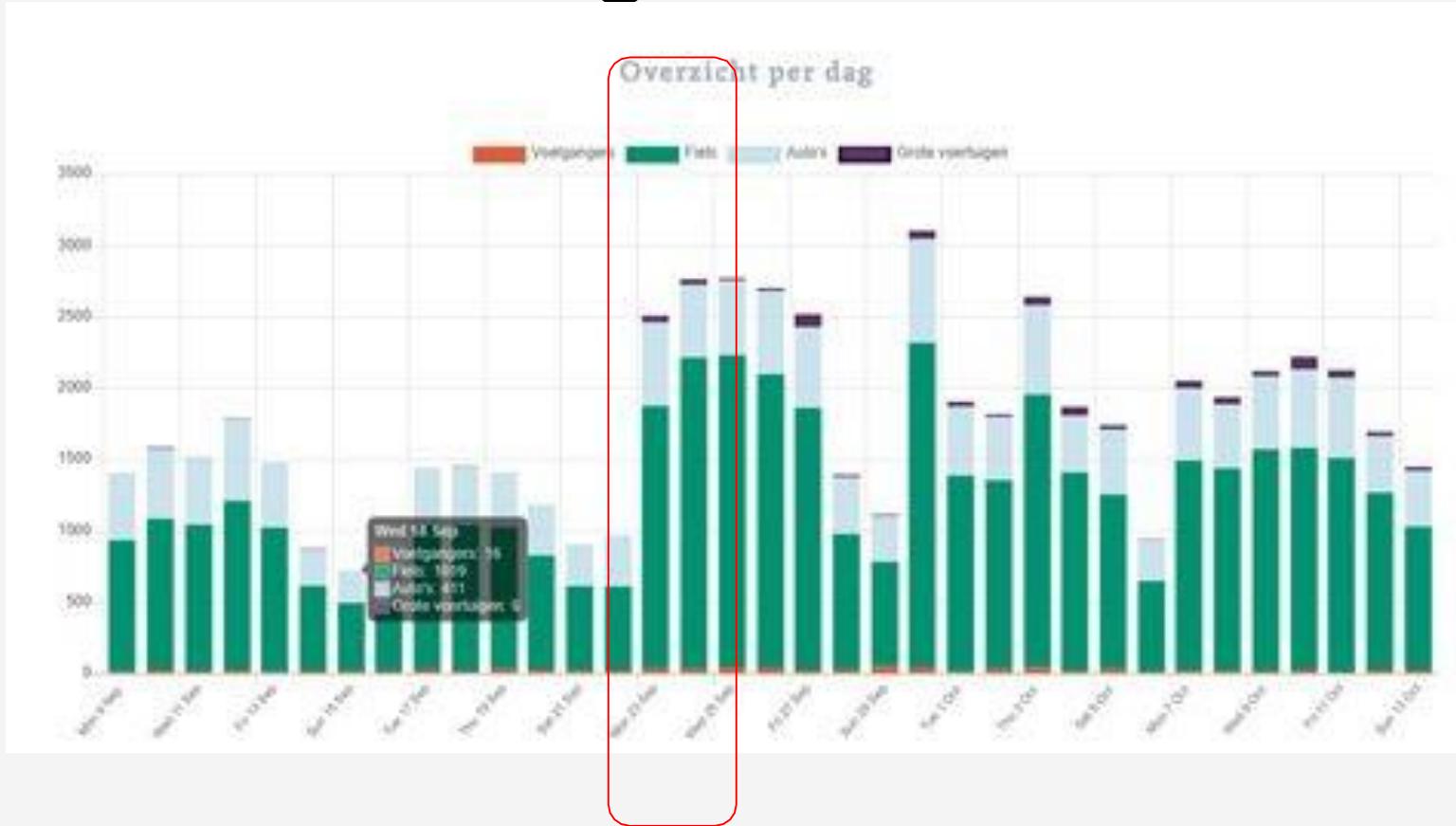
Impact toename fietsverkeer door onofficiële omleiding.
1000 extra fietsers per dag.

Slotbedenkingen

✔ **Omarm** de betrokkenheid van bewoners in stedelijk mobiliteitsbeleid en gebruik het als een "force for good"

✔ Durf een stap verder te gaan in participatie en betrek bewoners in dataverzameling en interpretatie als echte "**citizen scientists**"

✔ Een **Slimme Stad** is een stad die gebruik maakt van nieuwe technologie!
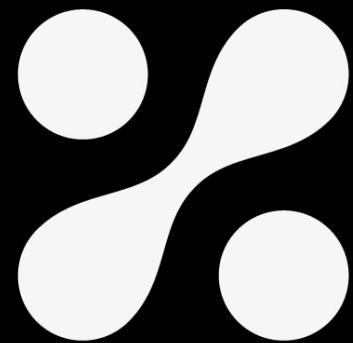
Algemene vragen:
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www.telraam-api.net
www.telraam.net

Mr François Macq,
Managing Director of Macq Mobility

„Europe for Europe"

Innovation since more than 100 Years

Founded in 1923 in Brussels
Belgian family business in its third generation

More than 130 employees
Hardware, software, data science, AI, …

1 Business – Traffic Management
Smart Mobility, Intelligent Traffic System, Road safety, Traffic modelisation and prediction, Environment

Our business models
As-a-Service & Licensing || Off-the-shelf products & solutions || Customized turnkey solutions

Intelligent cameras since 2001
100% designed in-house, both hardware and software

International Sales
CH, AT, DE, LT, LV, FR, NL, DK, CI, US, MA, VN, KH, AU, …

ISO 27001 INFORMATION SECURITY MANAGEMENT SYSTEM

ISO 9001 CERTIFIED VINÇOTTE

SGS

History

Business innovation

Technological innovation

Perseverance

Game Changer

Mobility (2000-2023)
Cameras - 2001
M³ (Macq Mobility Manager) - 2010

Digital Revolution (1960-2000)
Digital Voltmeter -1960
PLC's - 1968
DP - 1980
Supervision - 1983

From Radio (1923-1945) to Industry (1950-1960)
Mass spectrometry

Our goals

1. Preventing fatal road accidents

2. Protecting vulnerable road users

3. Improving air quality

4. Making road traffic more efficient

In agreement with UN's SDGs

4 Solution Areas - interconnectivity

Road safety

School

Mobility

Environment

Product Portfolio

QCAM Series

QCAM App

Further Products

QCAM Mobile

QSense Air

QSense Crowd

M³ Software
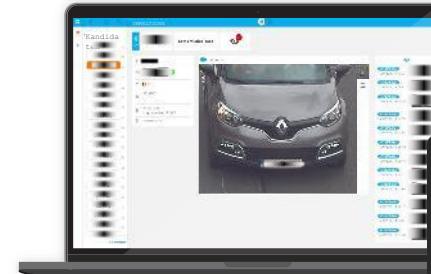
Police

Cities & Highways

School

Environ- ment

Analytics

Solutions

Section Control
Homologated

Blacklist Management

Search Query

Interdistance
Under development

Rat Running

Overtaking

Overload & Oversize

Seatbelt & Mobile Phone Detection

Spot Speed
Under development

Red Light Running
Under development

Railway Crossing

Dangerous Goods

Low Emission Zone & Mobility Pricing

Restricted Traffic Zone

Congestion Detection

Gridlock Detection

Parking

Variable Message Sign

Counting & Statistics

Origin-Destination

Travel Time

Data Solutions – never enough data
Multimodal traffic data processing
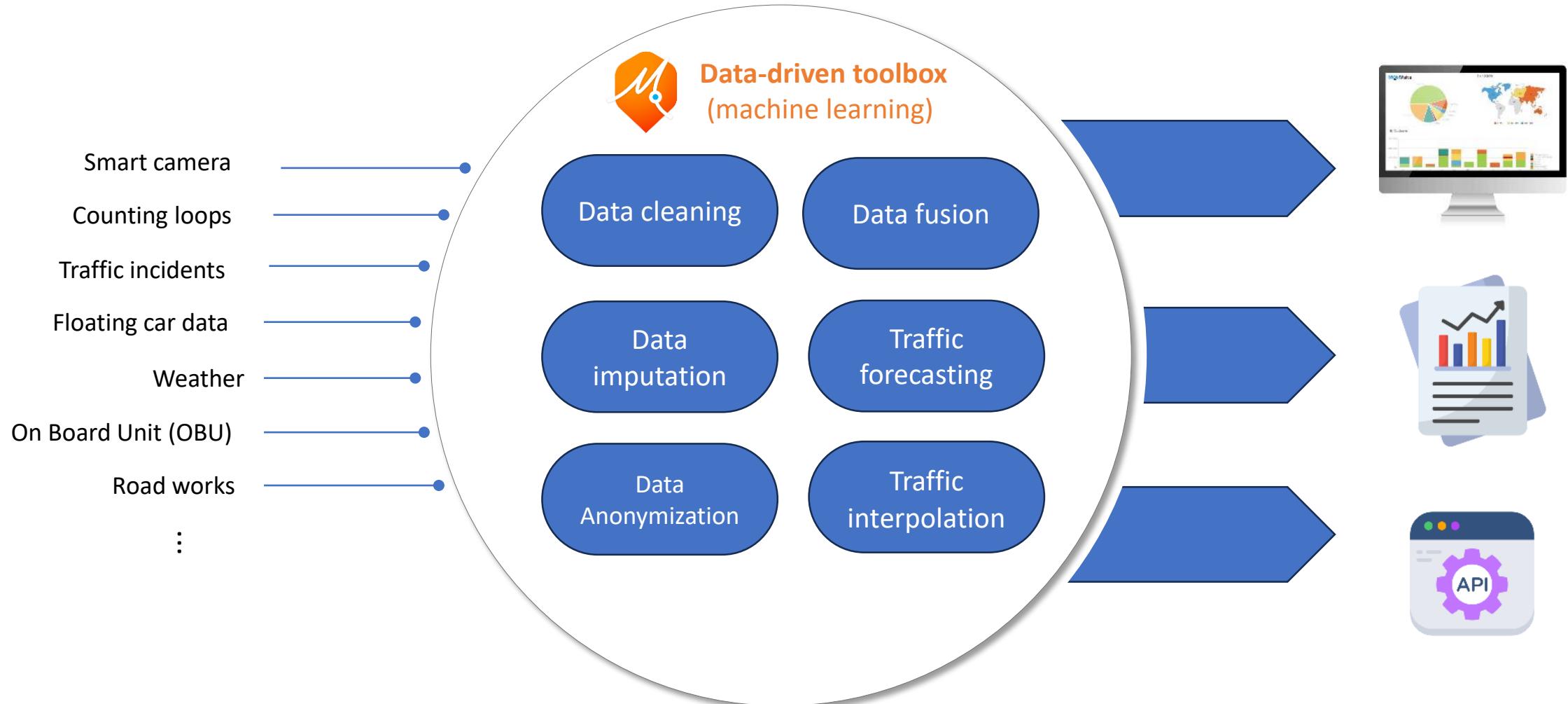
# Using latest Technologies

AI & Deep Learning

Edge Computing

Data Science & Data Modelling

Encryption & Data Protection

ANPR + Country code	Vehicle characteristics and color
Vehicle type classification	Object recognition
Axle Counting	Image-analytical speed measurement
Weight classification	Dangerous goods plates recognition (ADR)
Make & Model (MMR)	Seatbelt & mobile phone detection

100% designed by Macq

MACQ MOBILITY
MANAGER
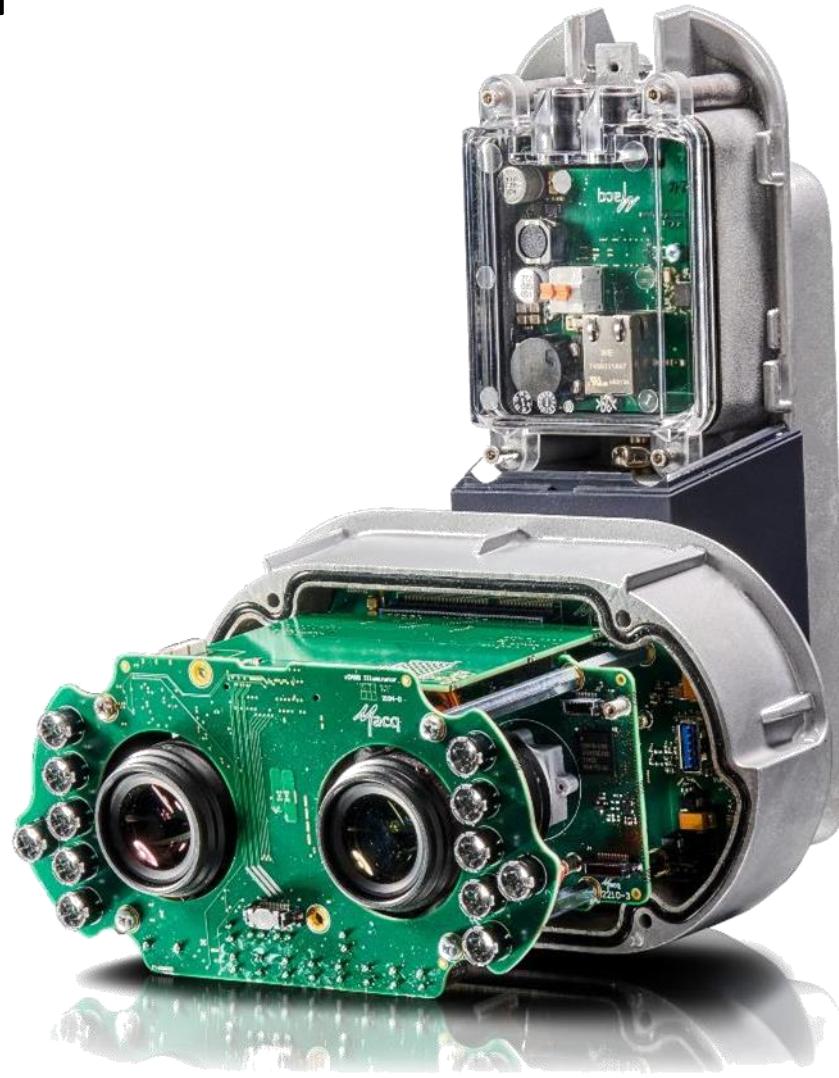
References – Market leader in Belgium

Section Control
+400 investment model & +240 „As-a-Service"-model

Blacklist Management
Complete traffic control centre of the Belgian Federal Police

Low Emission Zone
Brussels with over 350 installed ANPR cameras

Shadow Tolling
For the whole region of Wallonia (approx. 2,300 kilometers)

Parking & Restricted Traffic Zones
Free areas, bollards, barriers, VMS

Protection of level crossings
Similar technology as red light monitoring

Section Control – Sites in operation

Cameras

Server | M³ Software
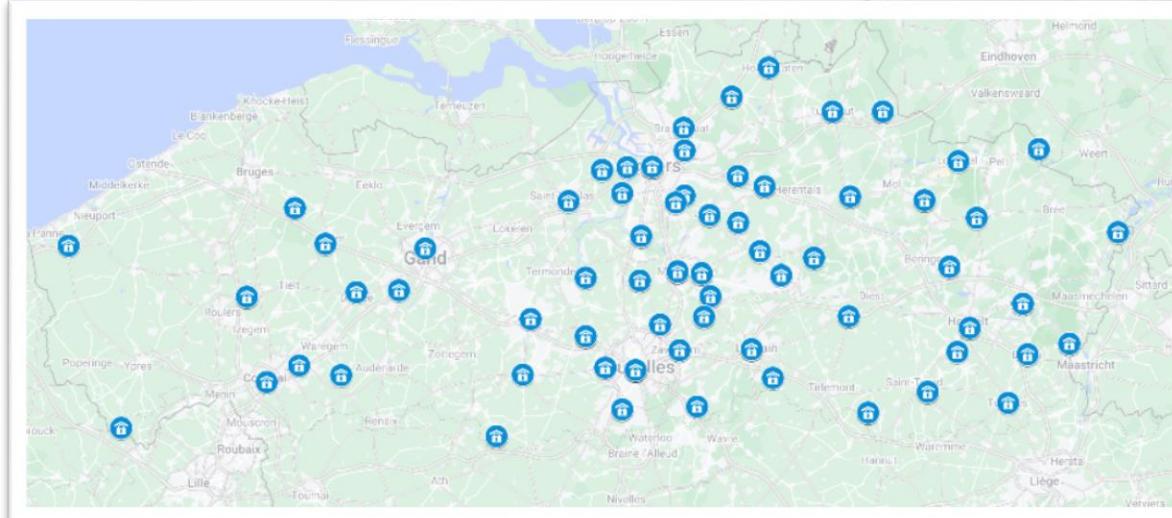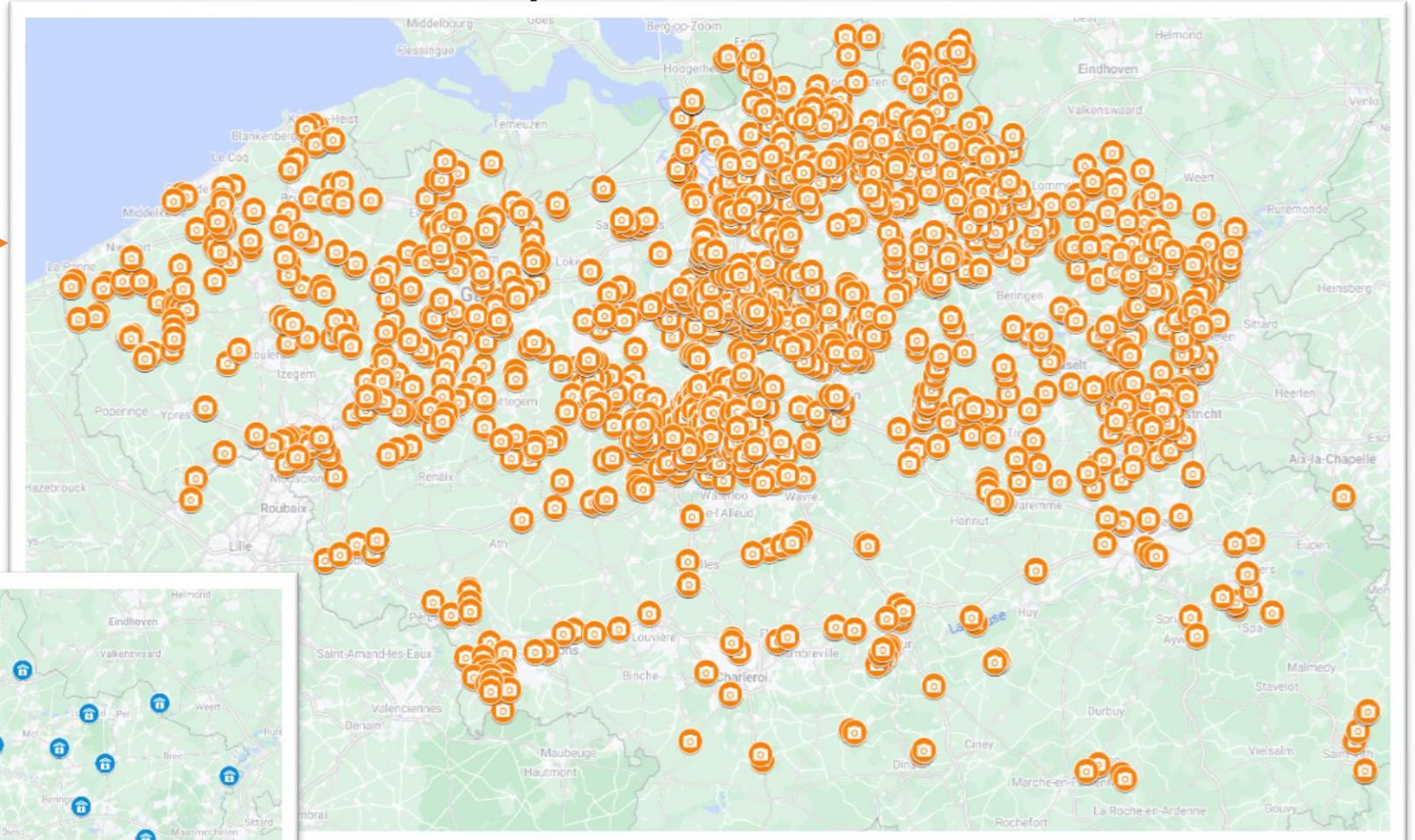
Target Clients – all together

Public authorities & private companies, e.g.:

- Police / Customs
- Road authorities
- Regions, Cities, ….
- Logistics companies, ports, airports, …

Worldwide & Geographically scalable

Consolidate several clients on one M²C (My Mobility Centre)

Pyramid Level	Example
Inter-national	European Union (EU)
National	Belgium
Region / Federal state	Flanders
Province / Canton / Departments	East Flanders
Metropol / Federation of municipalities	Ghent
City / Municipality	Ghent
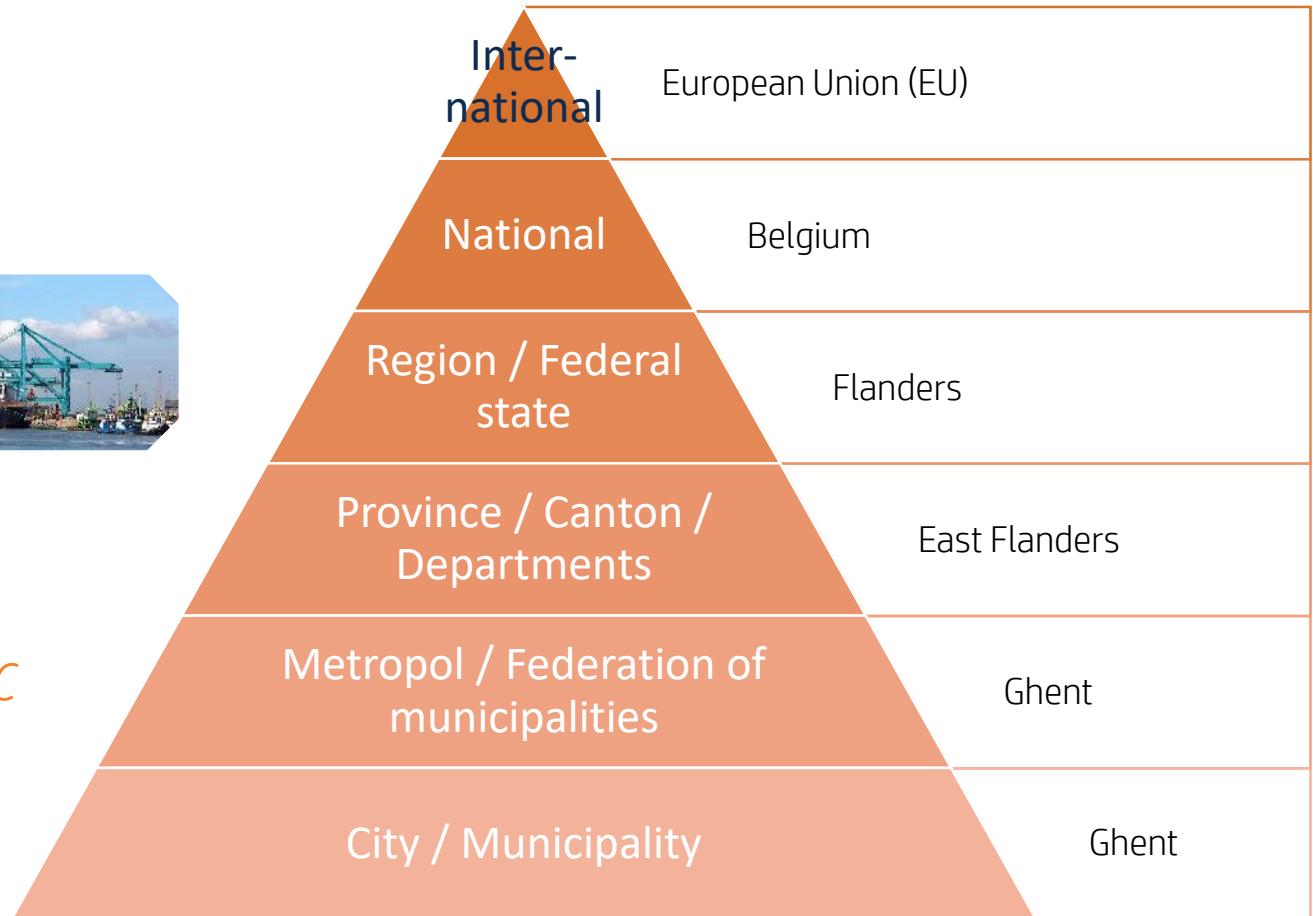
Thank you.

contact@macq.eu