SMART FLANDERS

Nils Walravens, PhD
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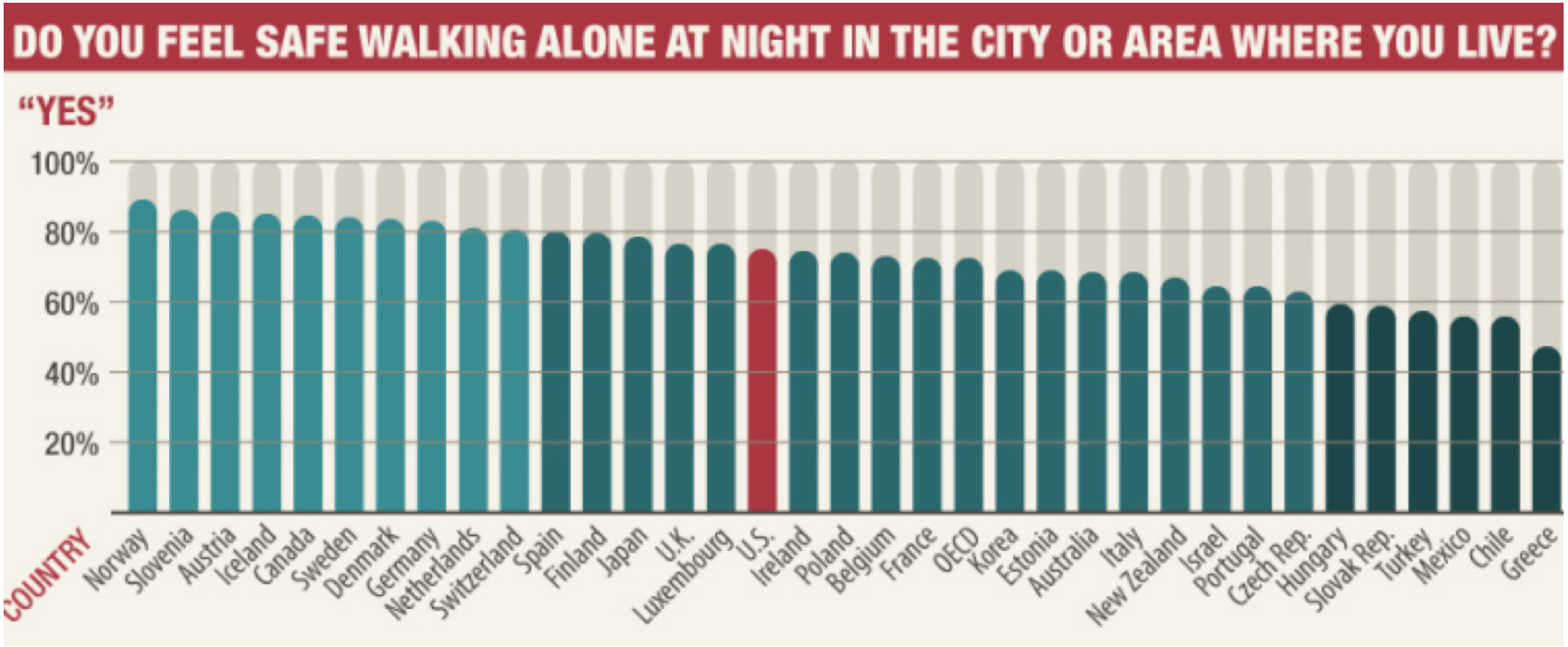
PROBLEM

What are we dealing with?



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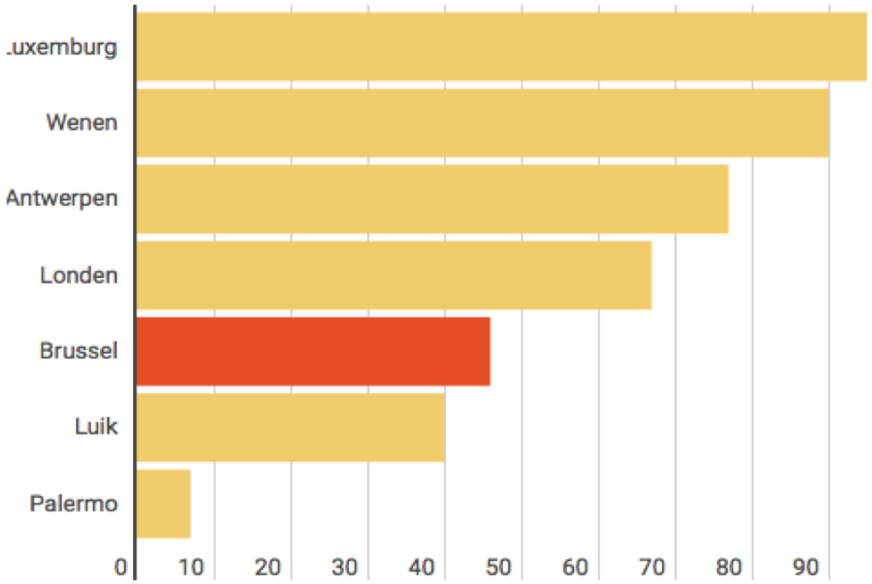
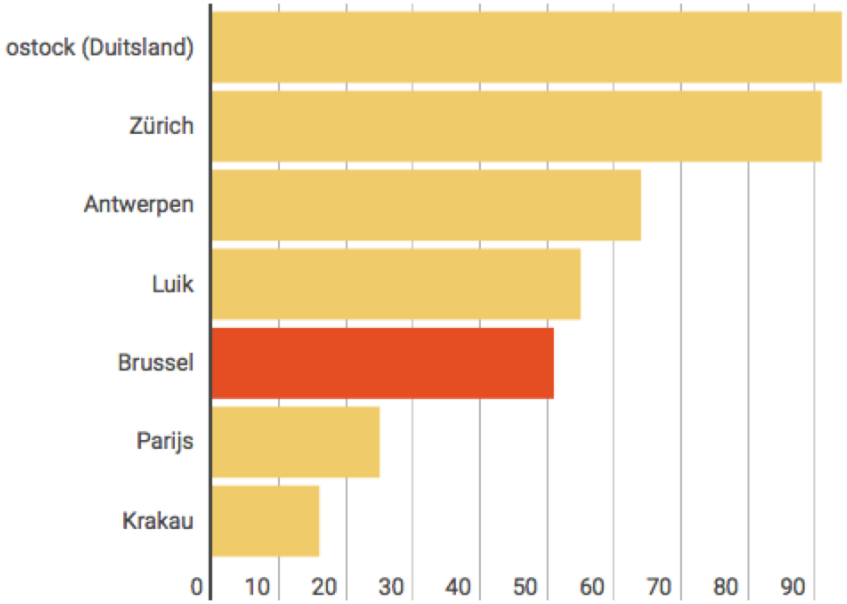
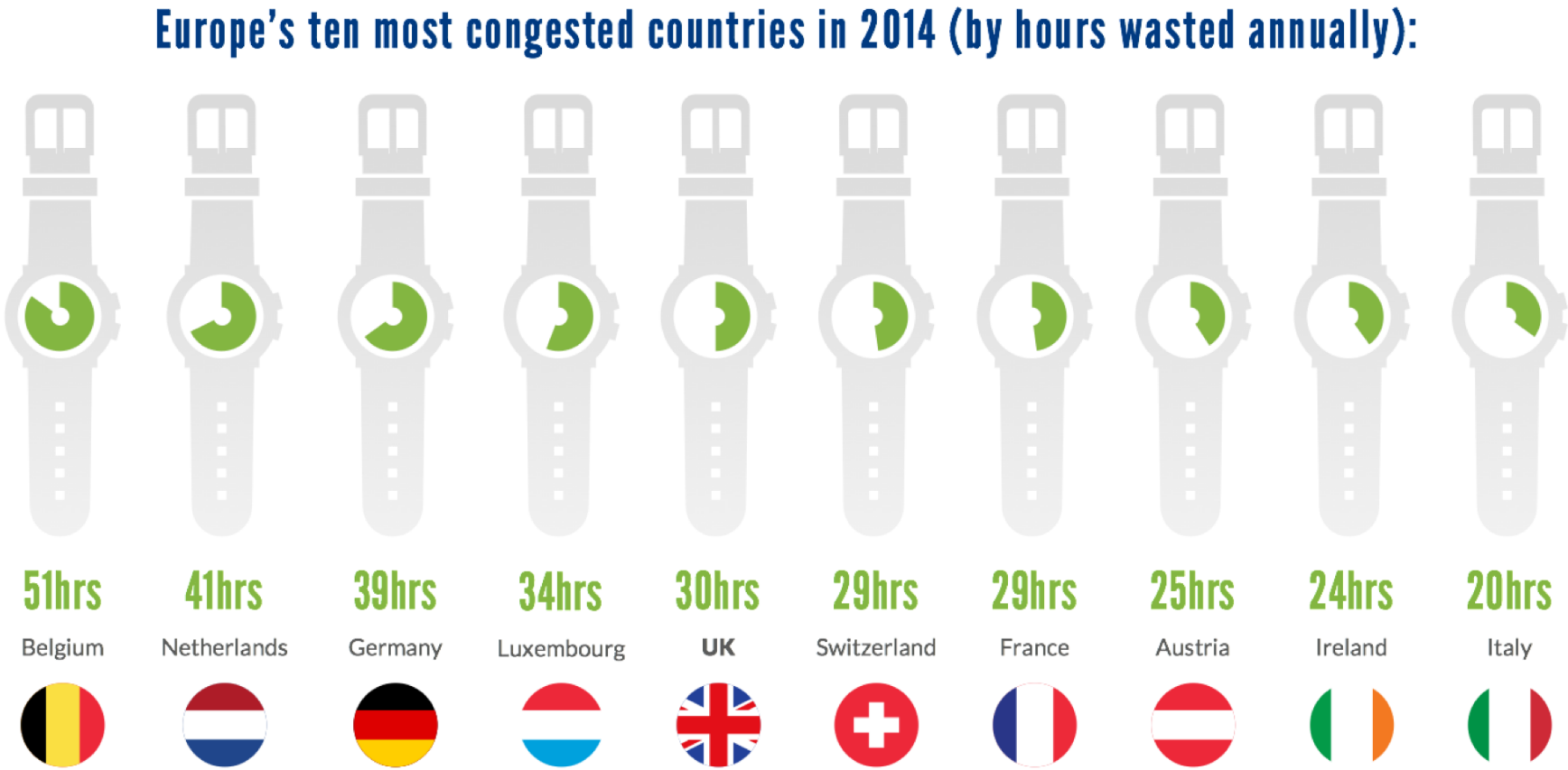


'Ik ben tevreden over de netheid in mijn stad"



'Ik ben tevreden over de luchtkwaliteit in mijn stad'

What are we dealing with?



Wicked problems require collaborative solutions

Not reinventing the wheel on an island…

Wicked problems require open and shared approaches

No silos or fragmentation…

Wicked problems require data

Tons of data…

https://index.okfn.org

BOTTOM LINE

Bottom line of Smart Flanders

Expectations around IoT and Smart Cities in general remain very high, but the potential real-life impact and return are still hard to grasp or unclear.

Which urban challenges can we start tackling in a better way today, by bringing together city data in smarter ways and making them available for reuse? (linked & open)?

Based on this exercise, which new opportunities do we identify for more innovative, different or other ways of collecting, processing and opening data?

WHY OPEN DATA?

Why open data?

Transport for London publishes real-time open data

13.000 registered developers, 600 apps

Approx 500 people directly employed

42% of Londeners use a service based on TfL data

Yearly estimated economic benefit and savings of £130 milio

http://content.tfl.gov.uk/deloitte-report-tfl-open-data.pdf

TRANSPORT FOR LONDON

EVERY JOURNEY MATTERS

AND BECAUSE YOU HAVE TO…

Why open data? Because you have to…

Decreet Hergebruik van Overheidsinformatie (2007)

According to the definition of 'bestuursdocumenten' in the Decreet Openbaarheid van Bestuur (2004)

Translation of the European Directive on Public Sector Information (PSI) in which Flanders was a frontrunner in Europe (and Belgium)

No privacy-sensitive or personal data

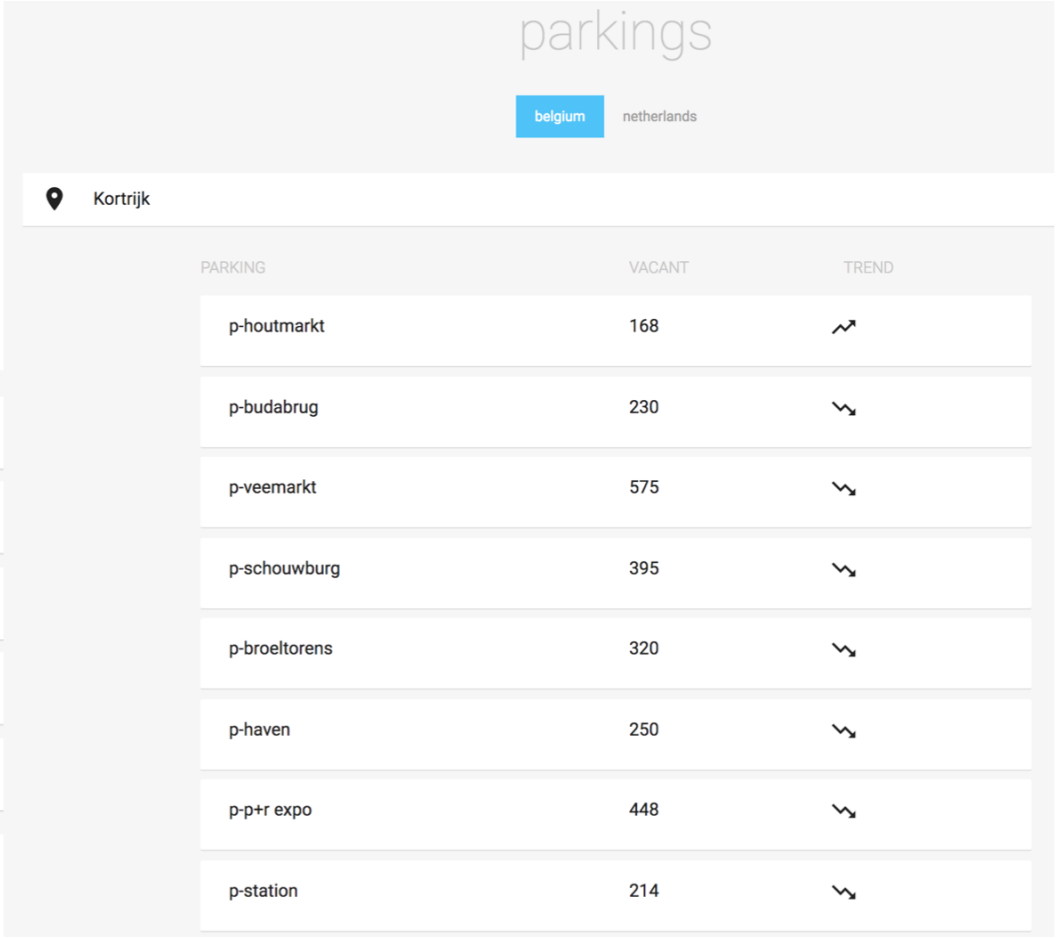
PILOT ON REAL-TIME OPEN PARKING DATA

Pilot real-time occupancy parking garages

Proof of concept
https://smartflanders-poc.netlify.com/#/parkings

Informatiepagina
https://datapiloten.be/parking

- Kortrijk
- Gent
- Leuven
- Sint-Niklaas
- Nederland



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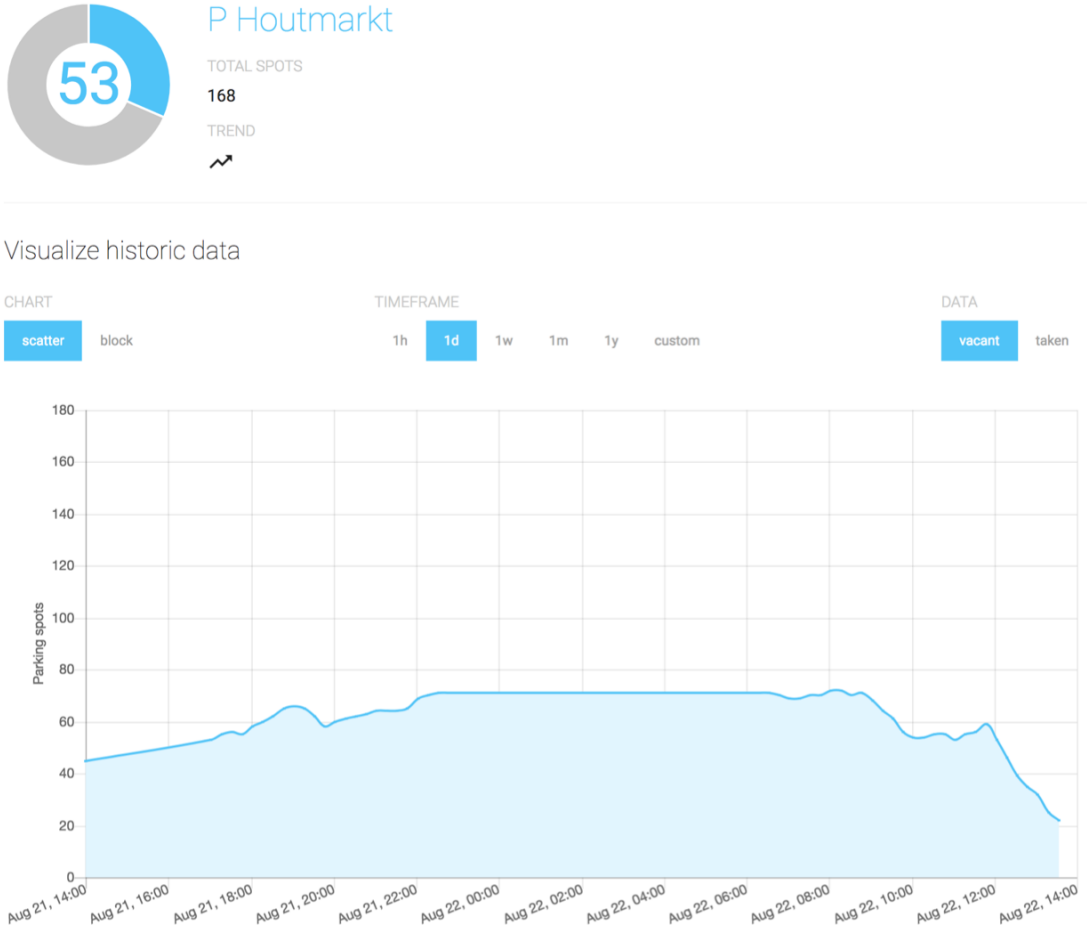
Occupancy individual parkings



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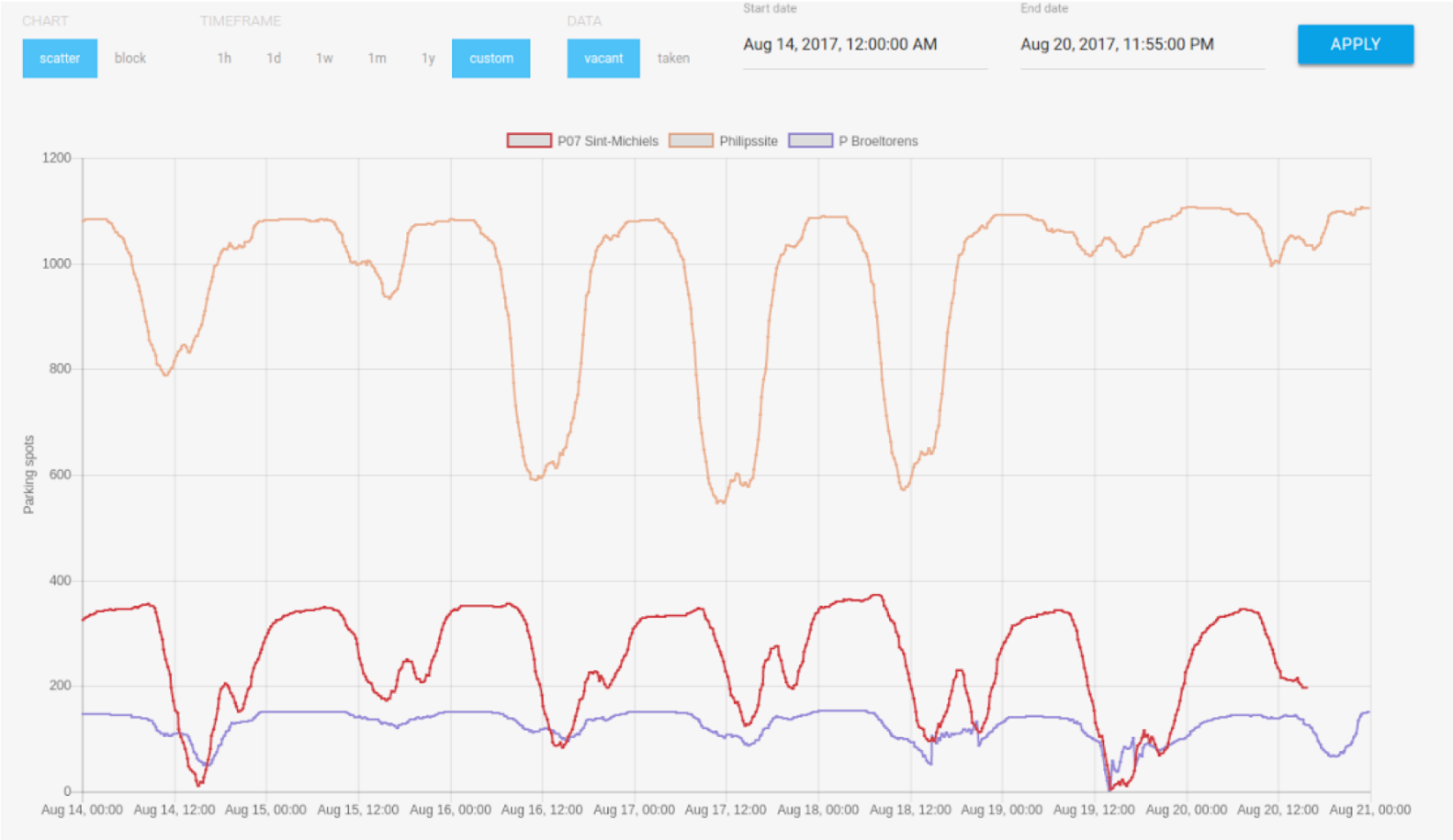
Compare occupancy over time



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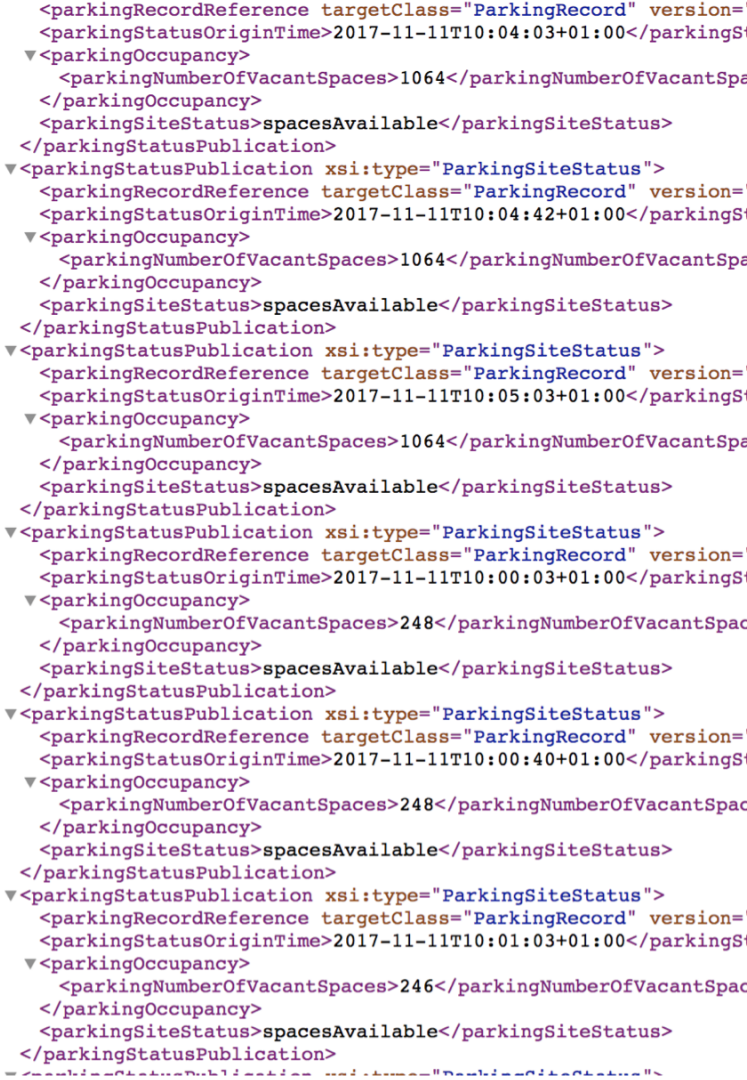
Importance of this approach to data publishing

Not this visualisation, however:

- Automation
- Reuse (already by one startup and research)
- Scalability and cost for cities
- Data-based policy (internal reuse)
- Transparency



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PRINCIPLES

Core principles of Smart Flanders

Support programme, communications channel, knowledge and interaction platform

Focus on real-time open data and shared reference architectures

Cooperation between cities and actors from the quadruple helix

Implementation-driven

Internationally networked

Lighthouse model for smaller cities (13 centre cities and VGC Brussels)

PROJECT STRUCTURE

Threefold project structure

1. Open and Agile Smart Flanders: *Maturity Check*
   - *Maturity check and 'Smart Portrait'*
   - *Open Data Charter*

2. Smart Flanders Data Pilots: *Reality Check*
   - *1 - 2 data pilots per year to tackle a shared urban challenge*

1. Smart Flanders Testbed: *Conformity Check*
   - *Test and validation in a real-life environment*

Partners: imec, 13 centre cities and VGC, ABB, Kenniscentrum, AIV, Facilitair Bedrijf, cabinets Homans, Muyters, Weyts, user group

WHAT CAN CITIES EXPECT FROM SMART FLANDERS?

Smart Flanders Offer I

Practices and tools for cost efficient data publication

Support in defining and setting up data pilots with societal impact

Stimulating data reuse with innovation as the goal

Working towards better inter- and intragovernmental data sharing

Support in avoiding vendor lock-in

Smart Flanders Offer II

Building bridges to existing initiatives

Building on available solutions and technologies

Gathering and translating international insights

Support participation in (inter)national projects, pilots and so on

Support matchmaking with the market where possible

WHERE ARE WE TODAY?

Status after one year

- ✓ Introduction round of 13 cities
- ✓ Questionnaire on Smart Cities and open data
- ✓ In-depth interviews 'Smart Portrait'
- ✓ https://smart.flanders.be with page for developers
- ✓ 7 Steercos
- ✓ 2 working groups
- ✓ Running pilot on parking data: https://datapiloten.be/parking
- ✓ Steerco-approved Open Data Charter

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OPEN DATA CHARTER

Open Data Charter

https://smart.flanders.be/open-data-charter

Goal: establish a progressive vision and ambition, stimulate reuse

Strategic and technical principles on open data publishing

Point of reference for cities, but open to broader support

Co-created with the cities for 3 types of data

Open Data Charter: Principles

Stimulate maximum reuse

Accurate metadata

Web as publication platform

Open licences

Sharing and coooperation between governments

Dialogue and interaction with quadruple helic and reusers

Lowest possible delay between measurement and publication + historical data

Attention for these principles in procurement, contracts, concessions etc.

To be published on https://smart.flanders.be/open-data-charter when finalised

CONCLUSION

Conclusion

Complex challenges can be tackled in the relative short term

Learning by doing works, but raises understandable questions

Not obstacles, but opportunities

Keep focus on return for the cities, with attention for the whole ecosystem

TEAM

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PhD Communication Sciences
Author “Smart Cities: Hoe Technologie Onze Steden Leefbaar Houdt en Slimmer Maakt” - Lannoo, 2016

Strategic coordination

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Senior Researcher imec – SMIT – VUB

PhD Communication Sciences on public value, mobile apps en Smart City strategies

Operational coordination

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Researcher imec – IDLab – UGent

PhD on data publishing for maximum reuse

Contact technical questions and vision on data publishing

Mathias Van Compernolle

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Initiated PhD gestart on governmental innovation, with focus on data government

Development Maturity Check and collaboration techniques, policy expertise open data & e-government

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PhD Researcher imec – SMIT – VUB

Initiated PhD on international Smart City monitors and benchmarking

Contact and support of monitoring activities