

# Dynamic Access Control

(DAC)

A way to promote sustainable last-mile delivery in the city



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The bigger picture



# Token

Horizon 2020 project:

Transformative impact of blockchain technologies in public services

1

Public Funding Distribution

2

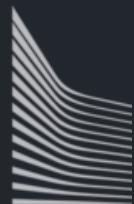
Management of Public Accounts

3

Urban Logistics

4

Data Valorization



European Commission

Horizon 2020  
European Union funding  
for Research & Innovation



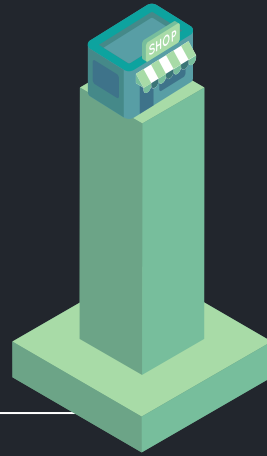
# Urban logistics challenges



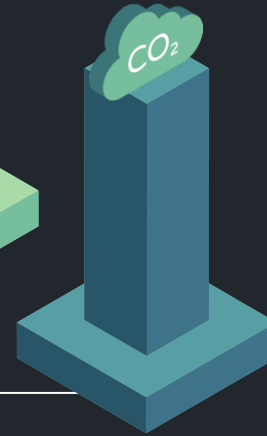
Goals

## How to...

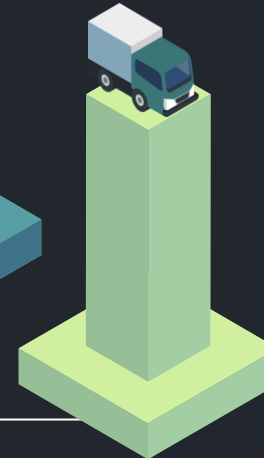
Promote local goods?



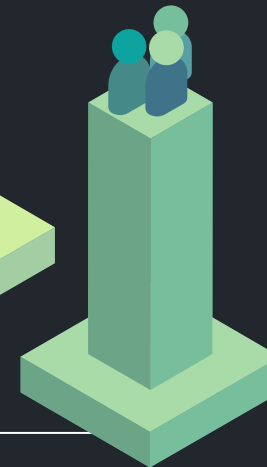
Enable zero-emissive transport?



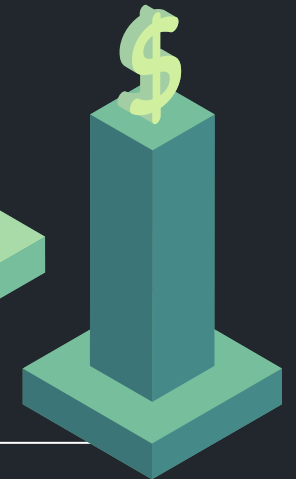
Optimize city access for motorized vehicles?



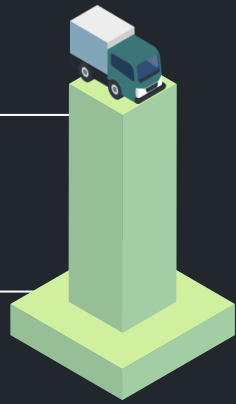
Create trust in collaboration?



Make it profitable and efficient for all partners?



Challenges



# City access for motorized vehicles

Static window times

Limited hours for delivery

(no) parking policy

Limited parking or (un)loading spots

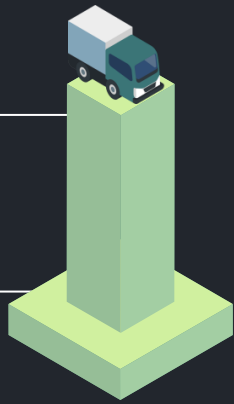


Traffic plan

Guide motorized vehicles to ringroad



Challenges



# City access for motorized vehicles

Example: Leuven



## Static window times

Delivery between 6 and 11 or 18.30 and 20.30

## Signage boards

Visual indication on allowed modality

## ANPR camera

Control mechanism in the city




# Urban logistics solution: Dynamic access control



## Dynamic Access Control

### What?

- » A system to evaluate access requests
- » Parameters + advantages decided by the city
  - » Zero-emission transport
  - » Consolidation / load factor
  - » Local goods 
  - » Extra time for delivery
  - » Passage through traffic plan
  - » Extra parking possibilities

### How?

- » Linked with planning systems of transport companies
- » Linked with city control mechanism





# Dynamic Access Control – the journey

Example: Leuven

## Gathering orders

Producer delivers transporter the orders through the Token platform.

## Access request

Transporter asks for exception through DAC.

## DAC evaluation

Evaluation according to parameters set by the city.

## Granting access

White listing of license plate:  
control ANPR



What's next?



What's next?

## What will happen next

**2022**

First testing in Leuven  
Parameter local goods




 Token



What's next?

## Which opportunities do you see?

**2022**

 First testing in Leuven  
Parameter local goods

### Search for new project partners

- New parameters (e.g. vehicle emission, consolidation)
- Real time/historic traffic/parking data
- New incentives (e.g. dynamic parking and passage)



 **Token**



# Dynamic Access Control

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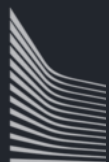
## Thank You!

Questions?



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