

# Open Data @De Lijn

27-03-2018

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Solution Strategy



Mijn lijn, altijd in beweging



# Why Open Data ?

- The Flemish government wants to be an open government that is transparent and participatory.
- The Flemish government agencies have an enormous wealth of data that can be opened to citizens, companies and organizations.
- Open data are data collected by the government as part of its public task and with no or minimal restrictions.
- Moreover, these data are available electronically and open standards are used.



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# Vision

- To become an active player in the mobility ecosystem by :
  - Embracing and stimulating digital entrepreneurship
  - Enabling technological innovation by providing real-time information for a multi-modal mobility
  - Focusing on customer-centric and combi-mobility
- Open Data are crucial in accomplishing this vision
- Following Open Data Guidelines from the Flemish government



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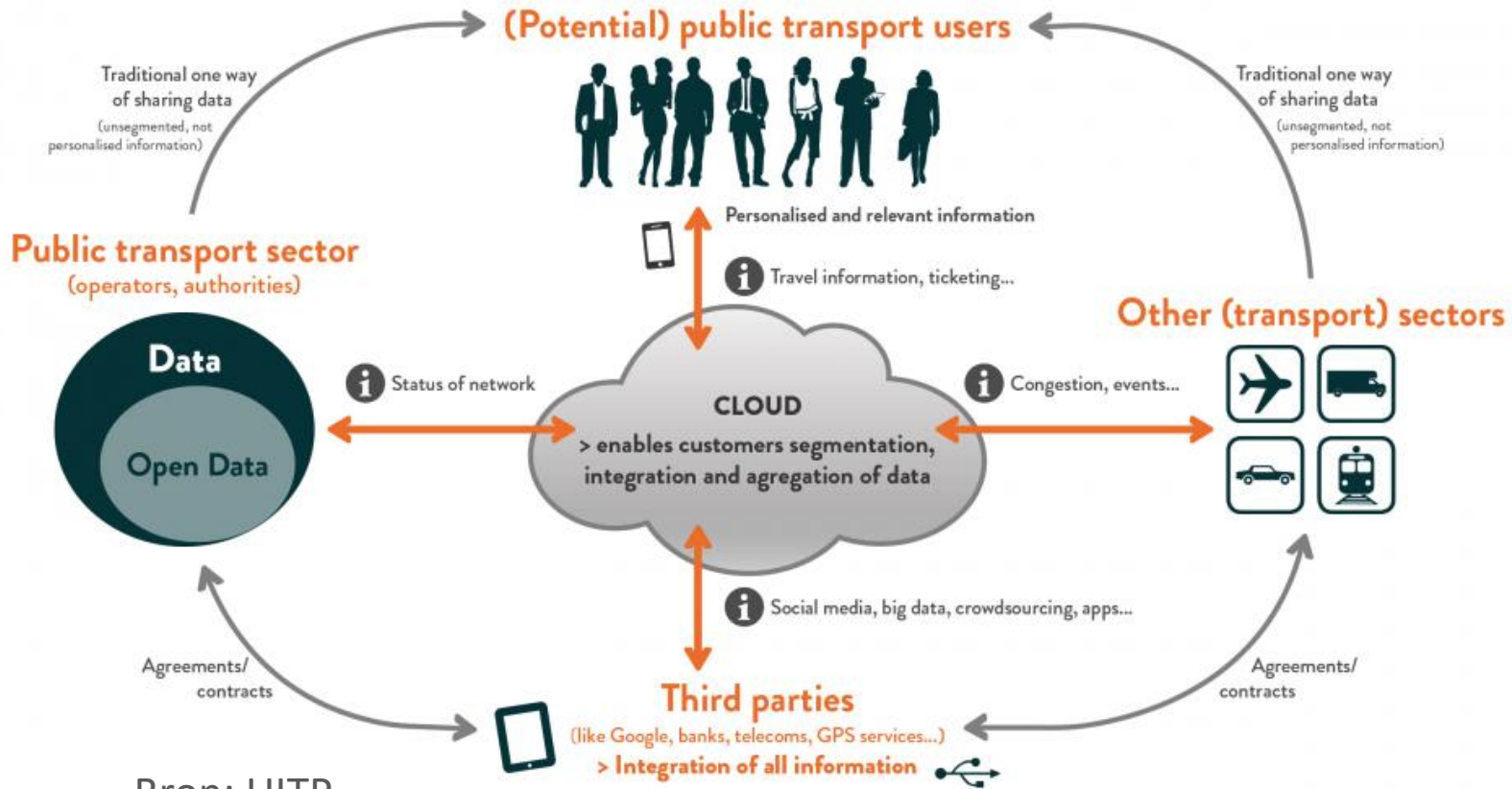
# Advantages

- Open data provides greater **transparency** about the functioning of the government.
- Open data also ensures greater **efficiency** both within and between governments and at companies and organizations externally to the government.
- Finally, open data also leads to **innovation** and the emergence of new and innovative products and services



# Open Data in public transport

## OVERVIEW OF OPEN DATA IN PUBLIC TRANSPORT



Bron: UITP



# Strategic lines

- Open data becomes the **norm** within the Flemish government
- **Re-use** of open data is **permitted**.  
Also for commercial purposes, free of charge or for an equitable remuneration. Open data uses simple, standardized licensing models
- Open data uses **open standards**
- Open data uses **open formats** and **open interfaces**;
- Open data from **authentic data sources** where possible



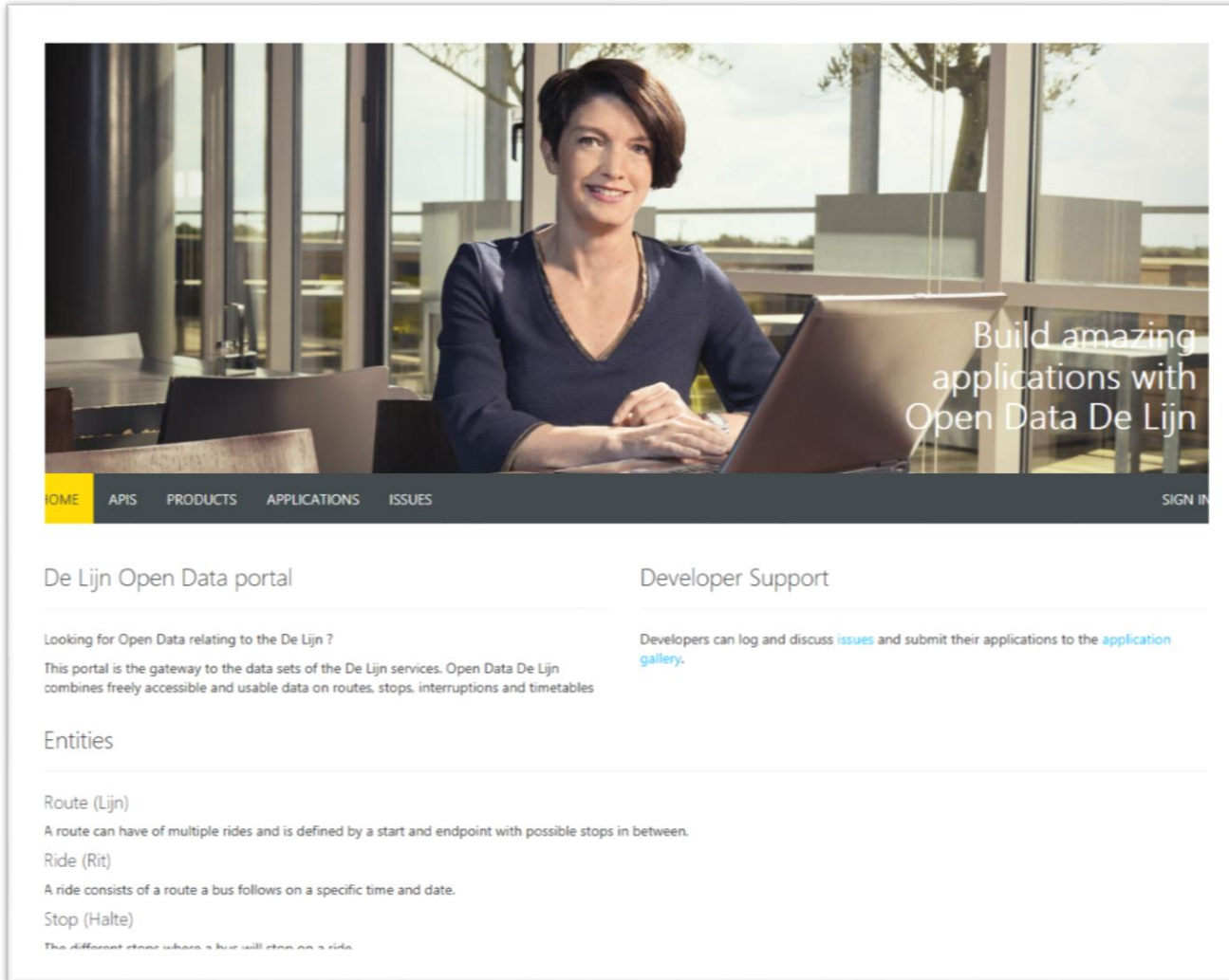
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# Licensing models

1. A Creative Common Zero statement
2. Free open data license
3. Open data license at fair compensation
4. Free open data license for non-commercial reuse
5. Open data license against fair compensation for commercial reuse



# Current offerings : <https://data.delijn.be/>



Build amazing applications with Open Data De Lijn

HOME APIS PRODUCTS APPLICATIONS ISSUES SIGN IN

## De Lijn Open Data portal

Looking for Open Data relating to the De Lijn ?

This portal is the gateway to the data sets of the De Lijn services. Open Data De Lijn combines freely accessible and usable data on routes, stops, interruptions and timetables

## Developer Support

Developers can log and discuss [issues](#) and submit their applications to the [application gallery](#).

## Entities

**Route (Lijn)**  
A route can have of multiple rides and is defined by a start and endpoint with possible stops in between.

**Ride (Rit)**  
A ride consists of a route a bus follows on a specific time and date.

**Stop (Halte)**  
The different stops where a bus will stop on a ride.





# Current offerings :

- <https://data.delijn.be/>
  - Static data : Stops, Lines, Schedules, ...
  - Dynamic data proprietary format
    - Route-planning
    - Real-time : stop passing times
    - M-Ticket (B2B)
- B2B – FTP (BLTAC – GTFS)



# On the roadmap

- Real-time :
  - B2B
  - Vehicle occupancy
- Provide NeTEx format
- Study in cooperation with Imec :
  - create a public Linked Open Data source according to the Smart Flanders principles.
  - Define an URI strategy so that vehicles can be unambiguously identified and linked across various interfaces.
  - Make real-time data usable for route planners today, such as Google Maps, CityMapper, Slim to Antwerp, Ally, Navitia, Moovel, and so on.
  - Make data available in accordance with the European Legislation





**Bedankt  
voor je aandacht**



Mijn lijn, altijd in beweging

