

PROJECT OVERVIEW - AND OPERATIONAL DATA

Operations data summary and technical project description of the 4 AVENUE pilot sites. Project funded by Horizon 2020 with the aim of testing and developing autonomous technologies towards a full scale implementation in public shared transport. The four pilot sites are Lyon, Luxembourg, Geneva & Copenhagen.

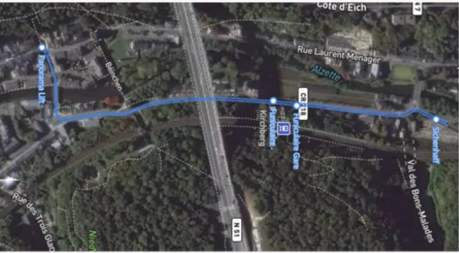
AVENUE SITE INFORMATION



Pfaffental, Luxembourg



Active: **Aug 2018 - Jan 2020**
Route length: **1.2 km**
Vehicles: **1**
Driving mode: **Metro**
Stops: **3**
Operational hours: **Tue/Thu: 12-16 & Sat/Sun/holidays: 16h45-20**



Contern, Luxembourg



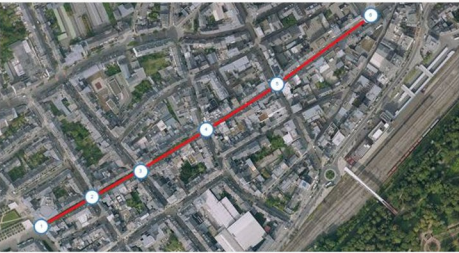
Active: **Aug '19 - Dec '20 & Apr '22 - Dez '22**
Route length: **2.3 km**
Vehicles: **1**
Driving mode: **Metro**
Stops: **2**
Operational hours: **Mon-Fri 07h20 - 09h10 & 15h50 - 18h35**



Esch, Luxembourg



Active: **Aug 2021 - Dec 2022**
Route length: **1,2 km**
Vehicles: **1**
Driving mode: **Metro & On-demand**
Stops: **6 + 4 virtual stops**
Operational hours: **Mon-Sat 11-21**
Order: **Via App or Call**



OPERATIONAL DATA



DRIVEN KMS

9.000



PASSENGERS

25.060



SERVICE MODE

METRO



DRIVEN KMS

3.700



PASSENGERS

800



SERVICE MODE

METRO



DRIVEN KMS

4.000



PASSENGERS

9.800



SERVICE MODE

METRO & ON-DEMAND

SITE LEARNINGS & ACHIEVEMENTS

- Driving in touristic site, industrial zone and in the pedestrian zone
- Each location has its own kind of obstacles: such as tourists, heavy trucks or bicycles
- First Luxembourgish approval for public roads
- One year of homologation and for the first approval could be cut in half for new projects – with the potential to reduce it even further
- 4 years of driving with some difficulty restarting after severe COVID restrictions has resulted in many learnings and recommendations for all stakeholders
- As long as a safety operator is required to be on board, the costs might be too high for some customers/operators
- In crowded areas the shuttle is well used but for the last mile it depends heavily on existing connections
- On-demand, fully integrated with ioki and their mission management system in Esch
- A high degree of utilization can lead to an increase in service times if everyone involved is convinced of the shuttle as more than just another mobility option

TOTAL  16.700 KM  35.660

KEY HIGHLIGHTS

- First Luxembourgish approval
- Two sites are going to continue the service in 2023 and the other one needs to find just some partners to share the costs
- A test field is needed for journeys without a safety operator on board

