

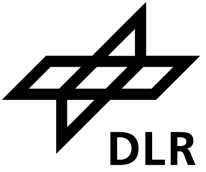
# ON-DEMAND TRANSIT CAN UNLOCK URBAN AND RURAL MOBILITY

International Mobility Summit 12. – 13.10.2022

Kay Gade



# DLR – German Aerospace Center



- Mission: to explore our Earth and space and develop technologies for a sustainable future.
- Research and development activities in the fields of

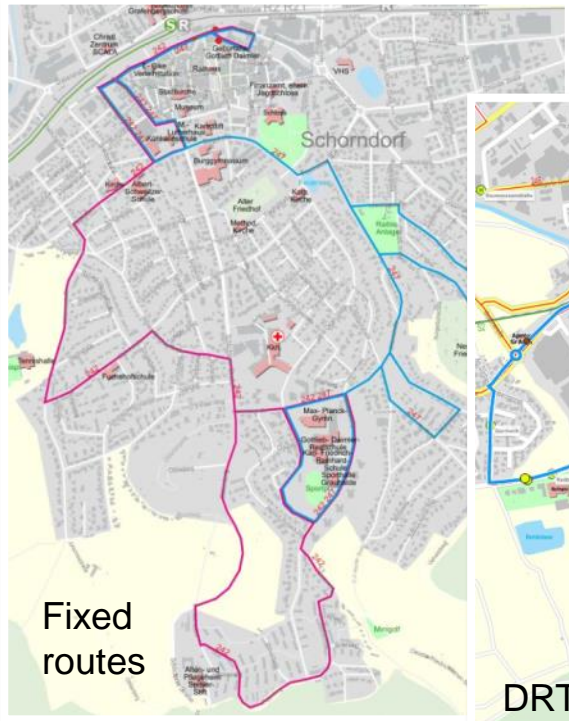


- Europe's largest research organisation with more than 10,000 employees
- 55 research institutes and facilities at 30 locations
- 4 international offices

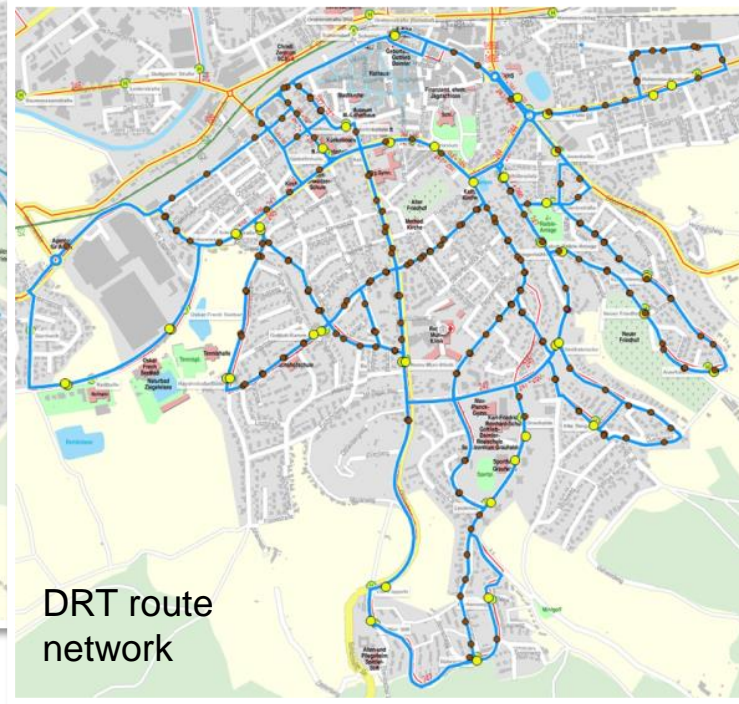


# ON-DEMAND TRANSIT CAN UNLOCK URBAN AND RURAL MOBILITY

# Living Lab Schorndorf



Fixed routes



DRT route network



**Smartphone app**  
**Web interface**  
**Telephone service**  
**Cooperating partners**

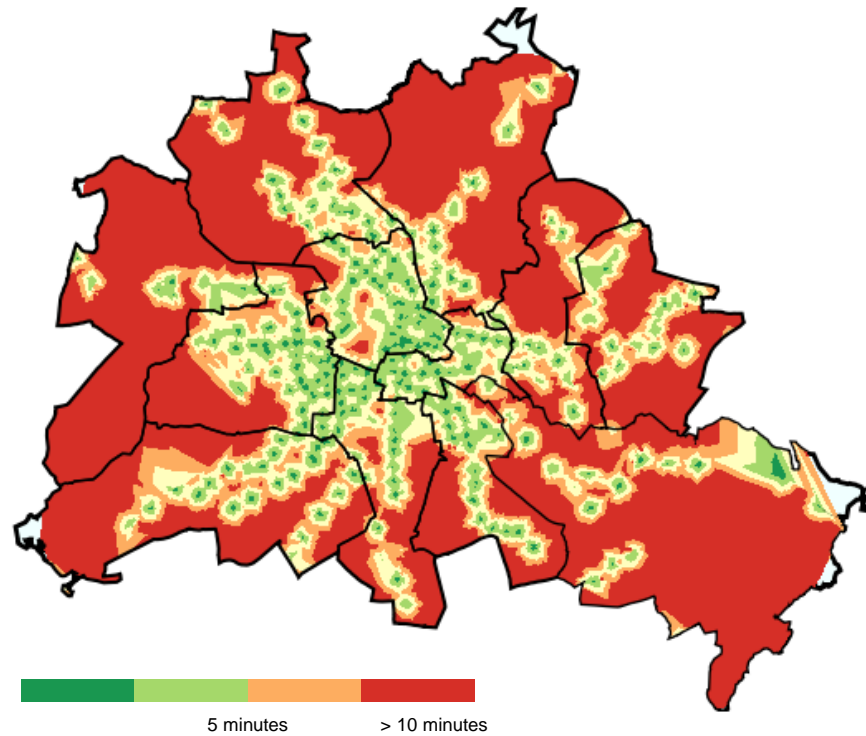
**Replacement of 2 existing bus lines on weekends**  
**DRT system offers:**

- High availability
- Short walking distances (>200 virtual stops)
- Direct links (no need to change buses)
- No empty runs

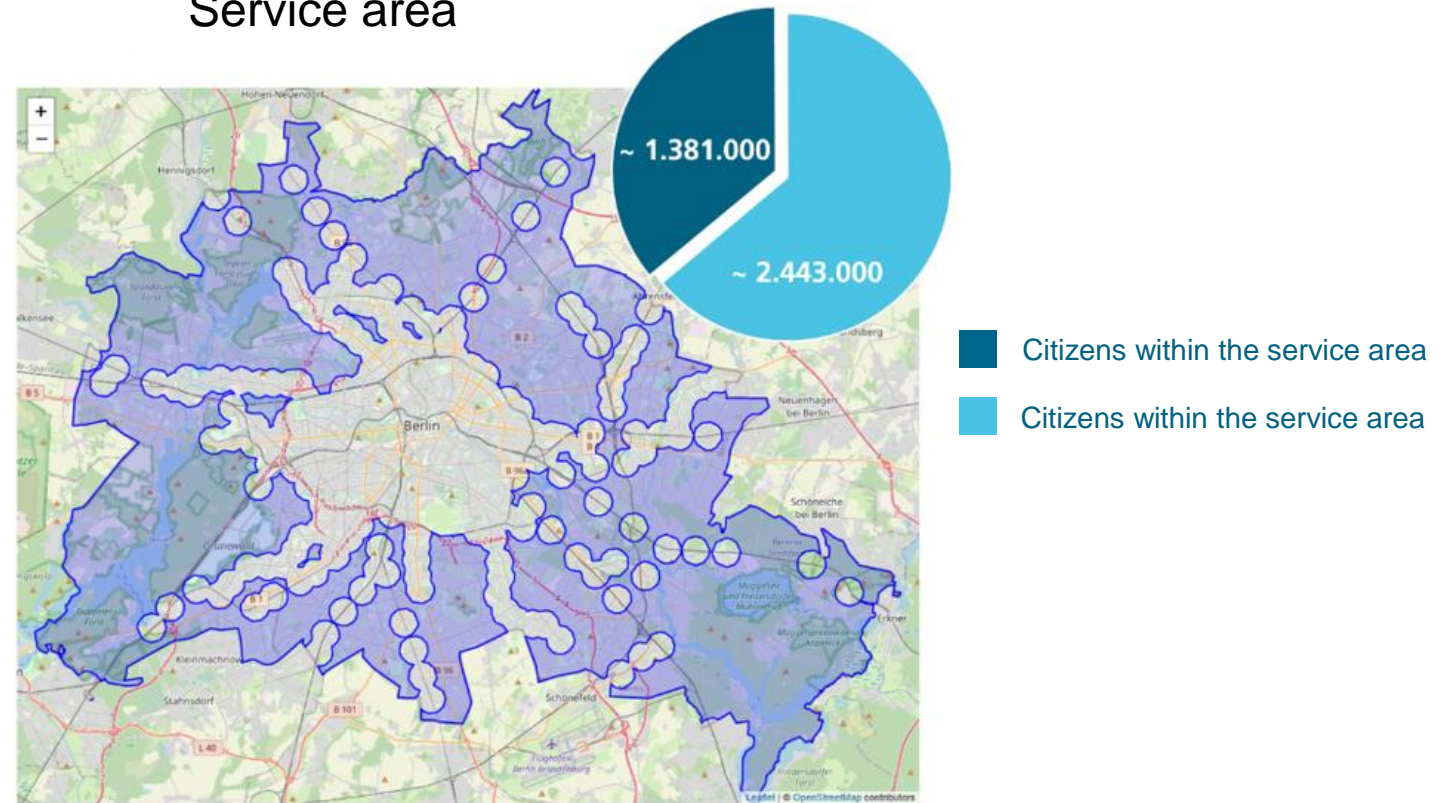
- Improved services with 10 % less kilometres driven; reduced emissions and noise
- Development in the co-creation process ensures acceptance, participation of all stakeholders and the finding of creative solutions.

# On Demand as first/last mile solution to mass transit

## Access time by walking



## Service area



# On Demand as first/last mile solution to mass transit

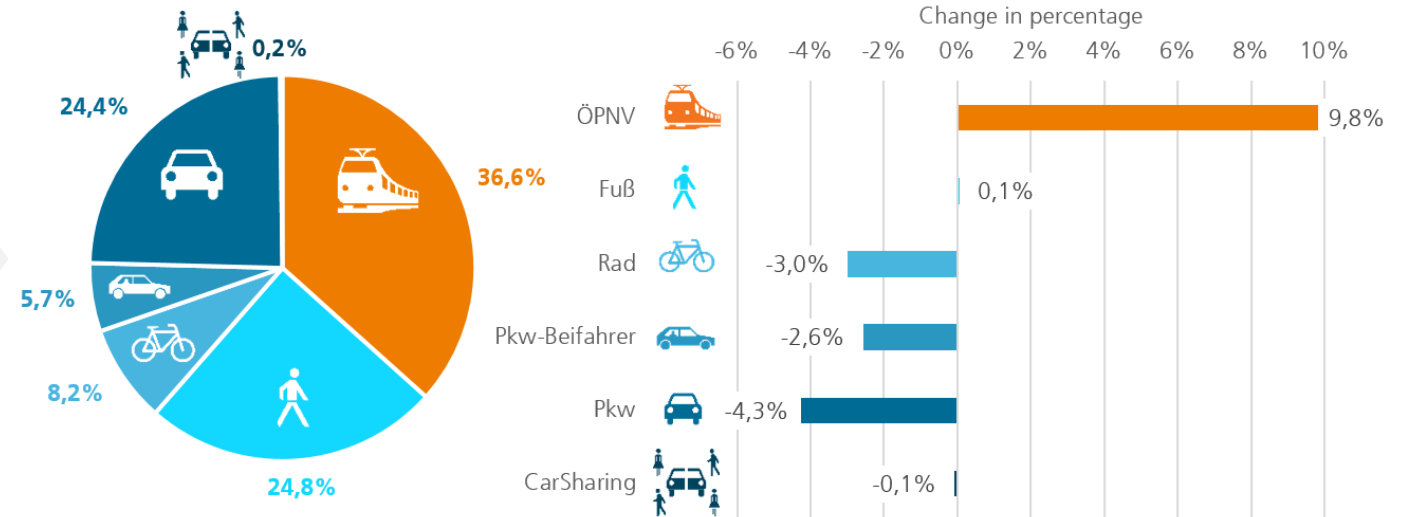
## Transport demand model

Reduction of travel time components  
(e.g. access and waiting times)



Comfort factor / perception of the  
transfer

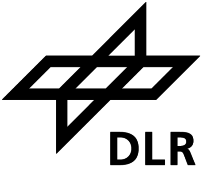
## Modal split and its change within the service area



- Reduced travel time has a minor effect on modal split
- Improving the service quality has a larger effect than reducing travel times

# On-demand transit can unlock urban and rural mobility

## Yes, it can ...



### ... but

- There is a need for integration of such services into the public transport system (information, apps, tickets, etc.).
- How much on-demand is enough?
- How to ensure an urban compatibility of such on-demand transport in terms of number, size and distribution of vehicles?
- What solutions are there to create offers for the entire city and all user groups and to make the business models profitable?





Further information on DLR projects  
[www.verkehrsforschung.dlr.de](http://www.verkehrsforschung.dlr.de)

DLR Institute of Transport Research  
**Kay Gade**  
Project Manager & Research Associate

[Kay.Gade@DLR.de](mailto:Kay.Gade@DLR.de)  
[www.DLR.de/vf](http://www.DLR.de/vf)

# GET IN TOUCH!