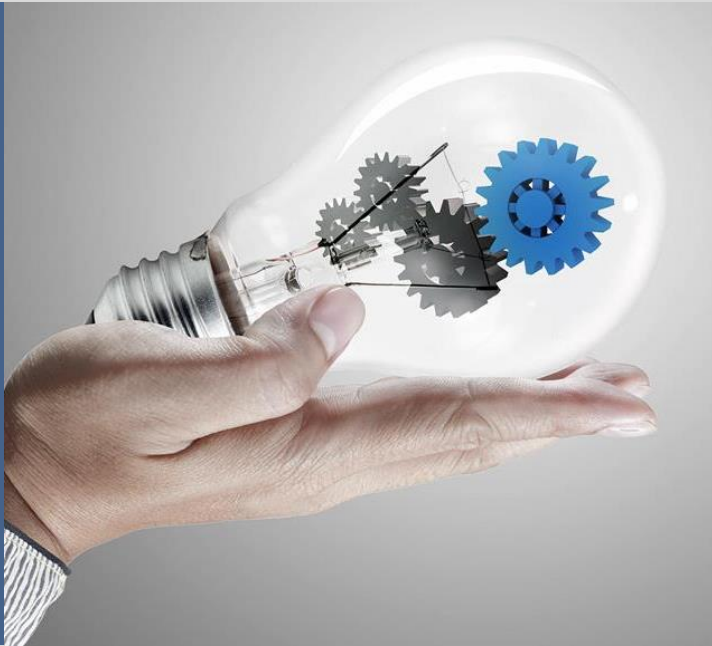


SSB Flex - A New Mobility Offer for Stuttgart



Ulrich Weber, Head Staff Unit Funding/EU Affairs, Stuttgarter Straßenbahnen AG

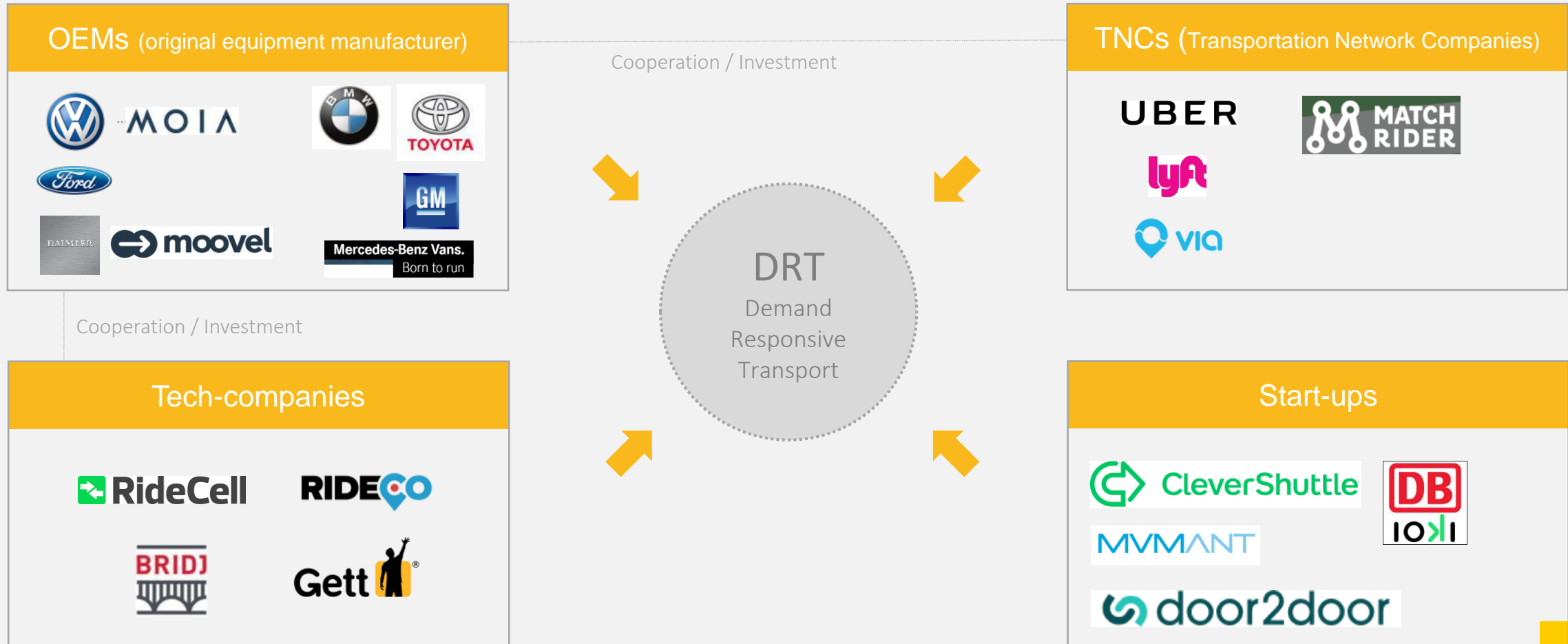
Cities for Mobility, Stuttgart, 19 June 2018



Initial situation and context

Why are we dealing with that topic?

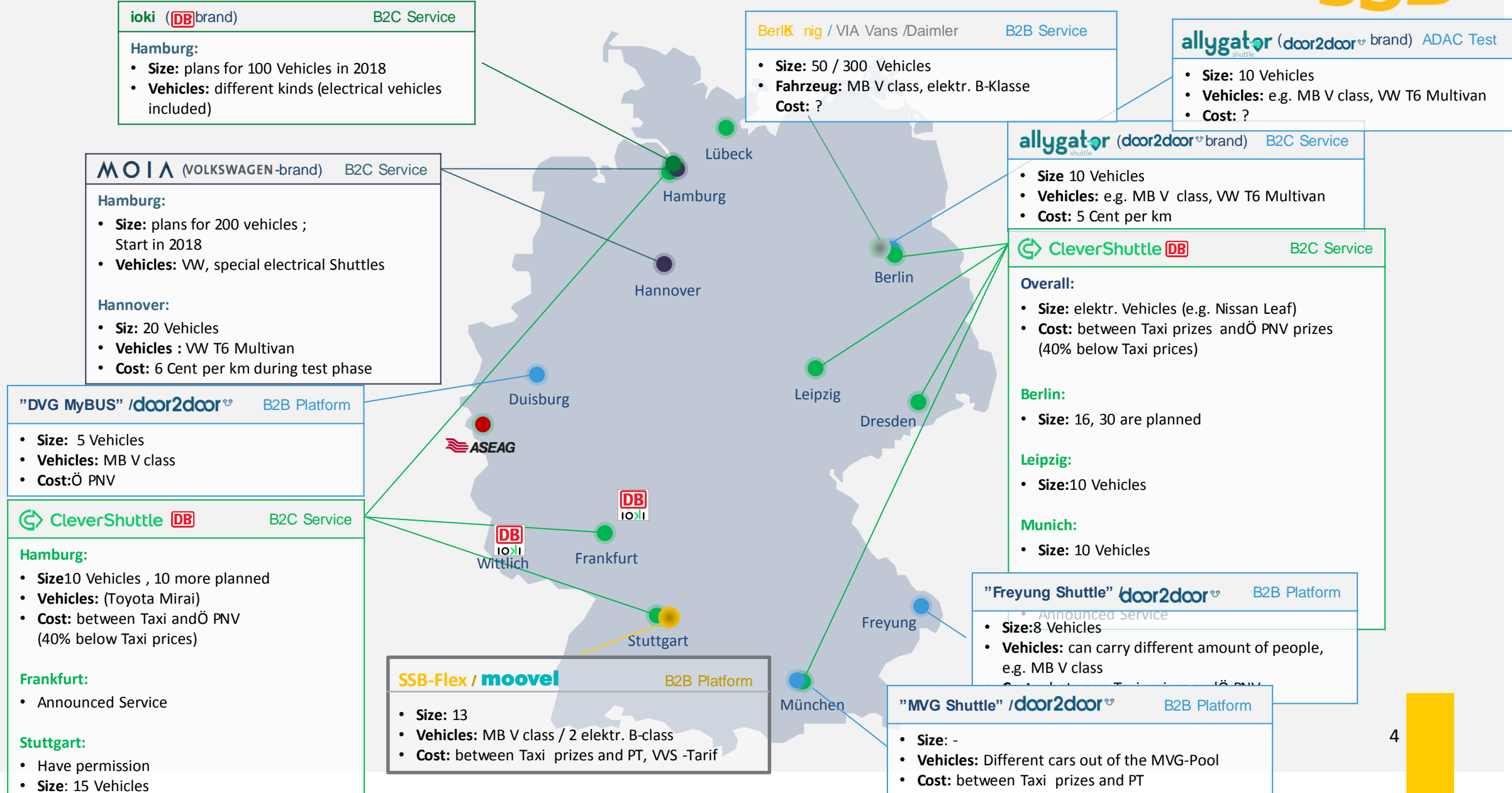
- New forms of mobility and new business models will influence public transport
- Digital control, integration and autonomous vehicles will enable entirely new forms of mobility
- Diverse opportunities for public transport, for new / complementary forms of transport, since cooperations are still requested



Some activities of on-demand services in Germany

(other activities of UberX, IOKI, MVVANT, MatchRider etc.)

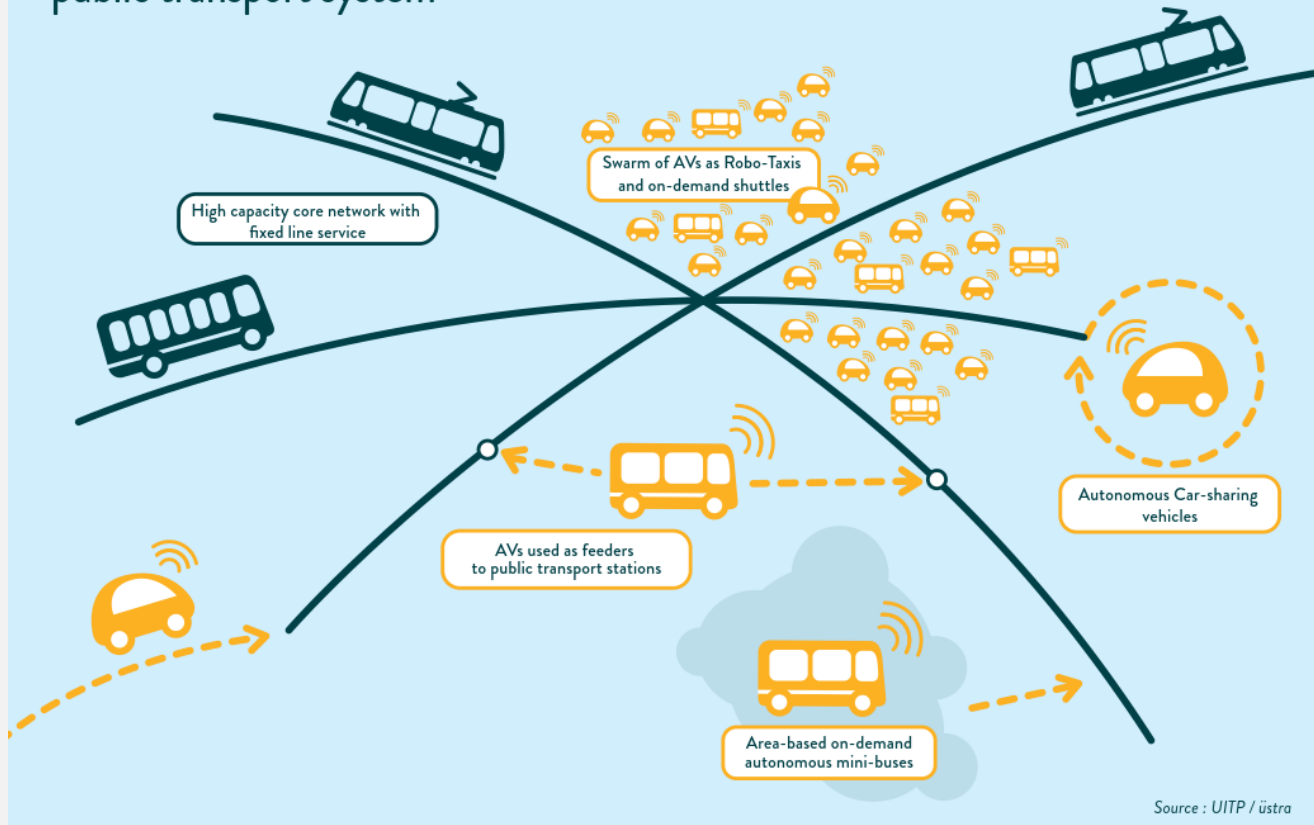
SSB



Less traffic, up to 80% less vehicles

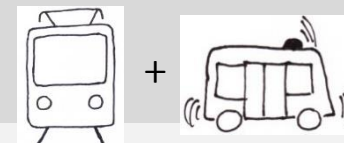
Recent studies, focusing on the use of ride sharing, show great potential : MIT (New York), IFT (Lisbon), MEGAFON (Stuttgart) for ridesharing

Possible applications of autonomous vehicles (AVs) as part of a diversified public transport system



MEGAFON Study (VDV/Ministry of Transport BW):

Only ridesharing with autonomous vehicles **in combination** with high capacity PT will contribute to future sustainable mobility in cities



Project objectives



Make concrete experience with new forms of mobility and carry out a first pilot during 18 months

- SSB intends to continue to be the sustainable and appreciated mobility provider for public transport in Stuttgart. SSB has therefore a high interest in taking an in-depth look at these new opportunities and drawing the right conclusions for innovative mobility offers
- Dealing with new forms of mobility and business models (Ride-Sharing, Pooling, DRT / on-Demand, Maas, integrated multimodal mobility) as basis for future strategic decisions
- On-demand service complementing public transport in a given transport area
- Gain new experiences
 - Legal aspects (approval for concession, Passenger Transport Act/PBefG)
 - Planning (demand, operating areas, times, schedules)
 - Marketing & Sales (Customer, Tariff, Profit Contribution, Marketing)
 - Operation (algorithm, operation control)
 - Political dimension (taxi industry, opportunities for cities, discussions on clean air/climate change, sustainable mobility, ...)
 - Strategic dimension (customer data, platform strategy)



Scope

Already strong backbone public transport – supported by attractive, demand-based offer



Dynamic on-demand transport



Attractive to the inhabitants of Stuttgart



forward-looking of SSB



Additional mobility for Stuttgart

Aim: More people using public transport thanks to more attractive overall offer

Advantages of dynamic, demand public transport

for passengers



Easier connection to train/light rail stations (last mile)



Shorter ways to bus stops and train stations through virtual stops



Simple real-time booking and payment via smartphone



Consideration of existing tickets

for Stuttgart public transport



increased utilization through intelligent pooling



Seamless integration into the already existing PT offer



Optimized transfer information through intermodal trip chain




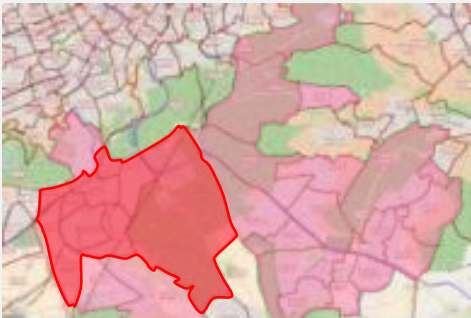


New digital native customers

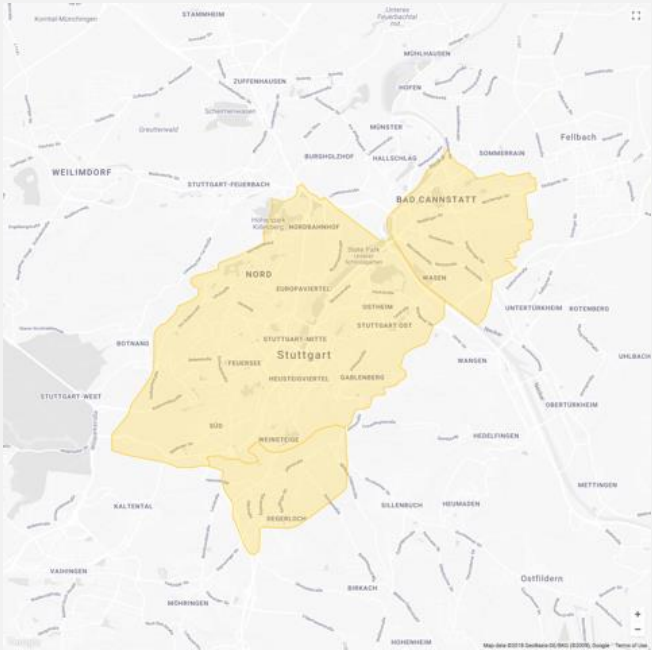
Attractive and efficient public transport even
in low-demand areas

SSB Flex service areas



Step by step entry (limited drivers and vehicles) covering so called “white spots and evening traffic

Area		Days	Times	Operating concept 13 vehicles (max 10 simultaneously)
Bad Cannstatt - East		Mo - Sa + Th - Sa	Mo-Sa 06.00am - 09:00pm + Th-Sa 09:00pm - 02.00am	2 SSB - Shuttle
Degerloch (Stufe 1) Sillenbuch (Stufe 2)		Mo - Sa + Th - Sa	Mo-Sa 06.00am - 09:00pm+ Th-Sa 09:00pm - 02.00am	2 SSB - Shuttle
Center Zone 10	  Gesamtgebiet	Th-Sa	Th-Sa 09.00pm - 02.00am	10 SSB - Shuttle



SSB Flex vehicles



- 11 Mercedes-Benz V-Class:
 - 5 passenger seats in the rear
 - Attractive interior design
 - Vis-a-vis seating for a better entry and exit
 - Electronic sliding doors
- Supplementary use of two Mercedes Benz B-Class electric drive.
 - 3 passenger seats
 - Testing of electric drives for DRT concepts, in particular the consideration of the range in the routing algorithm



Legal Framework

On-Demand-Transport: Position in legal framework



The German Passenger Transport Act/PBefG only knows two types of transport services (**occasional services** and **regular services**)

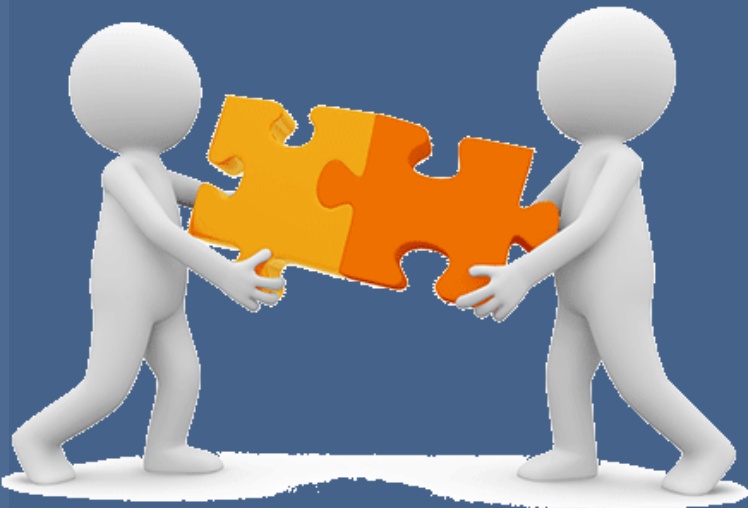
An on-demand mobility service is neither occasional (rental car) nor regular service (like bus/rail transport)

- An on-demand mobility service is subject to approval for concession
- In the view of SSB, such an on-demand mobility service is also **capable of being approved**, according to the rules of **regular services**, §§ 42, 2 Abs. 6 PBefG

→ SSB Flex has been approved as regular service by regulatory authority

Differences between the On-Demand-Transport and the already existing „Ruftaxi“/Taxi on call

	On-Demand-Transport	Ruftaxi/Taxi on call
regular transport connection	✓	✓
between predefined starting and ending points	✓	✓
Intermediate stops	Predetermined virtual stops	Fixed stops and exits in between
Booking	via Smartphone	Via telephone
Bookable single seats	✓	✓
Special tariff	✓	✓



Collaboration
SSB / moovel

Collaboration SSB AG // moovel Group GmbH



In the implementation of digitization strategies with new business models, classic and new companies work together successfully.



Reliable, safe public transport for 150 years with significant future options for sustainable mobility

- Regulatory approval
- Control center
- Drivers
- Branding / Marketing
- Demand data
- Fleet management
- Customer Service
- Ticketing



Digital, new and networked services with an agile approach

- Platform, Routing
- Fleet control (software)
- White Label - B2C App & Driver App
- Demand data
- Ticketing (technical)
- Payment
- Customer Service (2. Level)

Different skills, a successful collaboration



SSB Flex App

Operating mode of the SSB Flex App



After entering the start and end address, the algorithm provides corresponding search results for the on-demand shuttle and for bus and train. The passenger can change the number of passengers and the time of travel variably.

Each trip (start-destination relation) must be booked individually. The booking is made exclusively via the SSB Flex app.

The algorithm returns results:

- mode of transport
- Travel time
- Changes
- Departure Times
- Fares

Conclusion



- SSB-Flex is about complementing the existing public transport offer and not competition
- DRT/on-demand service as part of the existing entrustment to SSB: Public service offer, generating benefit is initially not the primary goal.
- Collaboration with moovel offers a good symbiosis: technology know-how and agility meets comprehensive public transport knowledge with an established brand.
- Service and customer benefit are the focus. The offer must appear in the SSB brand. From the strategic point of view of SSB, ownership of the platform is not essential, but customer master data and the role as a customer contract partner are of importance.
- Know-how and customer access for the upcoming challenges of mobility 4.0 are essential.

Such concepts ensure that the municipality's future mobility management remains in the public control