

# Munich - Germany

## Dynamic Curbside Management

**Code:** MU-UC01

**Brief:** The dynamic curbside system uses real-time data & sensors to improve space use and urban logistics. A zero-emission rickshaw tests sensors and alignment with semi-automated rickshaw in a non-public test field.



### Key Urban Challenges Addressed:

- The increased number delivery vehicles causes congestion, safety issues, and emissions in urban areas
- Other commercial vehicles face parking difficulties
- Lack of real-time curbside occupancy data leads to inefficient, static space allocation

### Goals & Anticipated Benefits:

- Reduce road congestion, decrease illegal double parking
- Shorten delivery parking search time and distance
- Cut greenhouse gas and pollutant emissions
- Improve urban public space quality

### Ownership:

- **City of Munich:** provides infrastructure, signage, and fosters stakeholder engagement.
- **Smart City System:** installs and handles sensors, maintenance, and dashboard integration.
- **stadtraum:** develops app/API, user interface with sensor data
- **Technical University of Munich:** conducts network-level assessment.



### Infrastructure:

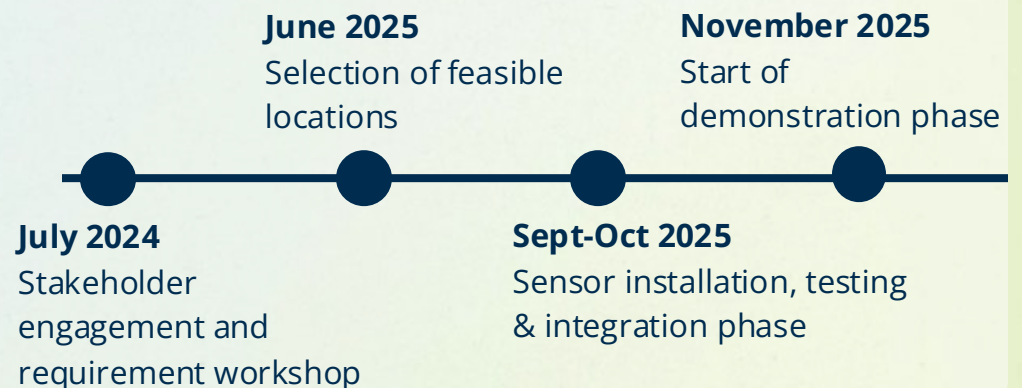
- **Physical:** Each loading zone has a length of 15 to 20 metres and is equipped with 3-4 sensors and can be used by vehicles up to 12 tons.
- **Digital:** Real-time dashboard, app, and API show occupancy and may allow reservations.

### Location:

Munich's Altstadt and Isarvorstadt will pilot Dynamic Curbside Management in about 20 loading zones in city areas with high parking pressure. In these zones, more than 70 sensors in total are installed



### Timeline:



City of Munich



stadtraum



Co-funded by  
the European Union