

Mobile 5G Lab: Local ad-hoc 5G grid operation for NRW

On-site demonstration of Network Slicing in industrial environments

As a unique 5G technology platform, the mobile 5G lab of TU Dortmund university brings a fully featured 5G network solution directly to enterprises. For this purpose, an end-to-end mobile radio solution based on Software-Defined Radio platforms on the air interface (Radio Access Network) is deployed.

The network solution is operated in the 3.7 GHz frequency range which is exclusively dedicated to **local 5G cells (5G campus networks)**. The core network is also fully integrated into the vehicle and based on a *Software-Defined Networking* solution.

The mobile 5G laboratory enables flexible and short-term **on-site demonstrations** as well as evaluation of 5G functionalities throughout North Rhine-Westphalia (NRW). Target groups are primarily companies with demanding ICT requirements, e.g. industrial production, future manufacturing sites.

In the course of the evaluation, the novel **5G Network Slicing** will be demonstrated in industrial environments. Slicing enables compliance with **hard quality of service guarantees** for demanding (e.g. security-



relevant) applications, even when there is competition and disruption from low priority services. Each service is assigned to a slice, which can be understood as an independent virtual network from the users' point

Points of contact

Stefan Böcker
stefan.boecker@tu-dortmund.de

Caner Bektas
caner.bektas@tu-dortmund.de

More info in video



youtu.be/f0tOkZBydWs