

# SES<sup>▲</sup>

## 5G-VINNI

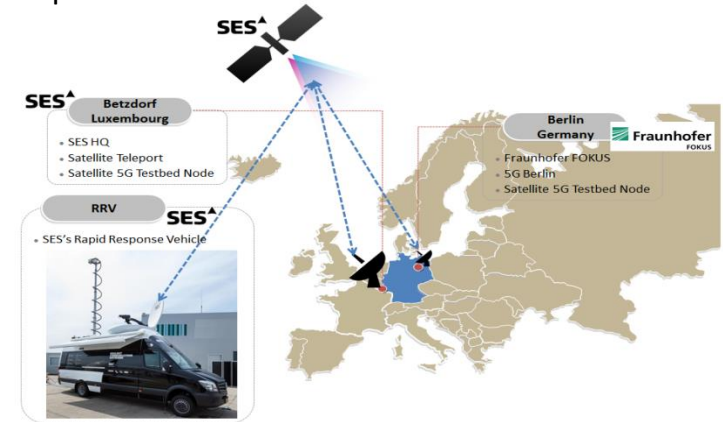
# Moving Experimentation Facility Site (Satellite Connected Vehicle)

SES

Website: <https://www.5g-vinni.eu/moving-experimentation-facility-site/>

# 5G-VINNI Moving Experimentation Facility Site (Satellite Connected Vehicle)

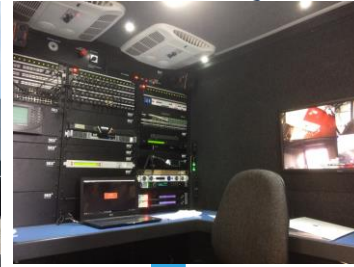
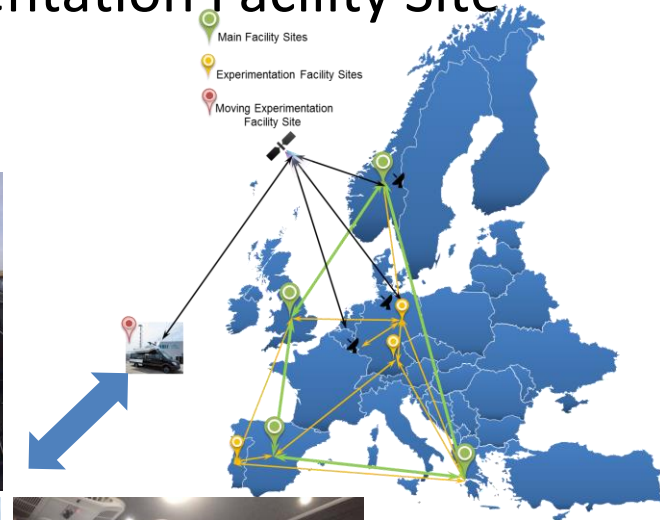
- Operated by **SES**
- Concentrates on the research, development, experimentation, validation and demonstration of customized solutions for **satellite integration into 5G**
- Enabled by the SES owned satellite connected vehicle (or else referred to as “Rapid Response Vehicle” – RRV) providing **satellite backhaul** capabilities
- Satellite interconnected with the 5G-VINNI **Berlin** experimentation facility site and SES’s teleport located in **Betzdorf (Luxembourg)**
- Hosts a satellite 5G testbed node which provides **SDN/NFV/MEC** capabilities and enables both **eMBB and mMTC** use cases over satellite
- Capabilities
  - GEO/MEO satellites
  - C/X/Ku/Ka-band
  - Satellite backhauling
  - Satellite interconnection with Berlin facility site
  - Satellite teleport
  - Satellite 5G testbed node with SDN/NFV/MEC
  - eMBB, mMTC use cases



# SES's Rapid Response Vehicle (RRV)

... enabling the 5G-VINNI Mobile Experimentation Facility Site

- RRV is a **multi-purpose** communications platform mainly for governmental and PPDR use cases
- Architecture is **modular** and supports evolution
- Highly resilient due to its **multiband capability** (X, mil-Ka, Ka, Ku)
- A rolling lab for mission specific **solutions**
- Designed to be easily configured, **even remotely**
- Quickly deployed **and operational in minutes**
- Built for client **showcases and demonstrations**

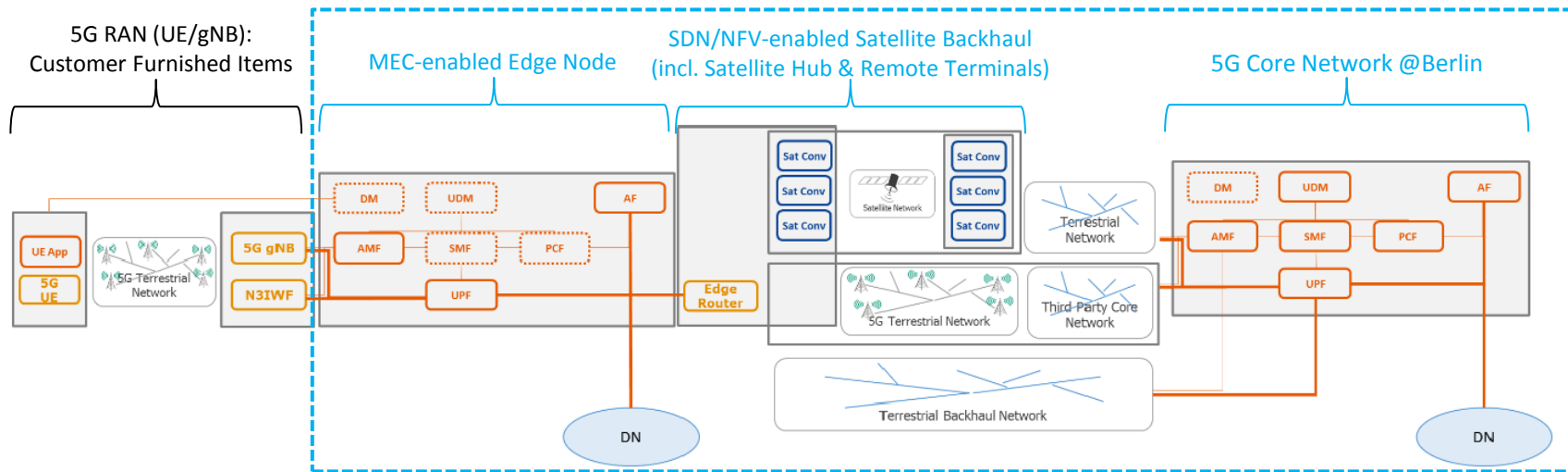


Further info: <https://www.ses.com/rapid-response-vehicle-rrv>

# SES's Satellite 5G Testbed Node

... enabling the 5G-VINNI Mobile Experimentation Facility Site

- Satellite backhaul connectivity architecture
- Satellite interconnection with 5G-VINNI Berlin Experimentation Facility Site
- Synergies with ESA ARTES project “SATis5” in collaboration with Fraunhofer FOKUS



Further info: <https://artes.esa.int/projects/satis5>

# Relevant Verticals, Use Cases & KPIs

5G-VINNI moving experimentation facility site supports satellite use cases for eMBB and mMTC

- Verticals
  - PPDR
  - Media
  - Transportation
- Use Cases
  - Public Safety Communications
  - Emergency Response
  - Disaster Relief
  - Civil Protection
  - Telemedicine
  - Video Contributions
  - Connected Vehicles
- KPIs
  - Ubiquity
  - Reliability
  - Throughput