



OSCCAR: Open Scalable Campus Connection Architecture

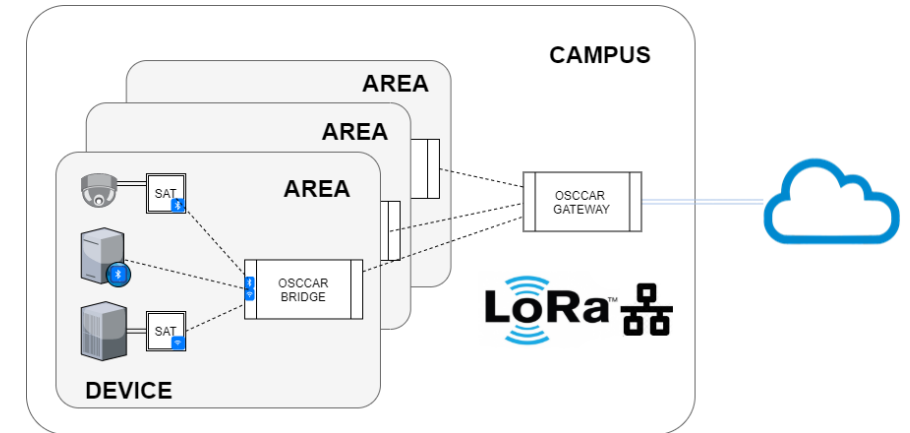
Candidate for an
„Important Project of Common European Interest“

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- The subject of OSCCAR is the **standardization** of the connection of end devices to the cloud via a **multi-level edge structure** (satellite - bridge - gateway).
- Core objective is to reduce the **total cost of device connectivity to a TCO of <1€** per device per year with simplest installation, excellent security features and real-time capability
- Key spill-over effects are the creation of a **European ecosystem** between device manufacturers and cloud providers and reaching the **economic viability threshold** for IoT solutions faster
- Status of the project is an idea sketch with currently four medium-sized interested parties. OSCCAR is part of the **GREEN-CIS consortium**, which has already been confirmed by the BMWi.

OSCCAR – Basic Structure

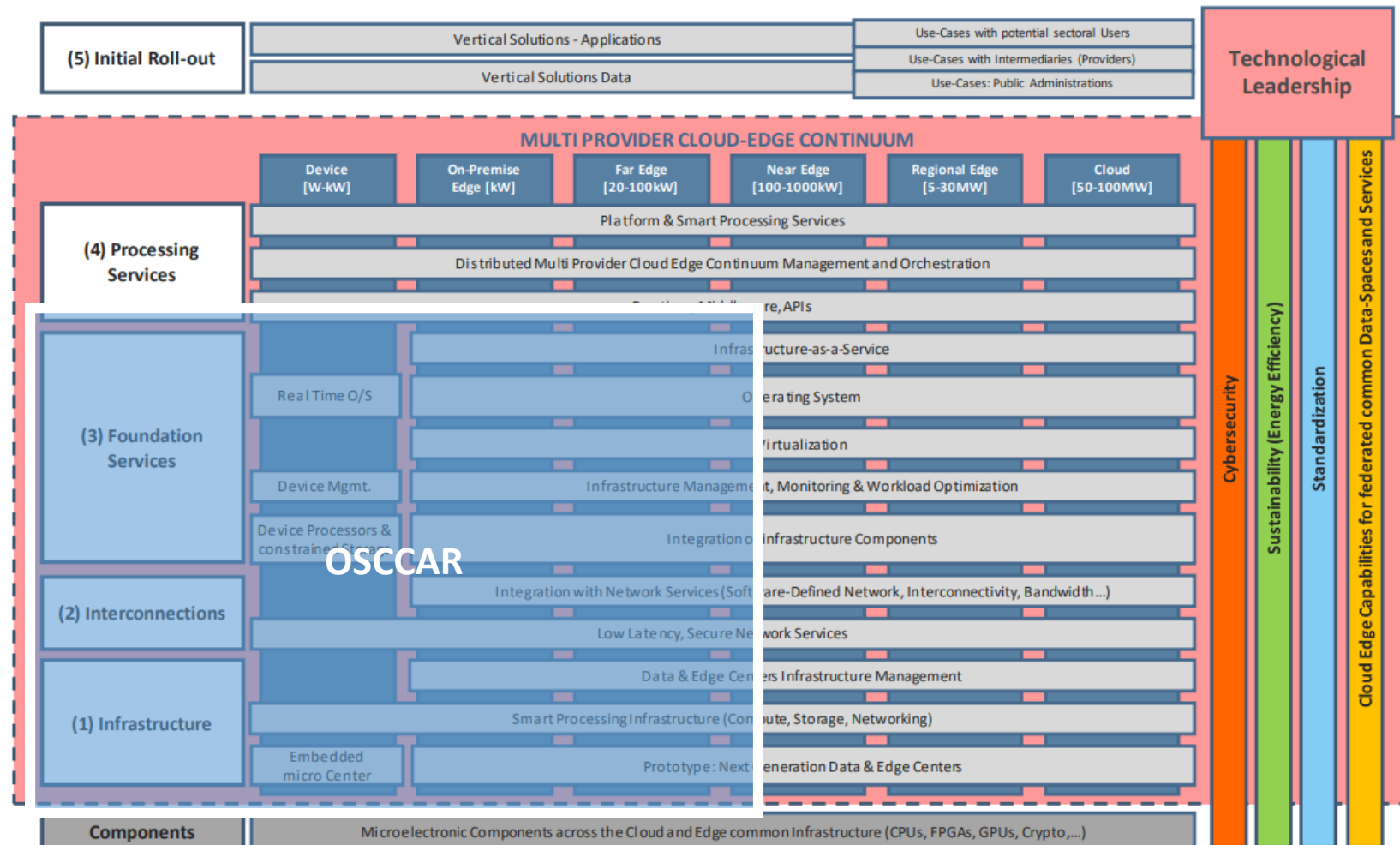
- Various devices are connected directly via a local radio standard (e.g. WiFi / BLE) or by means of an **OSCCAR Satellite** with a standardized **OSCCAR Bridge** and thus form a local AREA (e.g. room / apartment / part of a factory floor)
- The bridges of the different AREAs are connected to a cloud platform via a campus communication standard (e.g. LoRa / BPL) using an **OSCCAR gateway**.
- The areas connected via a gateway together form the **OSCCAR Campus** as an administrative unit. (e.g. residential area, commercial property, factory building, university).



OSCCAR standardized

- Connectivity (protocols / data)
- Installation and service processes
- Administration and billing
- Device identity and security

Integration into the overall IPCEI CIS project



- OSCCAR maps the area of device connectivity in the "Multi Provider Cloud Edge Continuum".
- OSCCAR is the open, economical, secure and sustainable connection of different devices ("edge devices") with the various cloud platforms.



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