# REINDEER

RESILIENT INTERACTIVE APPLICATIONS
THROUGH HYPER DIVERSITY IN ENERGY
EFFICIENT RADIOWEAVES TECHNOLOGY

The **REINDEER** project will address fundamental aspects of **6G** multi-antenna technology, by developing a new smart connect-compute platform based on **RadioWeaves technology**:

- wireless access infrastructure consisting of a fabric of distributed radio, computing, and storage resources which functions as a massive, distributed antenna array
- blend physical and virtual reality

- scalable capacity, perceived zero latency and zero outage
- interacting with an extremely high number of embedded devices
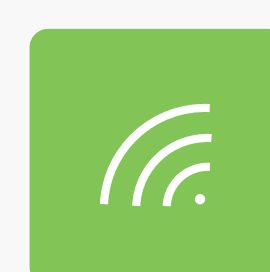
REINDEER - Platform
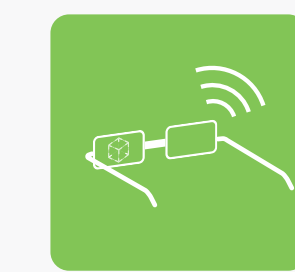
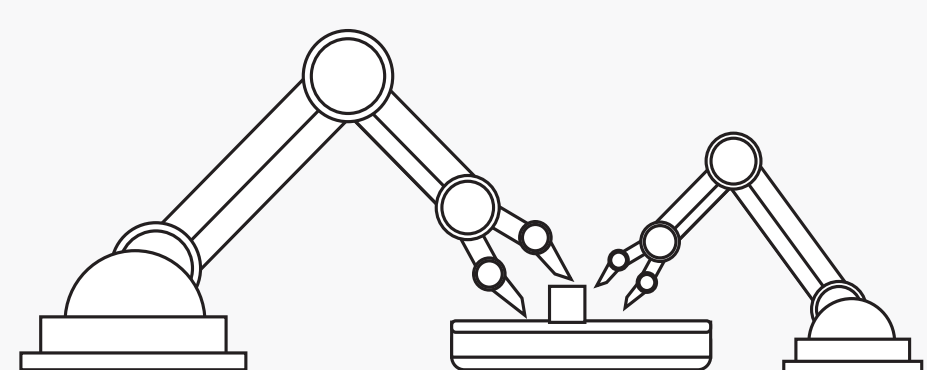|	
for interactive devices	imperceptible latency
power signals for energy neutral devices	scalable network infrastructure

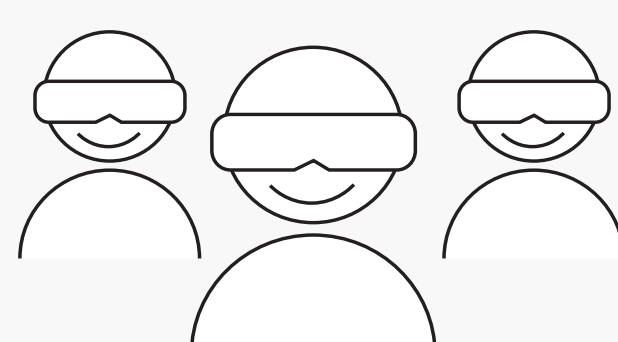**01** **Analyse and specify** technical requirements for future interactive applications

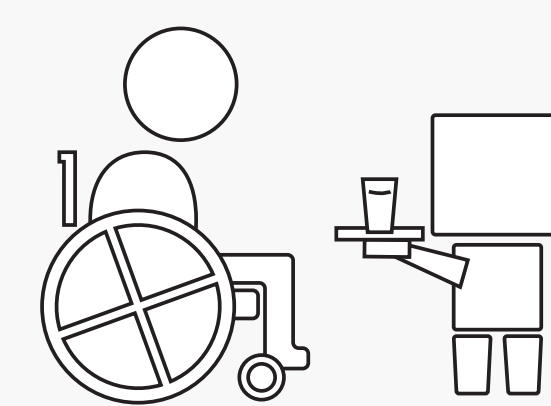### Robotized factories, logistics, warehouses

- real space information
- imperceptible latency, zero-outage
- energy neutral devices

Mixed-reality entertainment for crowds

- high capacity network
- high number of individual HD video services for crowds

Natural Human Machine Interaction

- reliablility
- interactive applications

02 **Develop** RadioWeaves connectivity infrastructure:

- energy-efficient, smart, scalable and secure
- including topologies for zero-outage, efficient and secure deployment
- data & power signals

03 **Develop** scalable protocols & algorithms for :

- cell-free operation & signal processing solutions for resilient interactive applications
- cooperation with energy-neutral devices
- secure connectivity infrastructure
- topologies for zero-outage, efficient and secure deployment

04 **Experimentally validate** and demonstrate the RadioWeaves smart connectivity platform and the REINDEER algorithms for robust applications and interaction with energy-neutral devices

05 **Share** the REINDEER results with a broad group of stakeholders and the scientific community, promote technological vision in pre-standardization activities, ensure interoperability