



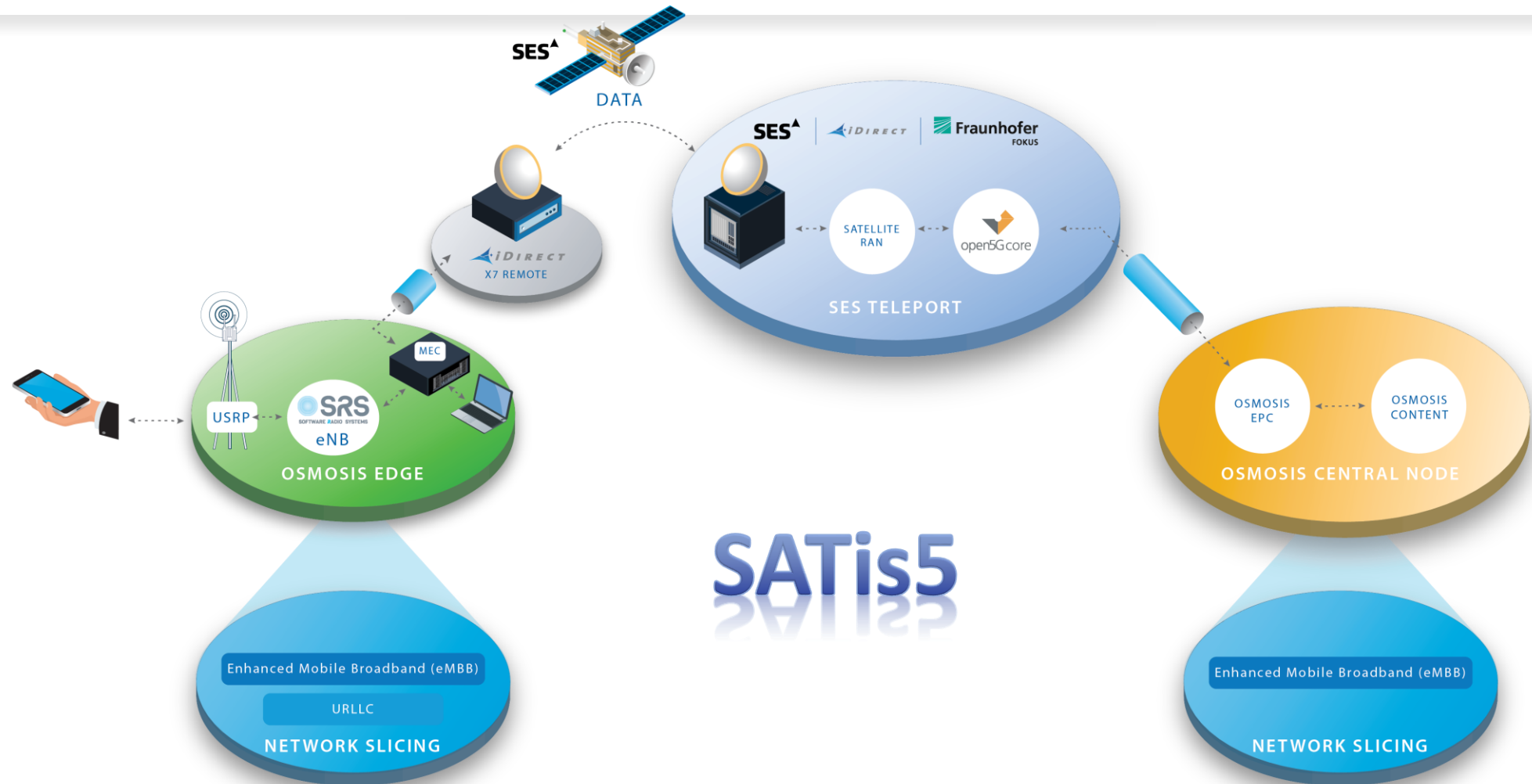
ENABLING UBIQUITOUS 5G

OSMOSIS EDGE COMPUTING ON SATIS5 SATELLITE 5G TESTBED

MWC 2019

DEMO OVERVIEW

ADVANCING SATELLITE'S ROLE IN 5G



LIVE OVER-THE-AIR TESTBED

DEMONSTRATE THE INTEGRATION OF SATELLITE INTO 5G



SATIS5 TESTBED ELEMENTS

SES[^]

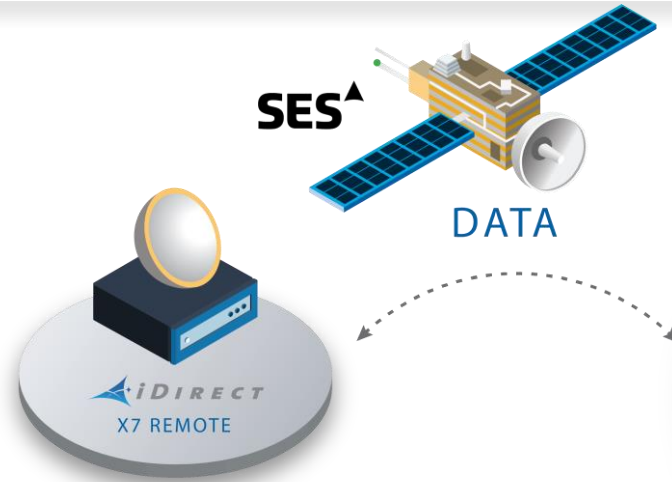
Provides end-to-end managed services, powers the space segment with its existing ASTRA 2F geostationary satellite system, and delivers seamless connectivity between the remote and the test bed



Provides the 5G enabled satellite hub platform and satellite terminal which incorporate SDN/NFV and MEC capabilities and enables the satellite integration into a 3GPP 5G core network architecture



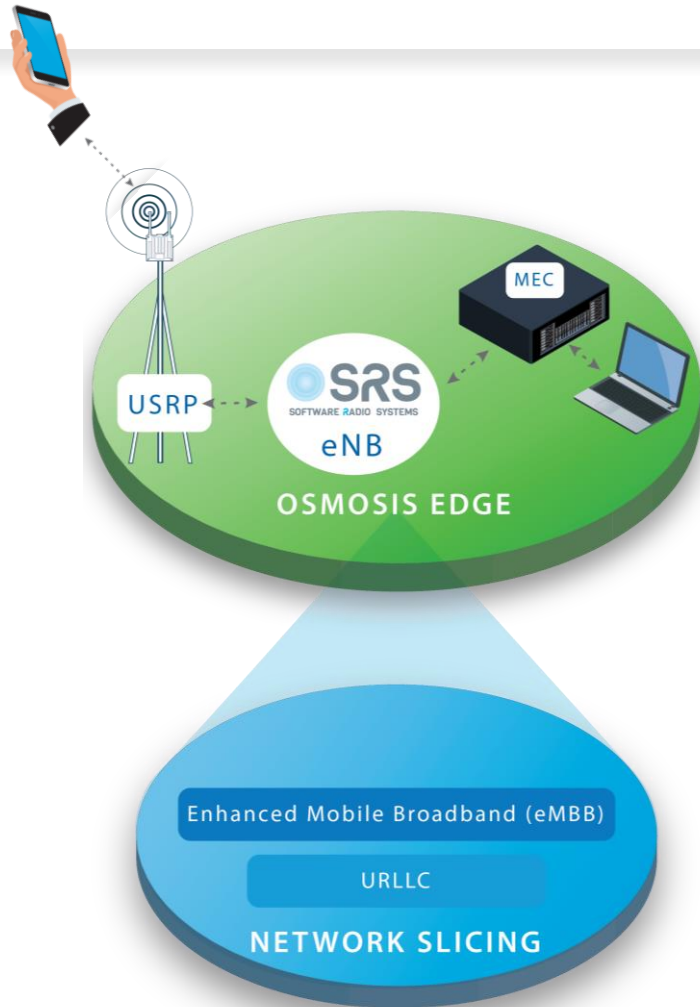
3GPP Release 15 compliant 5G Core Network "Open5GCore" integrated into the iDirect satellite hub platform to operate the satellite network (www.open5gcore.org)



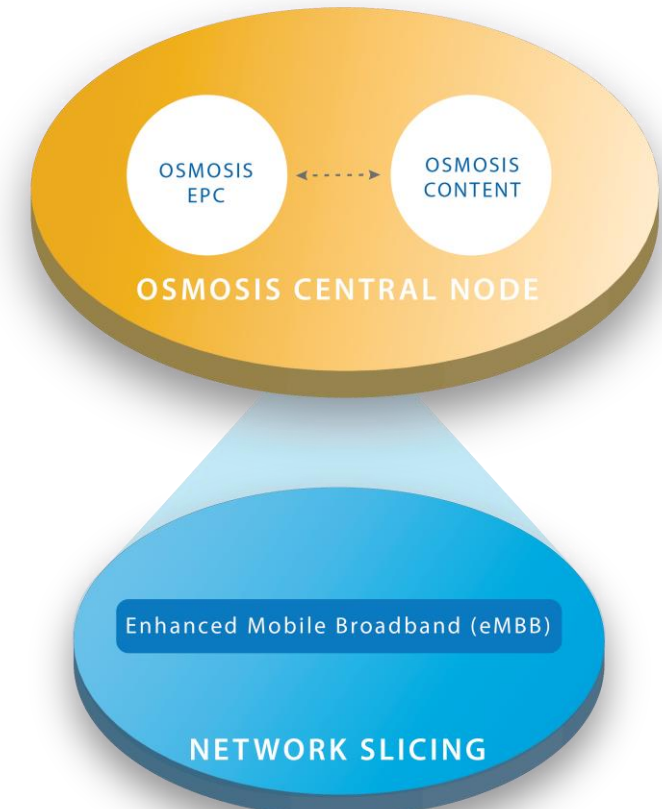
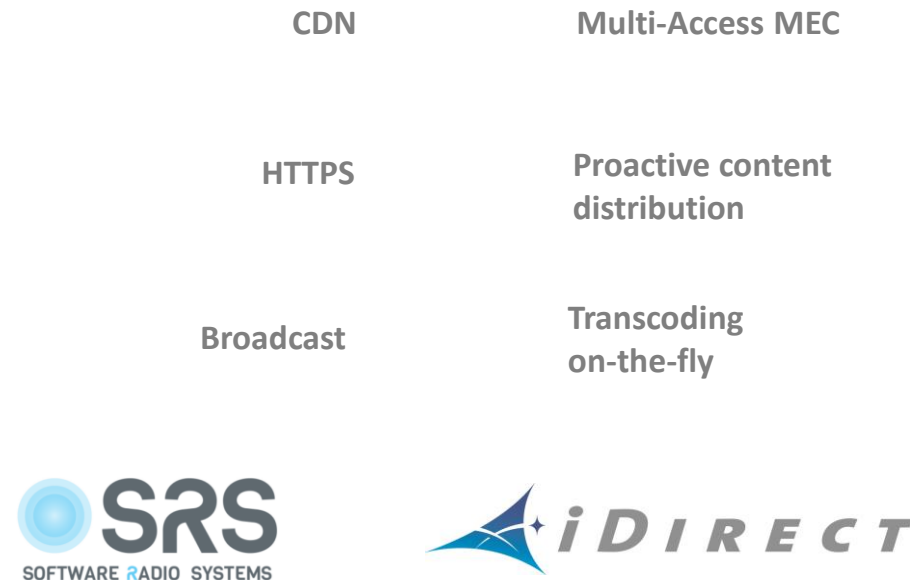
SATis5

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

OSMOSIS TESTBED ELEMENTS



- Content Distribution Network (CDN) integration
- Adaptive bit rate streaming (ABR)
- End-to-end Quality of Service (QoS) management
- Multimedia Broadcast (LTE eMBMS over satellite)



<https://artes.esa.int/projects/osmosis>

KEY TAKEAWAYS

- Demonstrate the integration of satellite into 5G, highlighting use cases that capitalize on the value that satellite brings to the 5G ecosystem
- Showcasing the successful integration of satellite into a standard 3GPP 5G network architecture supported by SATis5 testbed
- Supporting live end to end OSMOSIS video content distribution technology
- Satellite communications exercising SDN, NFV and MEC technologies
- Showcasing eMBB and URLLC network slicing use cases over satellite

THIS DEMO IS PART OF THE ESA ARTES FUNDED PROJECTS SATIS5 AND OSMOSIS

