

On the Design of 5G E2E Facility for Performance Evaluation and Use case Trailing

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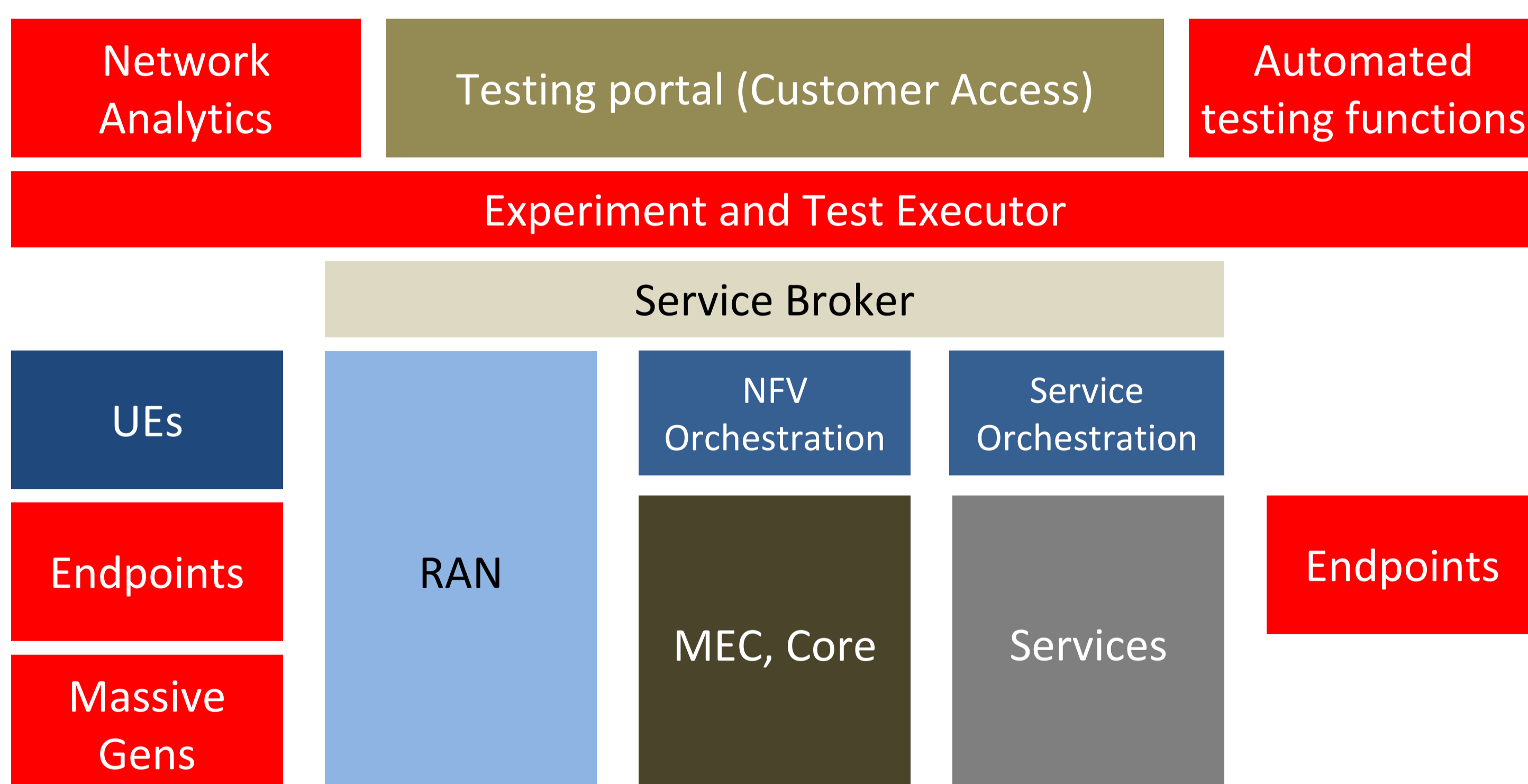
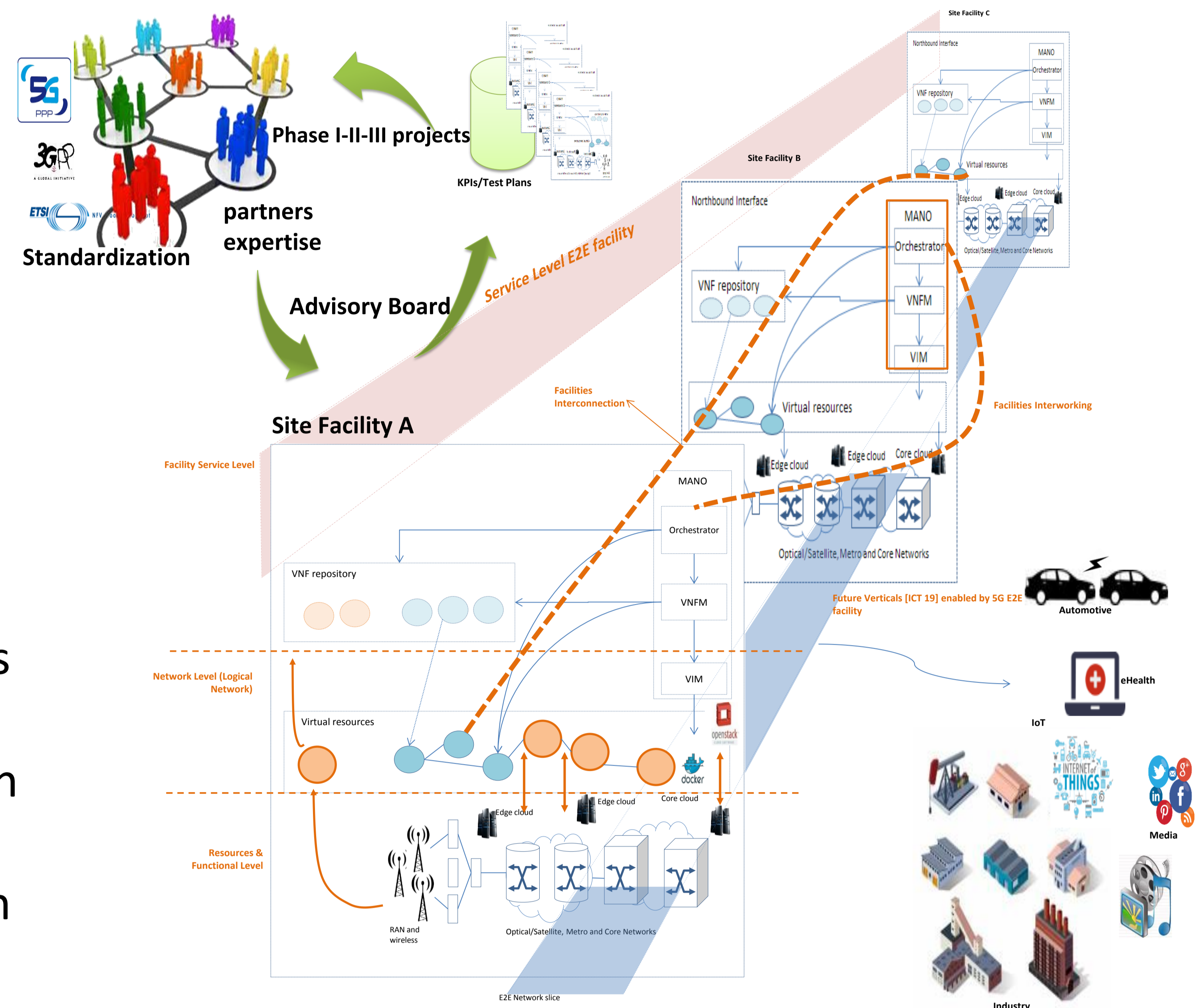
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OBJECTIVE

Build and operate a 5G test and experimental network through deployment of interworking 5G sites and modelled according to 5G Architecture which is open for verticals (in particular from ICT-19)

CONCEPTUAL ARCHITECTURE

- Resources and Functional Level – Radio Access Network (RAN), Backhaul, Mobile Core and Cloud Computing facilities.
- Network Level – Virtual Network Functions (VNFs) interconnected to build customized logical networks for eMBB, URLLC and mMTC 5G service classes.
- Service Level – Reference environment for validation and Implementation of the Network and Service Management and Orchestration Plane as defined in 5G Architecture.



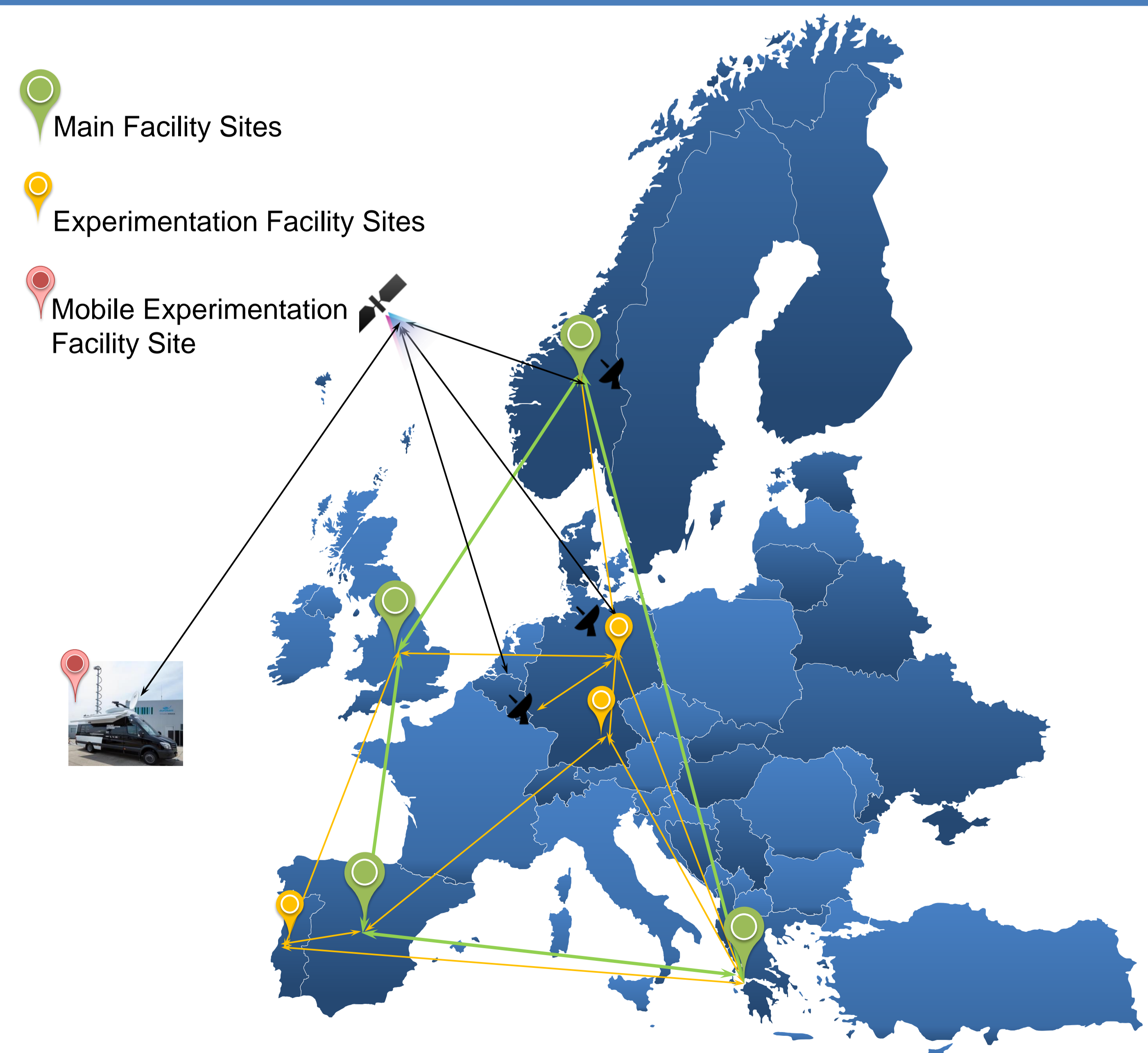
TESTING CAPABILITIES

Embedded in the end-to-end optical facility to support performance evaluation and access for vertical industry applications

- Test methodology for component integration, E2E performance tests, and benchmarking
- Industry reference test cases for 5G network validation and testing
- Detailed test plans for validation of 5G network KPIs via execution of test campaigns
- Industry reference testing framework and infrastructure

TECHNOLOGICAL AREAS

- 5G Radio access
- Reliability for urban Vehicle-to-Everything (V2X) communication
- Internet of Things (IoT) data fabric functions embedded into network slices
- E2E network service orchestration
- Edge computing support and IoT Edge slicing capabilities
- Satellite integration with 5G
- 5G network KPIs measurements and evaluations
- E2E slicing implementation and management
- New Business models – Ecosystem



Open for Verticals coming from ICT-19 and potentially others.