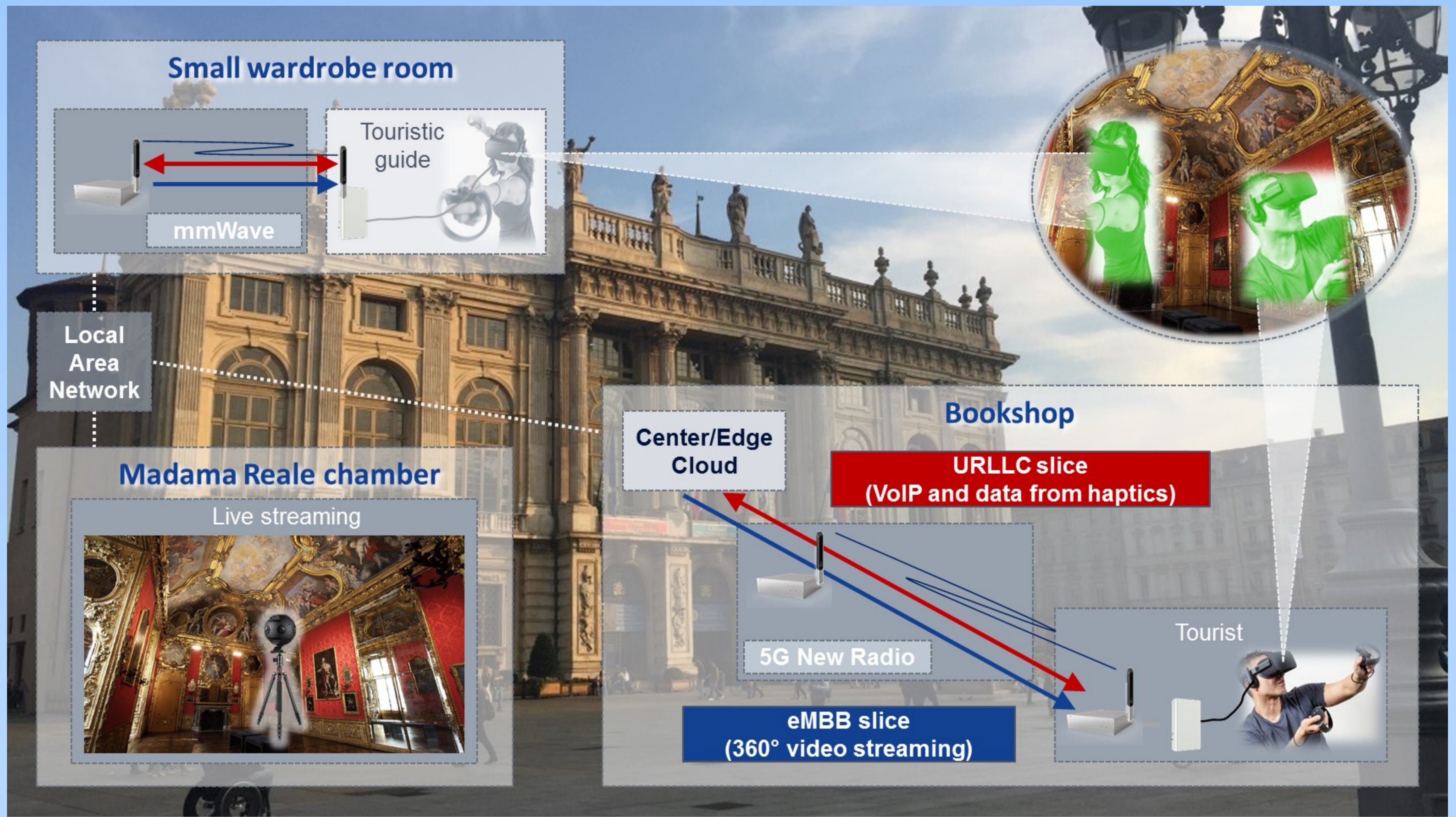# 5G-MONArch
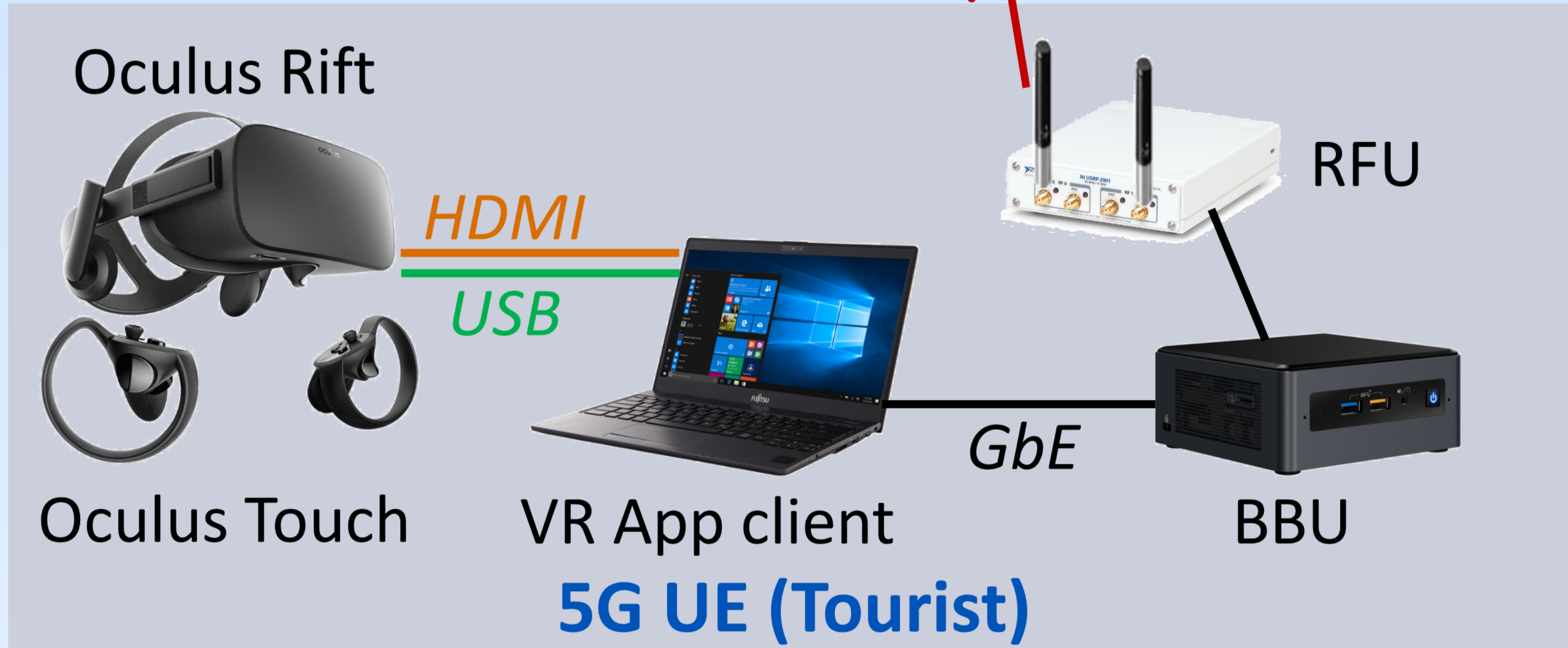
5g-monarch.eu

Turin Touristic City — Implementation
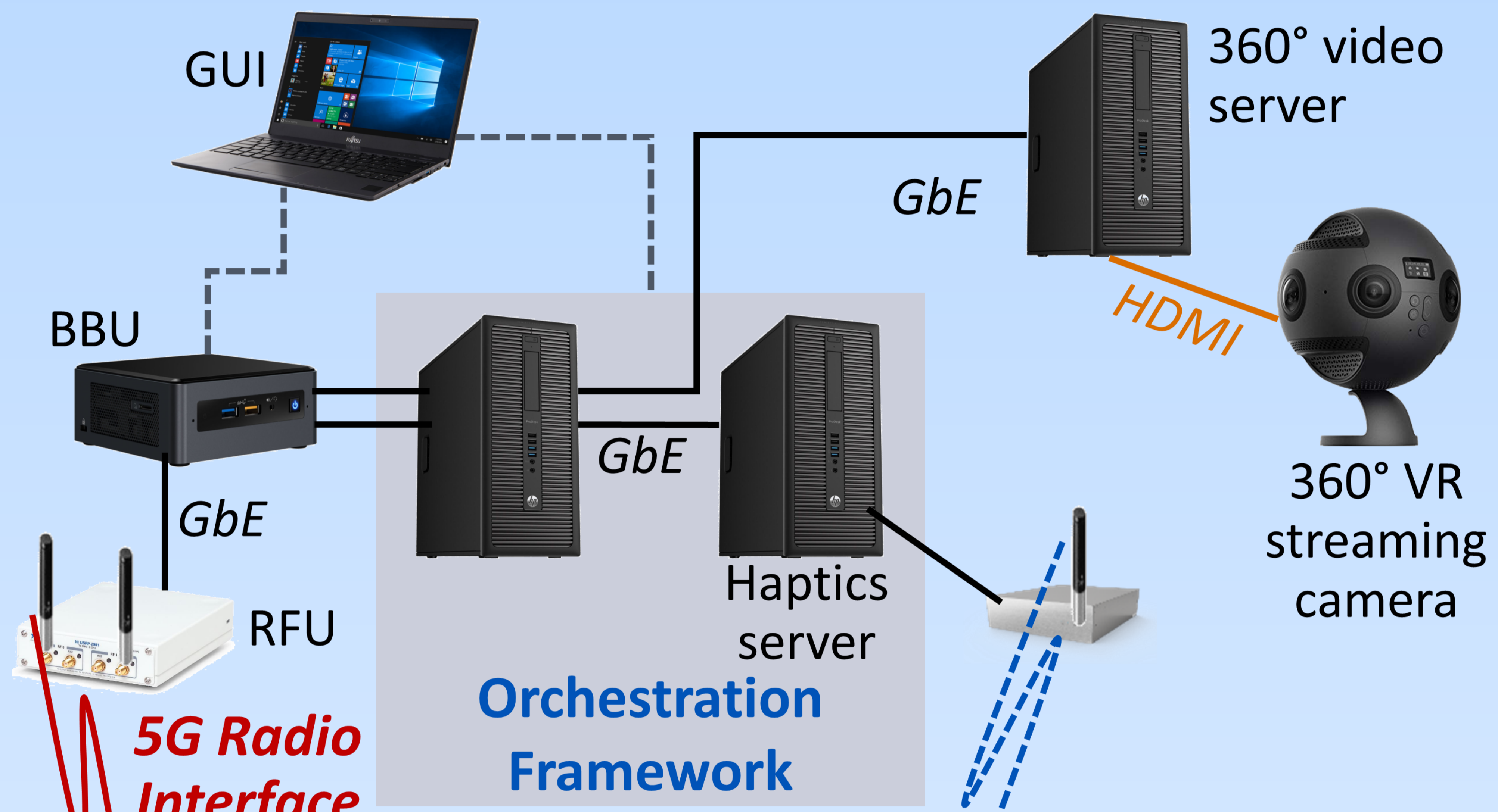
Testbed Setup

- Digital tourism services
- 5G network slicing
- Network elasticity functions
- 5G New Radio features

Small wardrobe room
Touristic guide
mmWave
Local Area Network
Madama Reale chamber
Live streaming
Center/Edge Cloud
Bookshop
URLLC slice (VoIP and data from haptics)
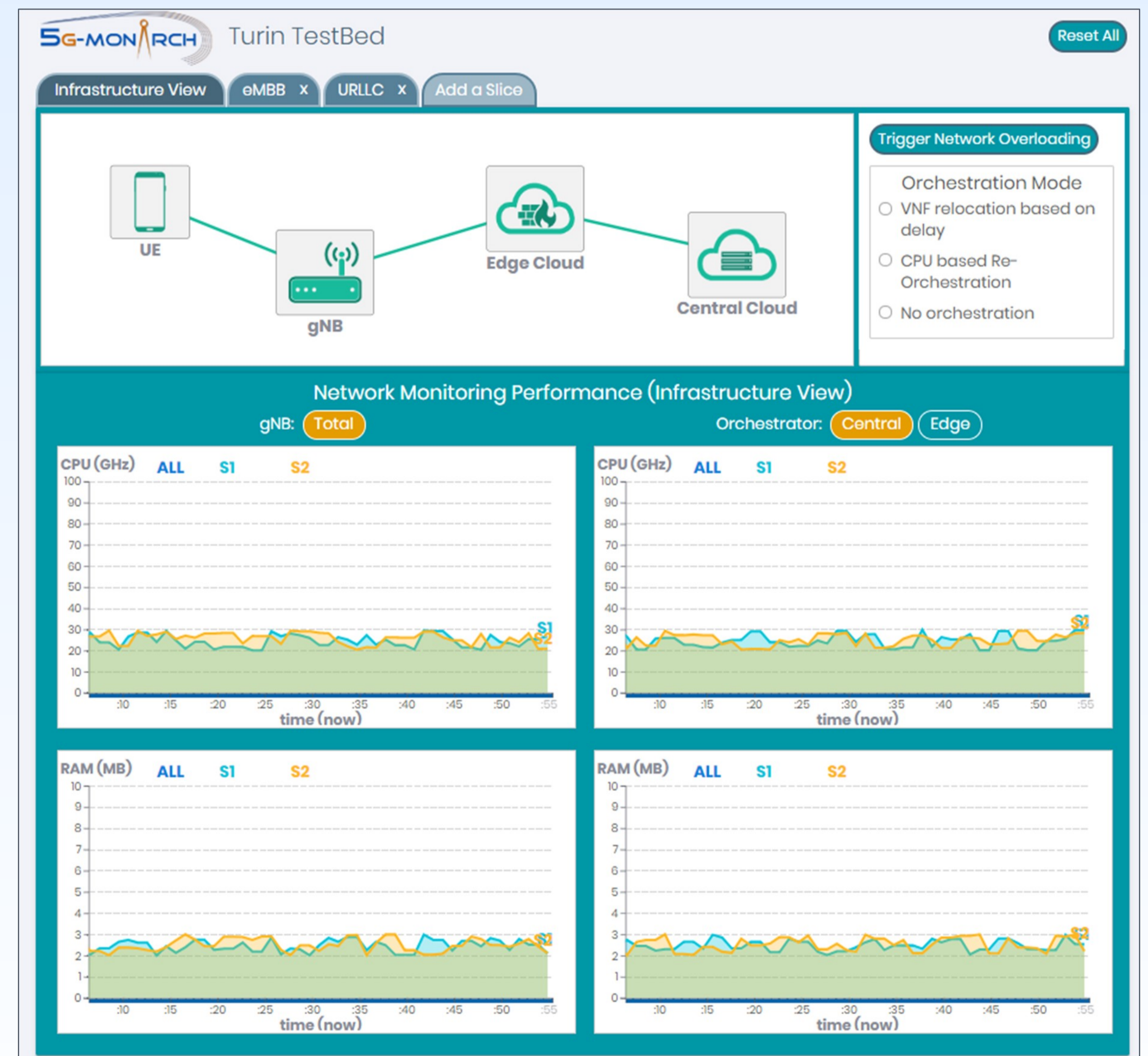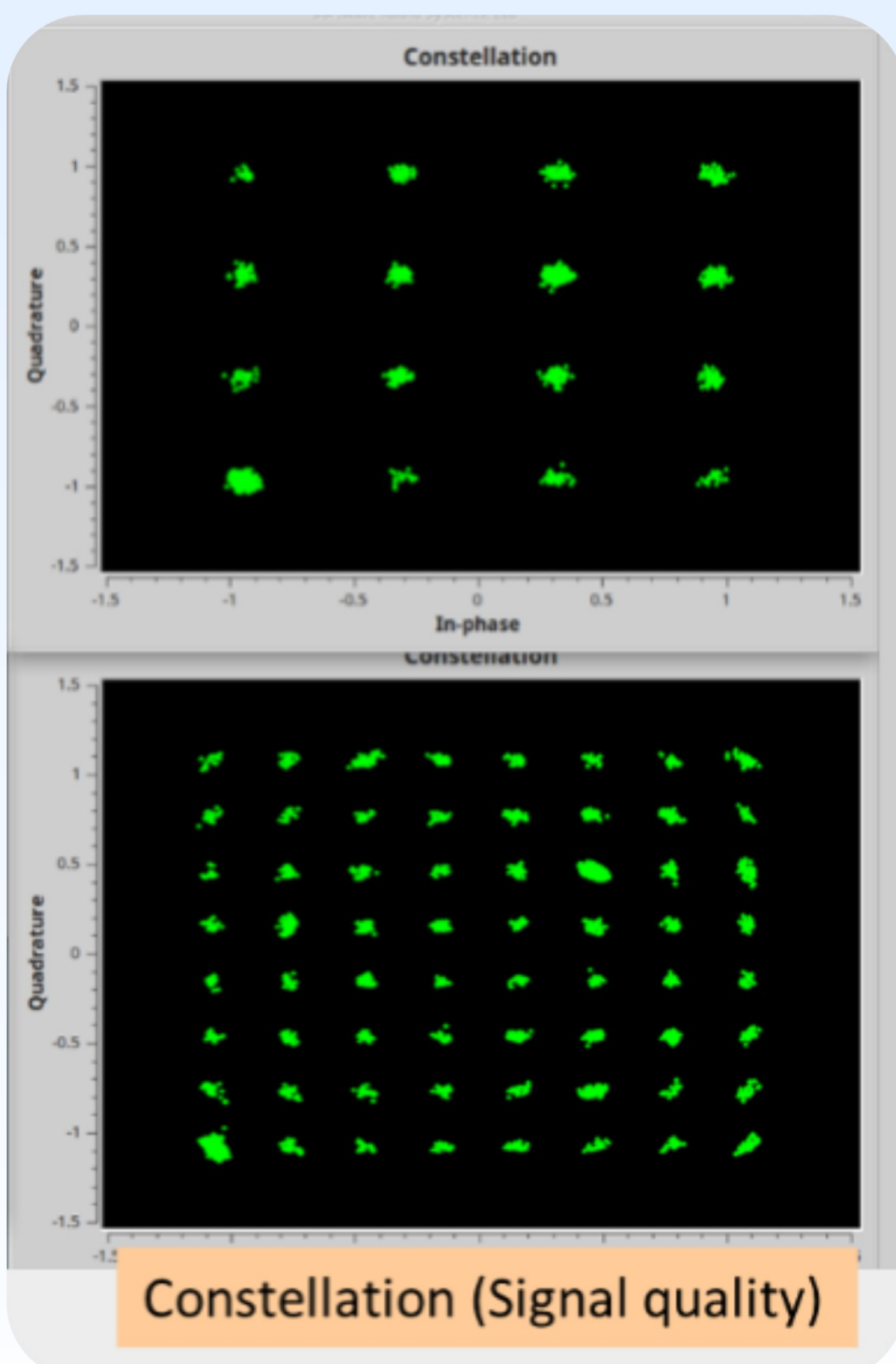5G New Radio
Tourist
eMBB slice (360° video streaming)

Implementation

- Implements 5G New Radio functionality at the PHY/MAC
- Provisioning of multi-sliced services to the UE
- Virtualised gNB protocols

GUI
360° video server
BBU
GbE
HDMI
GbE
RFU
360° VR streaming camera
5G Radio Interface
Haptics server
Orchestration Framework

Oculus Rift
HDMI
USB
RFU
Oculus Touch
VR App client
GbE
BBU
5G UE (Tourist)

Oculus Rift
VR App client
Oculus Touch
5G UE (Guide)

KPI Monitoring

Constellation (Signal quality)

- Graphical User Interface
- CPU and RAM measurements
- Signal quality metrics