5G EVE
Italian site status

5G EVE Webinar – 26 May 2021

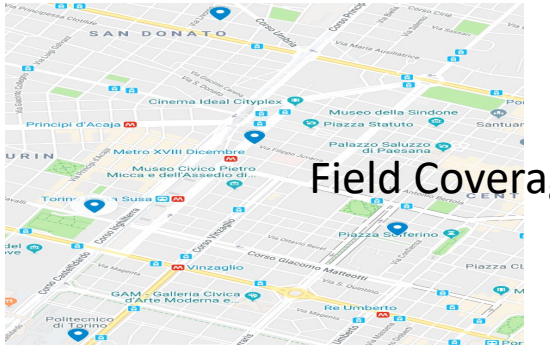
This Project has received funding from the EU H2020 research and innovation programme under Grant Agreement No 815074

TIM - Uso Interno - Tutti i diritti riservati.

5G EVE

5G EVE Italian site Infrastructure

TIM Field TO



Field Coverage

LTE eNB

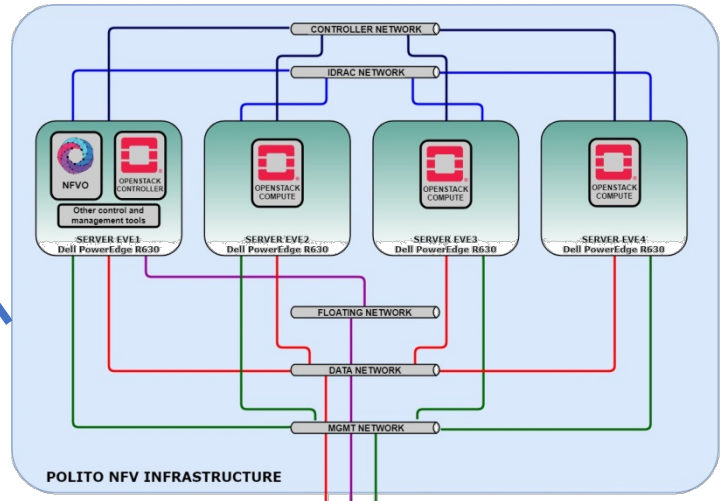
5G gNB

Field Core TIM

APN

APN

OneM2M



POLITO BORDER SWITCH

Public Internet

POLITO EVE SWITCH

PoliTO

EVE Portal

Ipsec tunnels:
Madrid
Paris
Athens

ICT-19

TIM LAB TO

IW Layer

Indoor coverage

LTE eNB

5G gNB

APN

Trial Core (ex NSA)

Indoor coverage

LTE eNB

5G gNB

APN

Lab Core (PVV)

5G EVE Italian site Infrastructure status

Site facility status: (What is currently in place)

- Infrastructure – connectivity, field APN, Lab APN
  - dark fiber connectivity through the local facilities
- EVE-wide IWL server
- Orchestrators:
  - EVER orchestrator
  - MANO (local orchestrator)
- Metrics – data shippers

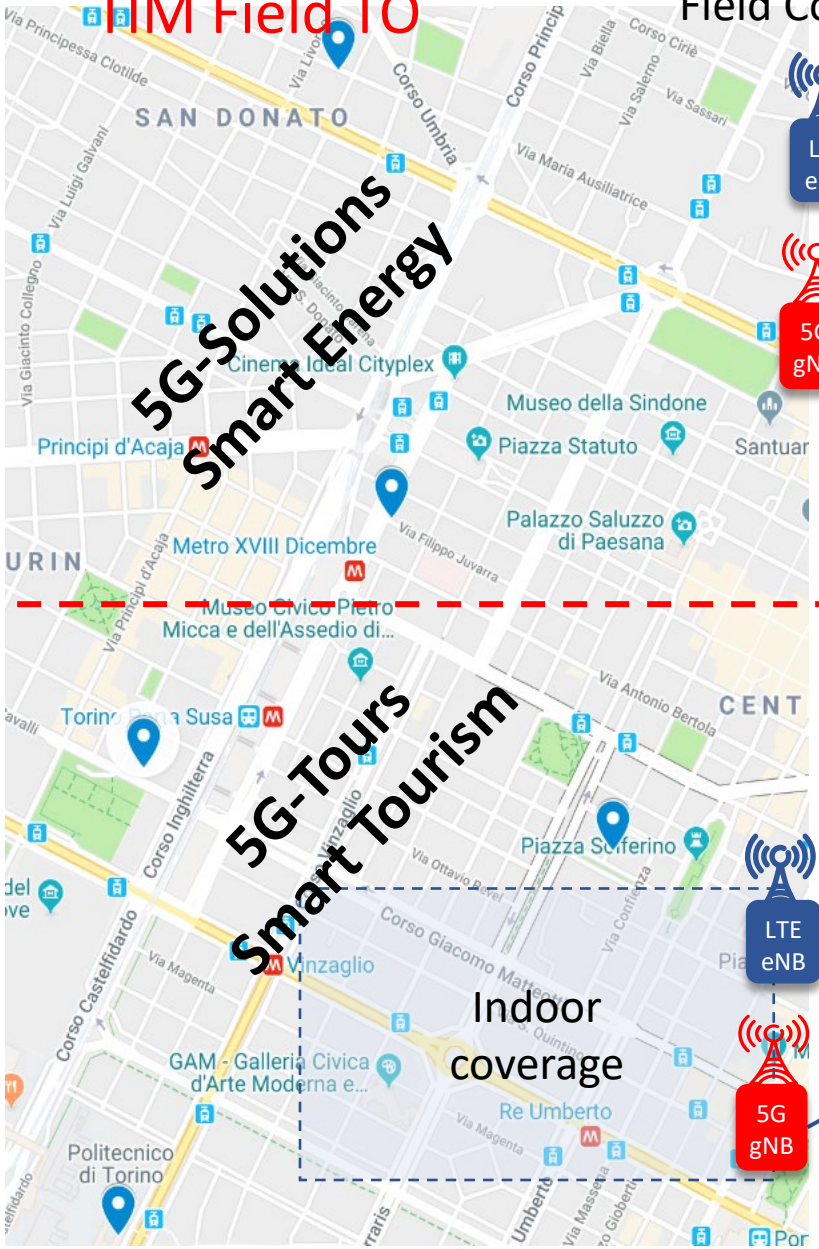
This Project has received funding from the EU H2020 research and innovation programme under Grant Agreement No 815074

TIM - Uso Interno - Tutti i diritti riservati.

5G EVE – ICT-19 interaction

TIM Field TO

Field Coverage



5G-Solutions
Smart Energy

5G-Tours
Smart Tourism

Indoor coverage

LTE eNB

5G gNB

LTE eNB

5G gNB

OneM2M

Field Core TIM

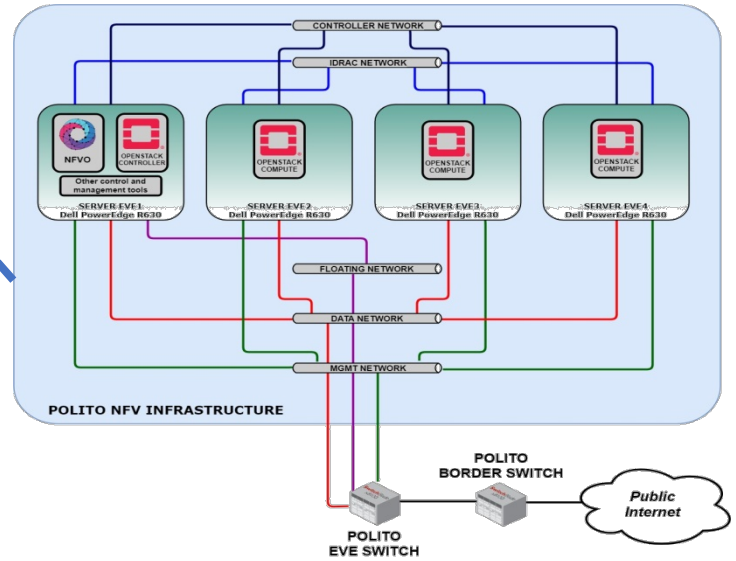
APN

APN

APN

Trial Core

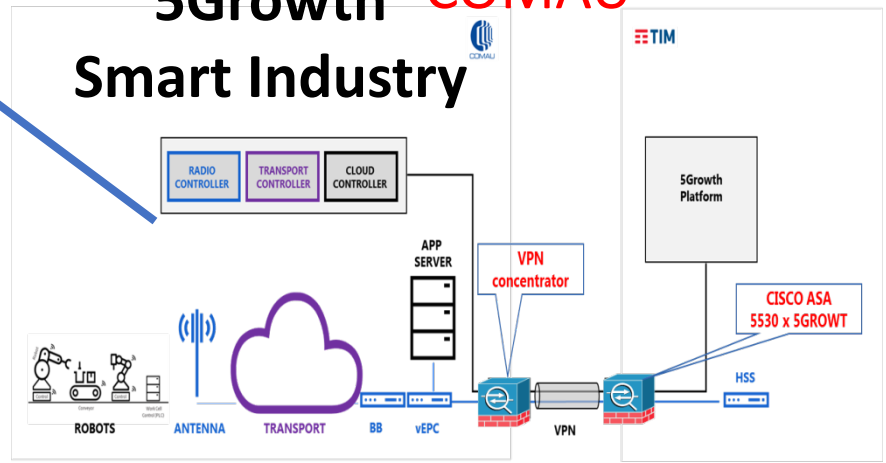
TIM LAB TO



PoliTO

COMAU

5Growth
Smart Industry



ICT-19 integration - status on Italian Site

- **5G-Solutions**: no infrastructure improvement required; three UCs from Smart Energy will be integrated via EVE portal in the Italian Site
  - three test cases under trial with complete use case executions planned in three cycles until April 2022 (cycle 1 already complete)

Open points

- Integration of the 5G-S Service Orchestrator with 5G-EVE IWL
- Definition of requirements for cloud edge resources needed by 5G-S

This Project has received funding from the EU H2020 research and innovation programme under Grant Agreement No 815074

TIM - Uso Interno - Tutti i diritti riservati.

ICT-19 integration - status on Italian Site

- **5Growth**: new VPN to connect vertical site (COMAU), service side in EVE cloud (@polito), user side @Comau.
  2nd step: 5Growth orchestrator with IWL driver (done)
  - (ongoing) 5Growth orchestrator in TIM Lab, connected to IWL

- **5G-TOURS**: phase 2 foresees the use of the 5G EVE infrastructure (i.e., OSM at Politecnico di Torino, TrialCore including EVER and RAN in the TIM laboratory) to experiment 5G-TOURS innovations; the topic is under discussion between the two projects

This Project has received funding from the EU H2020 research and innovation programme under Grant Agreement No 815074

TIM - Uso Interno - Tutti i diritti riservati.

ICT-19 integration – beyond 5G EVE

- Italian site will guarantee the local infrastructure to host use cases.
- The platform that will be maintained is the one available at June 21 and previously described
- Troubleshooting will be supported in case of failure in experiment execution
  - e.g., no access to log file
- Reference person: **Mauro Agus (TIM)**

This Project has received funding from the EU H2020 research and innovation programme under Grant Agreement No 815074

TIM - Uso Interno - Tutti i diritti riservati.

THANK YOU

This Project has received funding from the EU H2020 research and innovation programme under Grant Agreement No 815074

TIM - Uso Interno - Tutti i diritti riservati.