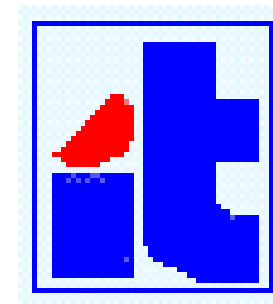


Moving towards the Digital Society: The 5GAI^{ner} Initiative

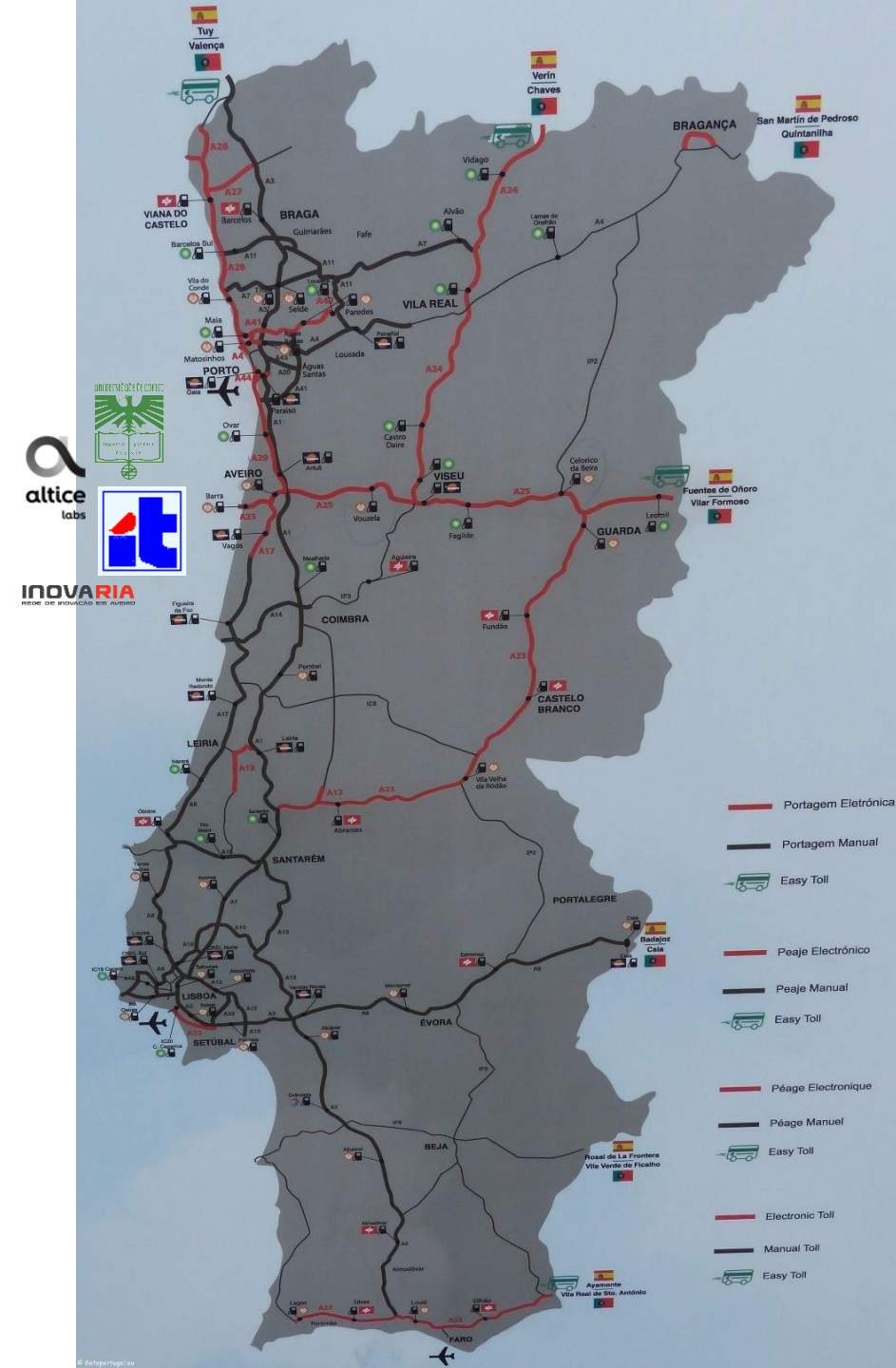


Belt and Road Conferences



Context

1. Portugal is developing a 5G policy coupled to a process of digital transition;
2. Huawei is a world leader in 5G, and aims to increase its investment in Portugal;
3. Aveiro is a leading telecommunication pole in Portugal (academic and industrial-wise);
4. Collaboration projects already exist, both in national and international contexts.



Goals

Facilitate vertical markets digital transition to 5G

Enable easy development and experimentation

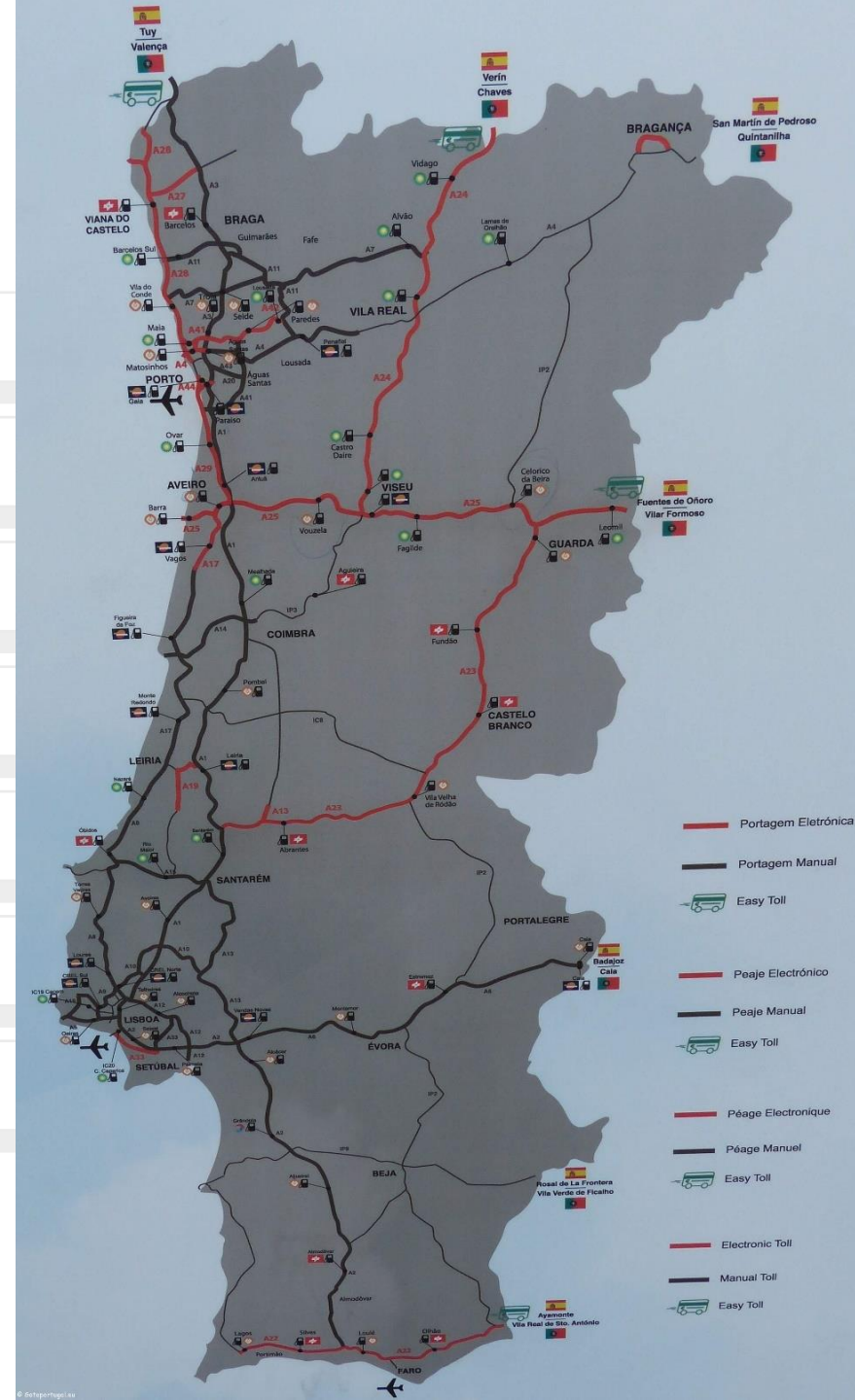
Promote the usage of novel solutions/concepts across vertical markets

Link with international successful use cases, both in Europe and Asia

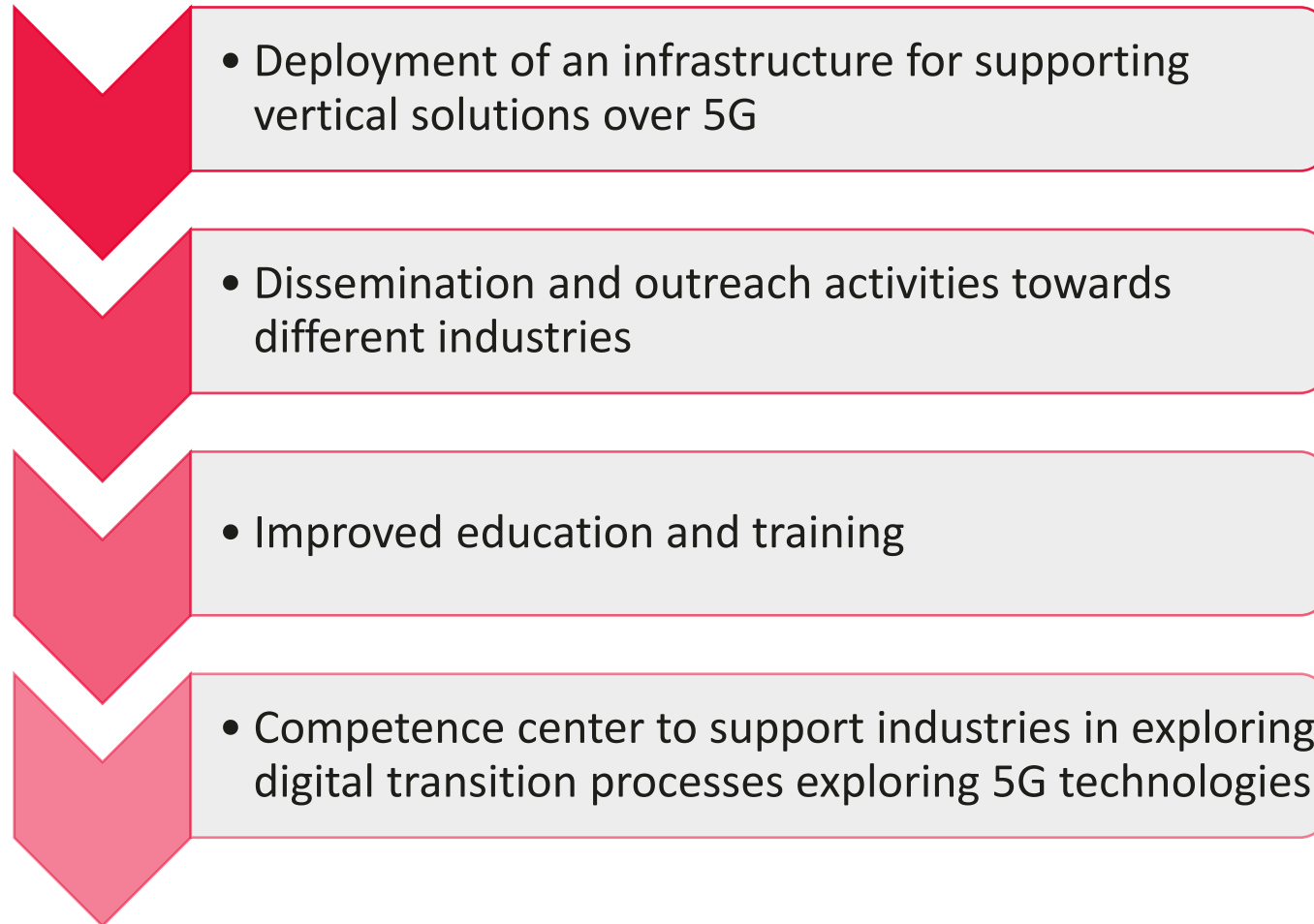
Assist Portuguese industry in different vertical markets to assess trust and reliability

Smooth challenges in certification processes

Enable further research on next generation network structures.

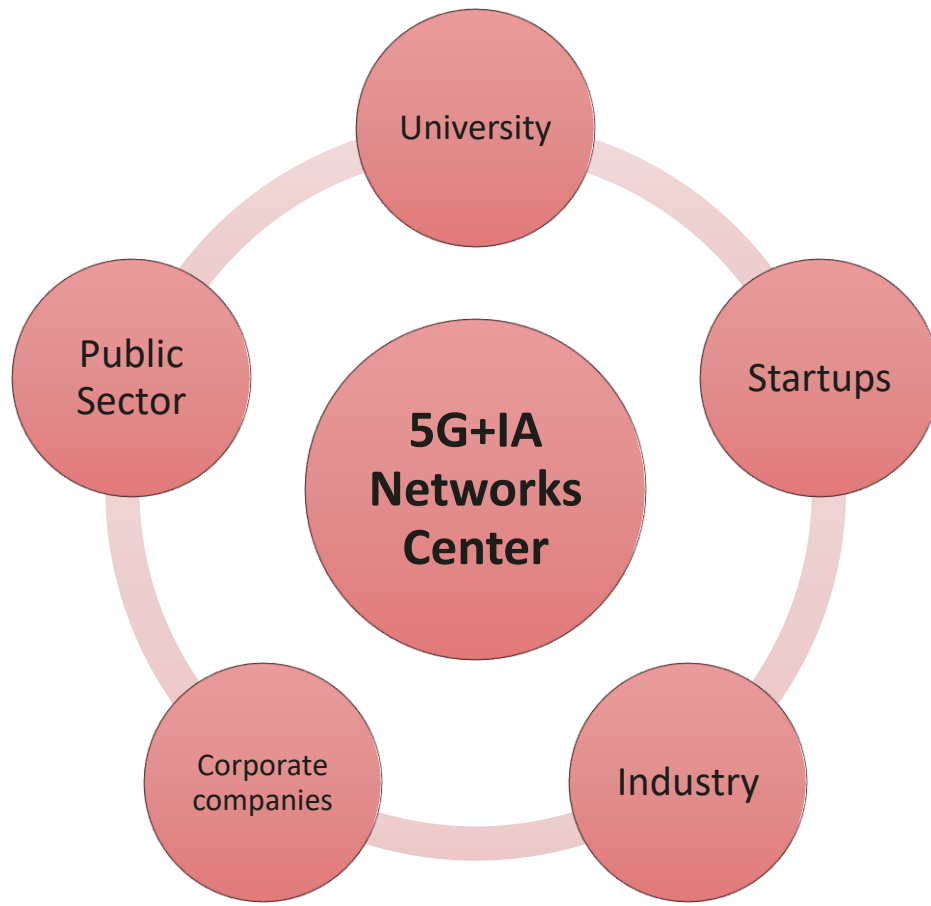


Development lines

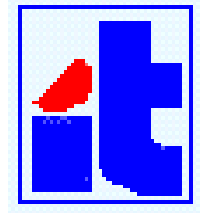


Initiative adapted in time according to its evolution (and 5G market acceptance)

A platform to accelerate digital transition of Portugal through 5G and AI

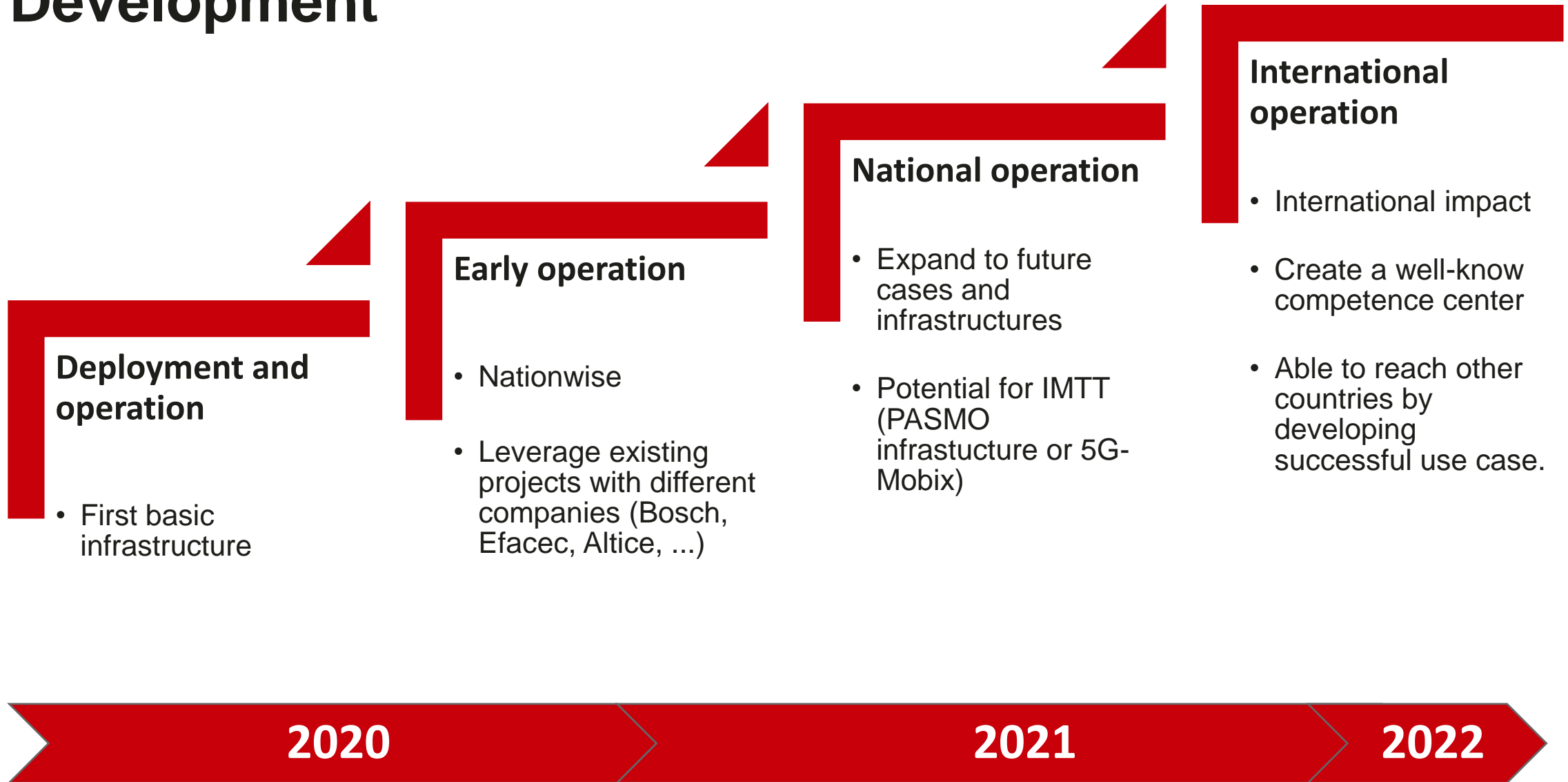


- Equipment and tools
- Best practices
- Funding
- Training
- ...

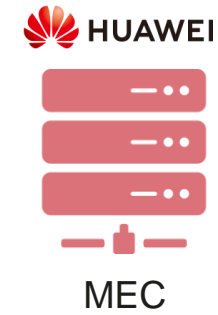
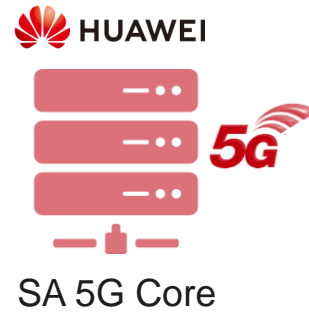
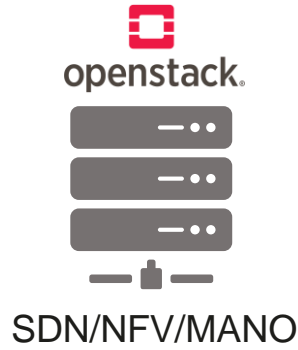


- Research
- Human support
- Identify new entities
- Fundraising
- ...

Development



Main Site



Industrial Site



SDRs



Research Lab



5G Radio (Indoor)



Mobility Testbed



5G CPEs

Energy Use Case



IIoT Use Cases



5G Radio (Indoor)



5G CPEs

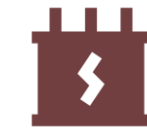
Secondary On-Campus Site



5G Radio (Indoor)



5G CPEs



Energy Use Case



Transportation Use Case



5G Radio (Outdoor)

Outdoor Site

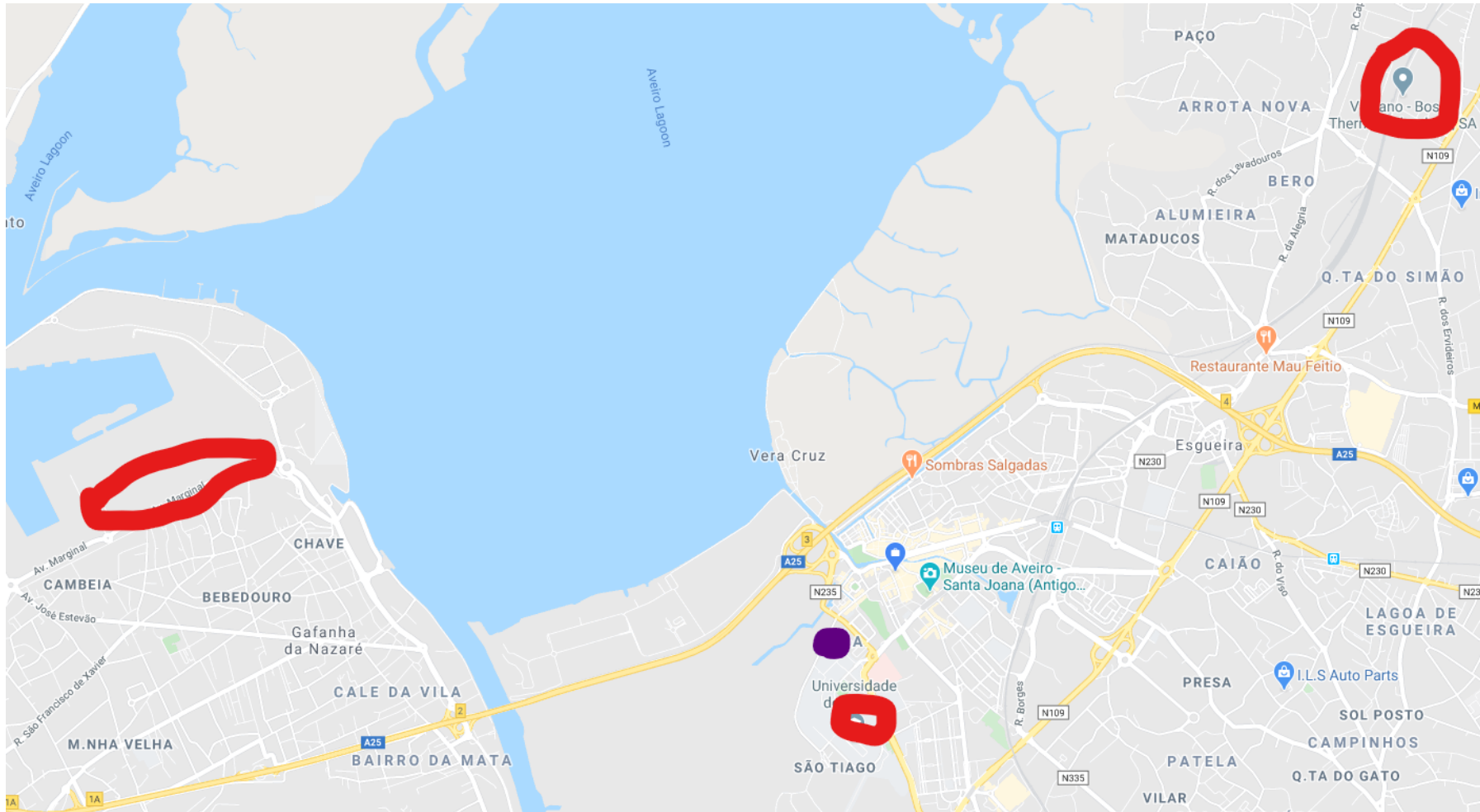
Industrial graded

research graded

early use cases

Early Deployment Location

Full operational commercially-graded 5G test networks



- Core
 - > Instituto de Telecomunicações (campus)
- Access (1st phase)
 - > Campus
 - > Bosch
 - > Aveiro Port
- AI accelerator (MEC)
 - > Bosch

Reality in 2023

- Build on the (5G) Digital Innovation Hub setup
- Link with other similar initiatives, covering Centro Portugal actors (other DIH, Colabs)
 - > Engage on the establishment of a Zona Livre Tecnológica that can explore the synergies of existing activities
 - > Link with entities like Vortex (Altran) in Fundão
- Potential creation of a **R&D innovation pole** in Aveiro, associating with other initiatives
 - > *Technical, financial and regulatory challenges exist for pushing Portugal to the forefront of 5G innovation.*
 - > *Support from the Region and development enabler for the Region, transitioning into a knowledge-based economy*
 - > *Building the conditions for international projects cooperation*
 - > *Multiple national and international projects being associated:*
 - *Augmanity – I4.0*
 - *Route25 – Vehicular communications*
 - *ATE – Energy management*
 - *5GASP – PPDR & automotive applications*
 - *Imagine-B5G – testing of advanced 5G infrastructures*

Moving towards the Digital Society: The 5GAIner Initiative

Belt and Road
Conferences

Questions?

