5th Generation connected and automated mobility cross-border EU trials

IEEE 5G Summit for CAM

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Project coordinator

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Vision

5G-Routes conducts advanced **large-scale field trials** of representative Cooperative, Connected and Automated Mobility (CCAM) applications to demonstrate seamless functionality across a 5G cross-border corridor (Via Baltica-North), traversing Latvia, Estonia & Finland.

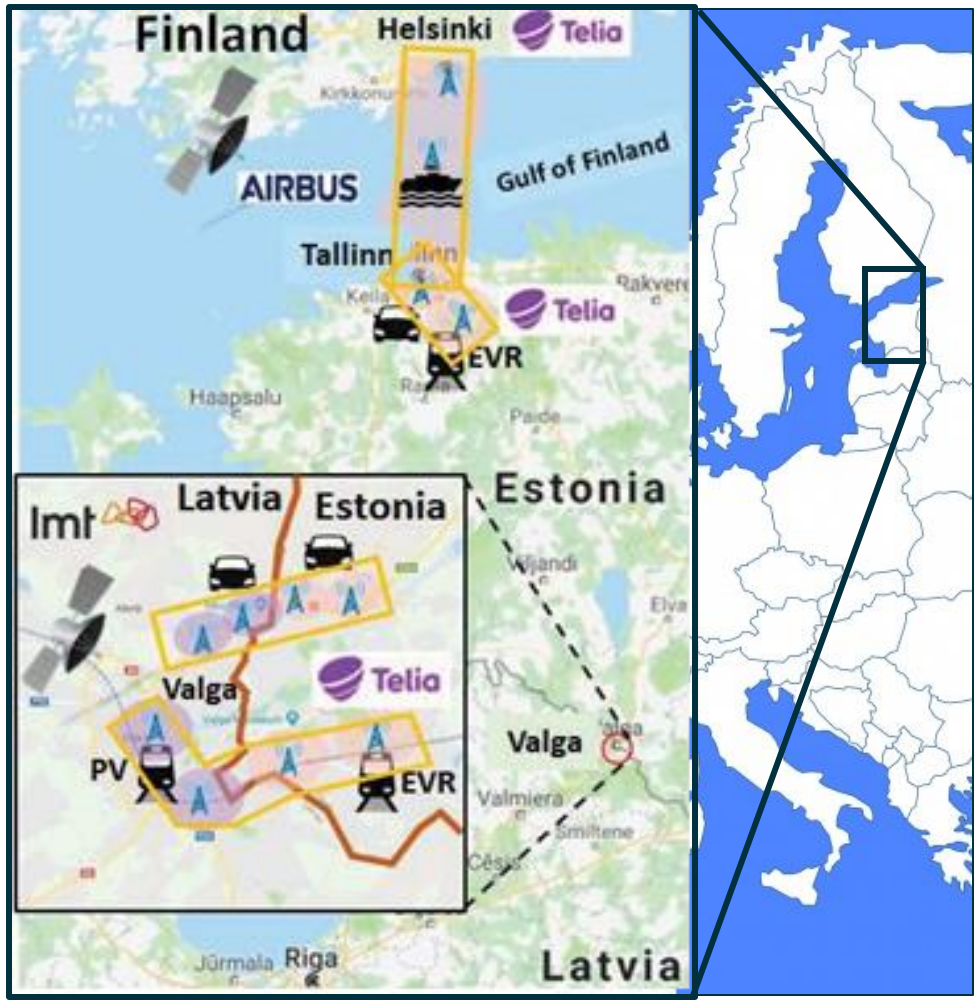
Several **scenarios** will be considered for each use case:

- cross-border (Finland-Estonia-Latvia),
- cross-telecom operators (Telia, LMT),
- integrated cross terrestrial-satellite and
- cross-transport-mode settings (Rail + Ferry).

Incremental **validation**

1. Lab trials
2. Local trials
3. Large scale trials

Start date: Sept 1st, 2020, **Duration:** 36 months
Horizon 2020 call & Topic: H2020 – ICT- 2020 / ICT-53-2020



Consortium

Project Coordinator

ERICSSON

Consortium

AIRBUS DEFENCE & SPACE

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BRAINSTORM

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PASAZIERU VILCIENS

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TELIA

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ELEKTRONIKAS UN DATORZINĀTŅU INSTITŪTS

VEDECOM

VEDIA

VTT

WINGS

ENIDE

INLECOM

IQ

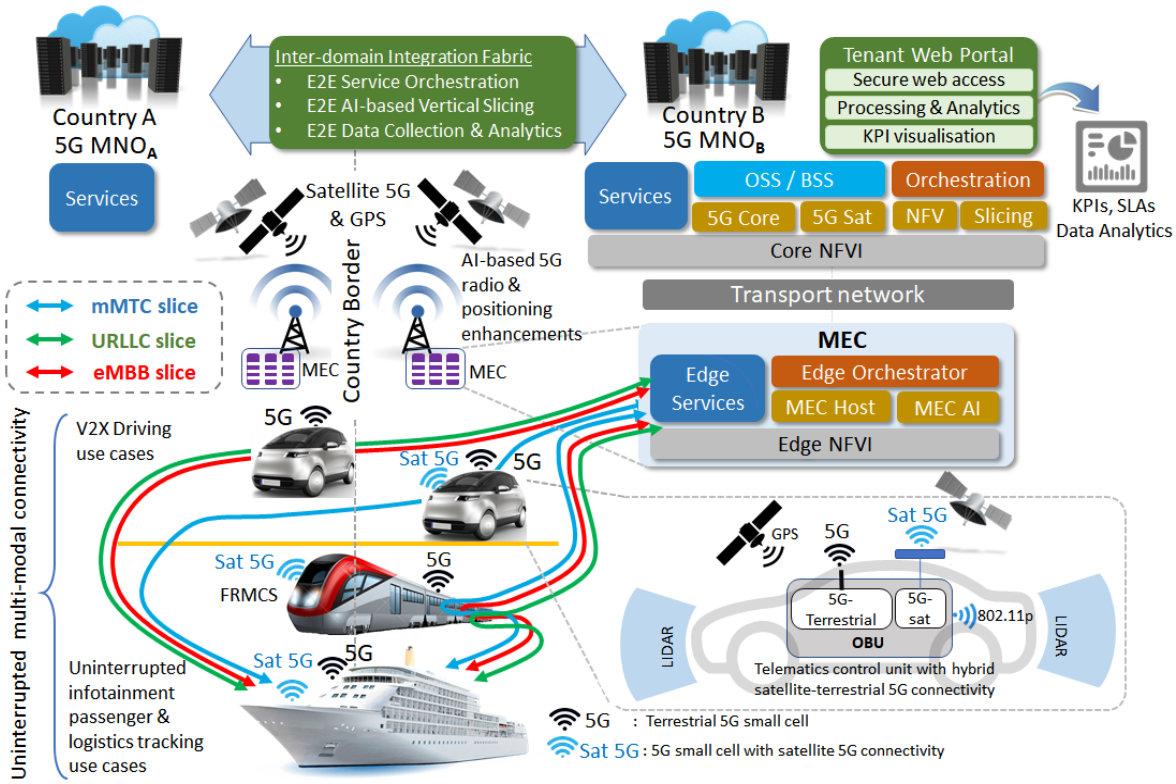
LMT

Objectives

1. To develop innovative and commercially exploitable CAM UCs for automotive, railway and maritime sectors within the cross-border context.
2. To analyze the technical and business requirements for the UCs to enable extensive large-scale CAM field trials.
3. To advance and optimize the enabling technologies using AI for the reliable, seamless and uninterrupted delivery of interoperable CAM services across borders.
4. To develop the infrastructure, integrate the technological enablers in an E2E CAM ecosystem, setup the 5G corridor and facilitate lab and large-scale field trial validation.
5. To demonstrate the potential and the user value in 5 advanced CAM deployments at cross-border areas.
6. To develop and validate the business models of advanced CAM UCs and protect EU IP.
7. To provide rationalized contribution to key standardization bodies within the CAM context.
8. To ensure long-term success through wide dissemination of the project's results; to exploit synergies with other 5G-PPP projects and 5G CAM initiatives.

Use cases overview

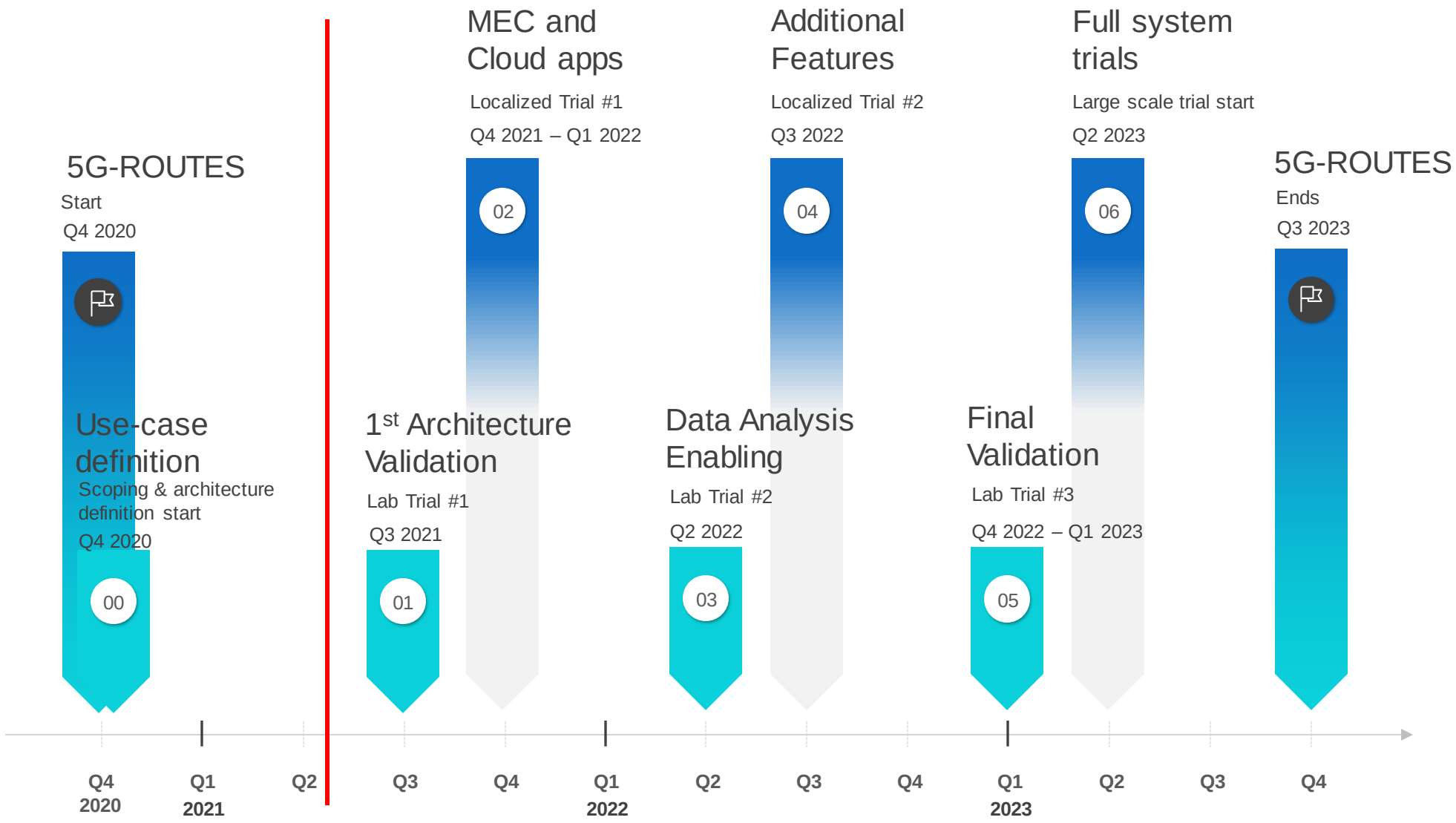
- Automated Cooperative Driving
  - UC1.1 Dynamic vehicles platooning
  - UC1.2 Cooperative lane change
  - UC1.3 See through view for safe automated overtake
- Awareness Driving
  - UC2.1 Real-time traffic info and cooperative intersection collision control
  - UC2.2 Traffic jam chauffeur
- Sensing Driving
  - UC3.1 Sensor info sharing
  - UC3.2 Connected maintenance
  - UC3.3 Vulnerable road user collision avoidance



Use cases overview

- Uninterrupted infotainment passenger services on the go
  - UC4.1 360° immersive multi-user gaming on the go
  - UC4.2 3D real-time virtual collaboration on the go
- Multimodal services
  - UC5.1 Goods tracking visibility in multimodal cross-border logistics
  - UC5.2 5G-based Proactive and Multimodal Management of Passengers and Freight
  - UC5.3 FRMCS telemetry operation, railway from Estonia ↔ Latvia

Progress on timeline



Contact us

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Thank you for you attention!

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