5G-SITACOR

Inception Study for the deployment of 5G in the cross-border sections of the TEN-T Mediterranean and Baltic – Adriatic corridors between Italy and Slovenia

Agenda

Project Contest

The project concerns a **study for the diffusion of 5G** in the cross-border sections of the Mediterranean and Baltic-Adriatic TEN-T corridors between Italy and Slovenia and is part of the community program CEF (Connecting Europe Facility) and, more precisely, in the EU call CEF-DIG- 2022-5GCORRIDORS, **which finances growth, employment and competitiveness through investments in infrastructure located in key areas** and connecting countries of the Union.

https://hadea.ec.europa.eu/programmes/connecting-europe-facility_en
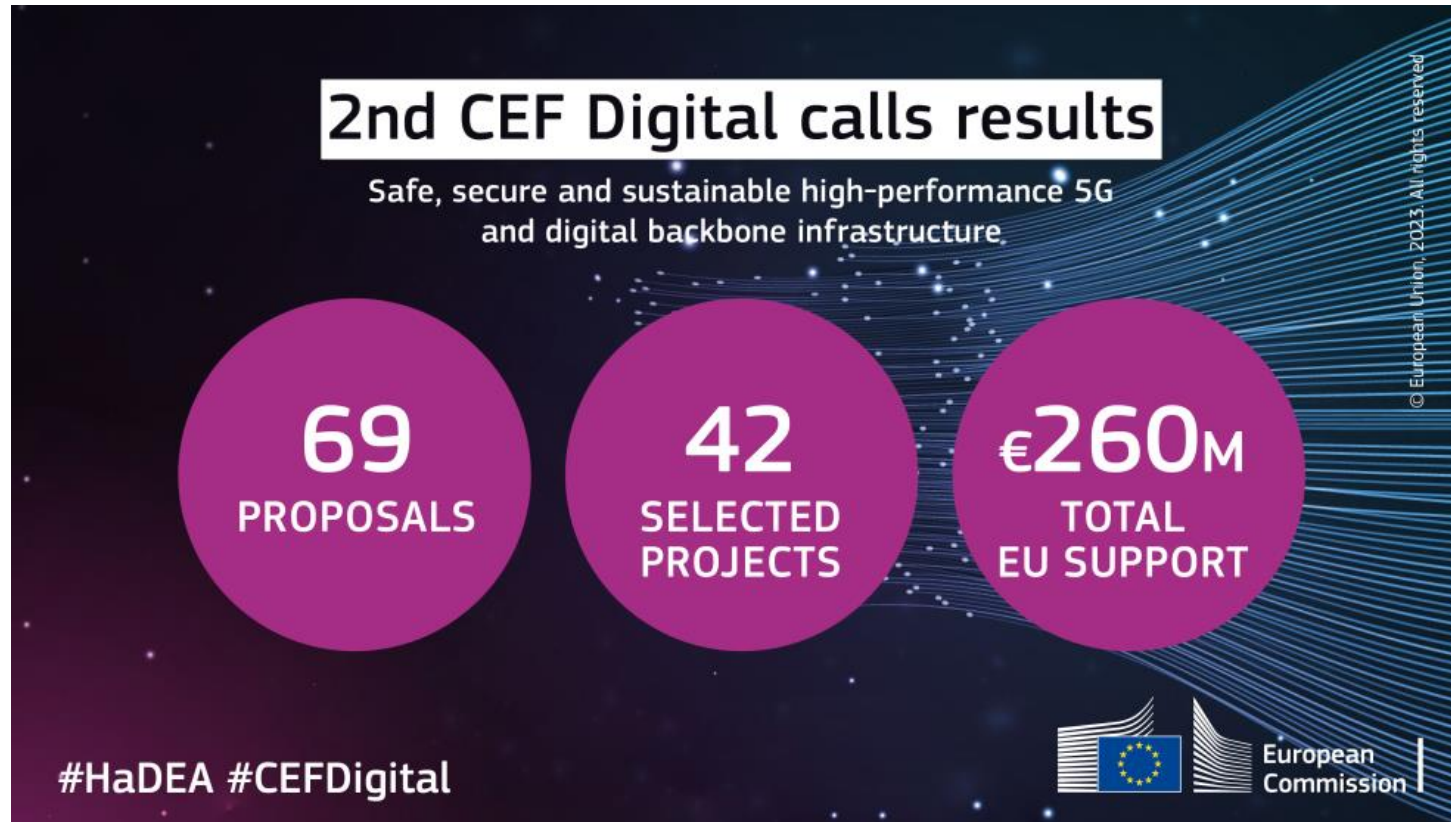
Total EU Contribution (50%): €342 742
Duration: 15 Jan – 14 Jul 2024

Location
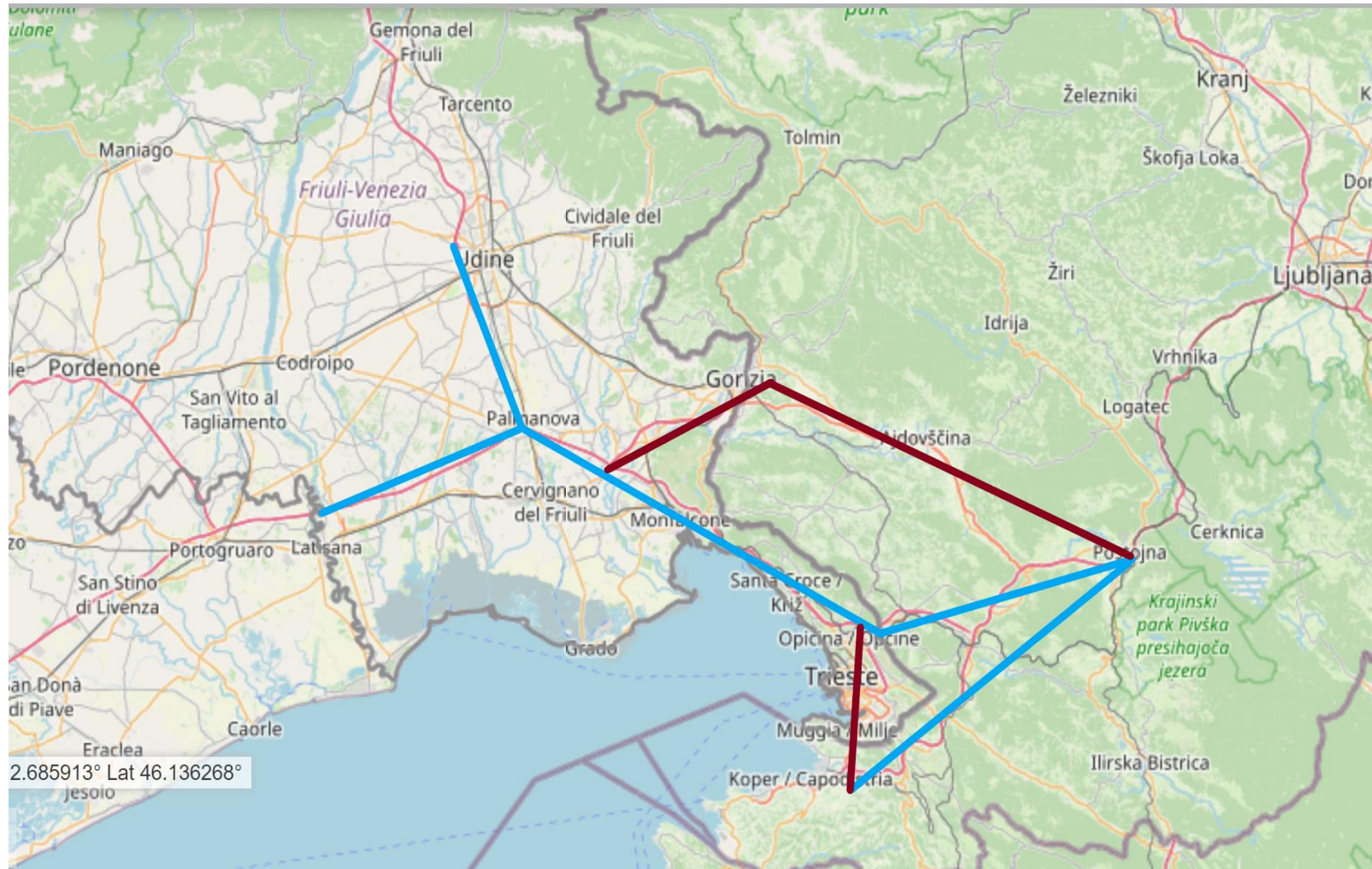
In total 213 Km of the Mediterranean Corridor and of the Baltic-Adriatic Corridor (**BLUE LINE**)

62 Km of additional motorways as secondary path in case of critical events (**RED LINE**)

| Project Corridor Paths	Italy [Km]	Slovenia [Km]	Road Manager (partner)
Adriatic - Baltic Corridor	27		
Udine Nord - Palmanova	27		Autovie/Altoadriatico
Mediterranean Corridor	102	84	
Ronchis (A4 FVG western border) – Sistiana	56		Autovie/Altoadriatico
Sistiana - Fernetti (eastern country border)	22		ANAS
Fernetti – Rabuiese (southern country border)	24		ANAS
Rabuiese - Koper		11	DARS
Fernetti – Divača (join on Koper Postojna path)		16	DARS
Koper – Postojna		57	DARS
Additional	18	44	
Villesse – Gorizia/Nova Gorica	18		Autovie/Altoadriatico
Nova Gorica – Razdrto (join on Koper – Postojna path)		44	DARS
Total Km	147	128	275

Local Municipalities Involved
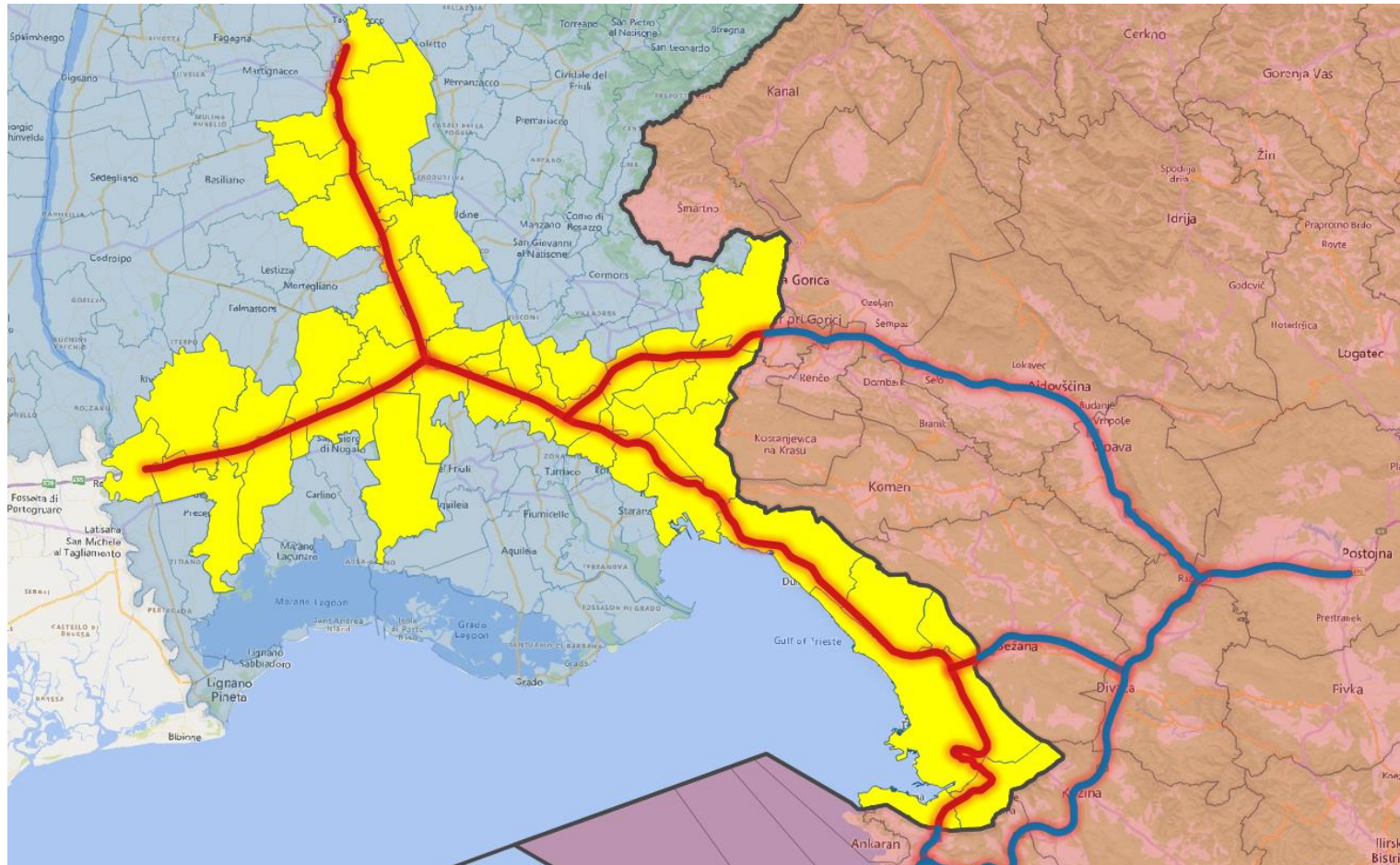
Needs

The project arises from the need to improve the coverage and quality of connectivity in the identified corridors, characterized by:

I. Diversified territory with urban and uninhabited areas, mountains and tunnels.
II. Heavy traffic on important Italian (A4, A23, A34, E55, E70) and Slovenian (A1, E61, H4, H5) roads.
III. Presence of ports (Trieste and Koper) that connect passengers and goods with Italy, Slovenia and Central Europe.
IV. Need to strengthen the interconnection between road and port infrastructures using the best available technology.

Advantages

I. Greater road safety thanks to CAM (Connected and Automated Mobility) technology.
II. Better management of traffic and goods flows.
III. Development of innovative digital services for companies, cities and highways.
IV. Greater competitiveness and attractiveness of the area for investments and tourism.

Main Goal
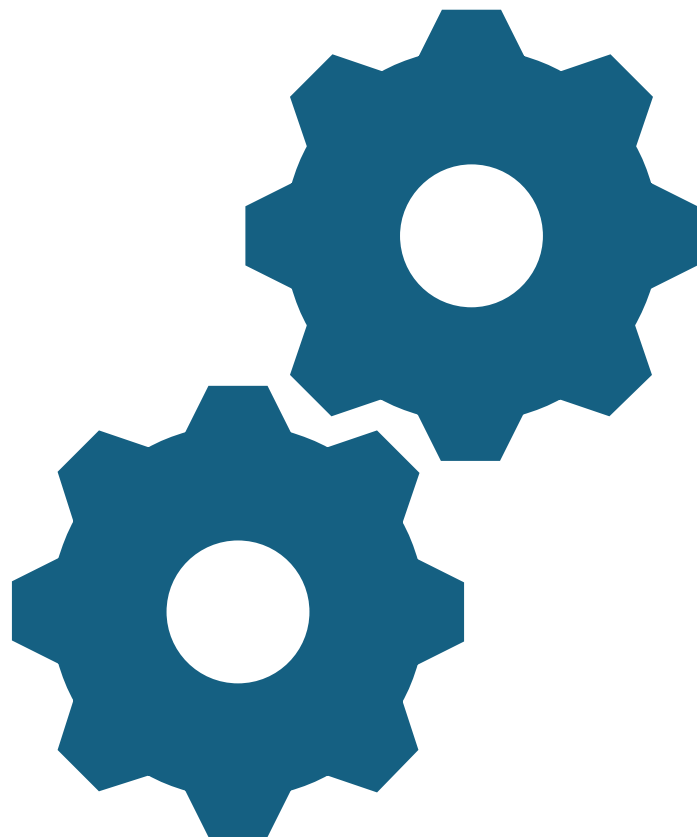
The final objective of the study is to **define the parameters necessary** for the subsequent implementation of an infrastructure dedicated to the development of **intelligent digital services for territories and communities**, to be applied to businesses, schools, hospitals, cities and highways.

Specific objectives

i.   The assessment of existing transport and telecommunication infrastructure serving the corridor for efficient sharing and reuse (such as fibre, power supply, utility poles, ground space etc.);

ii. An analysis of the technical and economical sustainability of the investments needed for the complete coverage of the corridor in line with the goal of the call;

iii. The assessement of cost-saving practices/strategies by sharing passive and active infrastructure;

iv. Development of linear infrastructures related to Connected and Automated Mobility (CAM) and road safety (i.e. eCall), as well as the alignment with the goals of the EuroQCI infrastructure;

v.   The identification of the economic and technological requirements to ensure a seamless redundant connectivity enabling full digitalization of the corridor in line with the existing stardards.
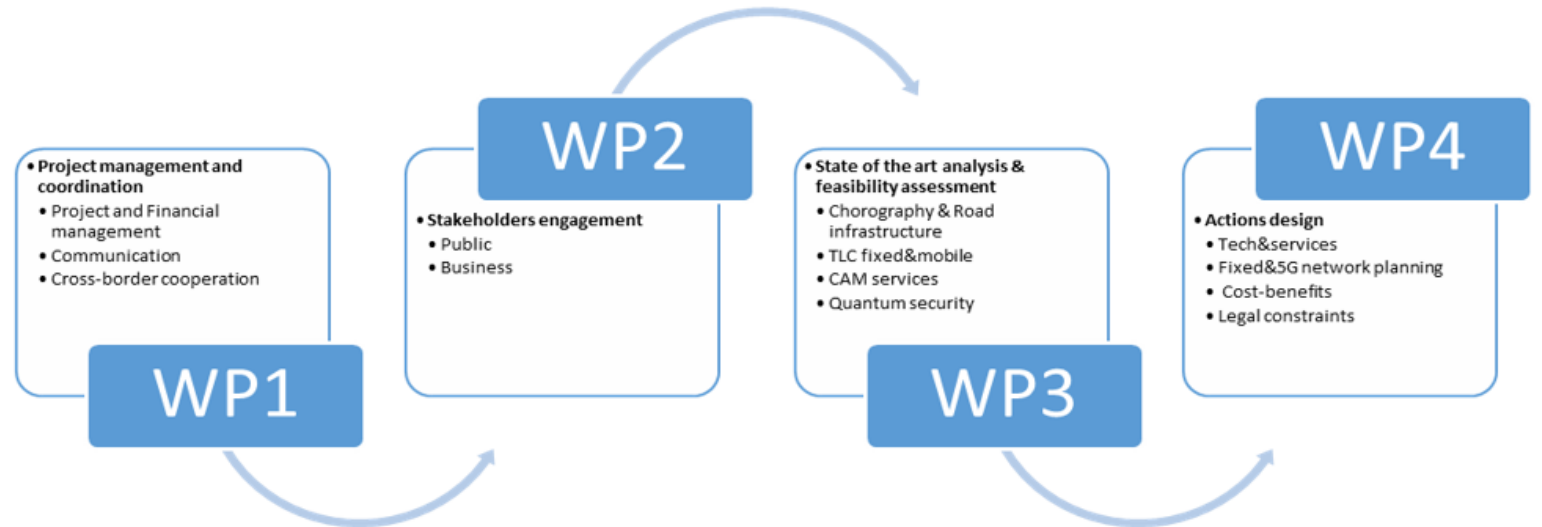
Expected outcomes

i.   the provision of a typology model assessing the comprehensive resources in terms of investment and time required to achieve the complete coverage of the areas of intervention where Baltic-Adriatic and Mediterranean Corridors run;

ii.   the design and implementation plan introductory to the deployment of advanced digital infrastructures in the concerned corridor sections;

iii.   the identification of the main constraints (i.e. technical, legal, regulatory and commercial) as well as the synergies effectively available;

iv.   the definition of the features and benefits of 5G (high transmission speed, low latency and high reliability) applied to numerous use cases while taking into consideration the constraints for the development of linear infrastructures such as Connected and Automated Mobility (CAM) and road safety (i.e. eCall). The main focus will be the use of 5G to ensure quality in the Internet of Things (IoT) sector applied to the use cases, as well as to assure quantum-based secure communication and data transfer
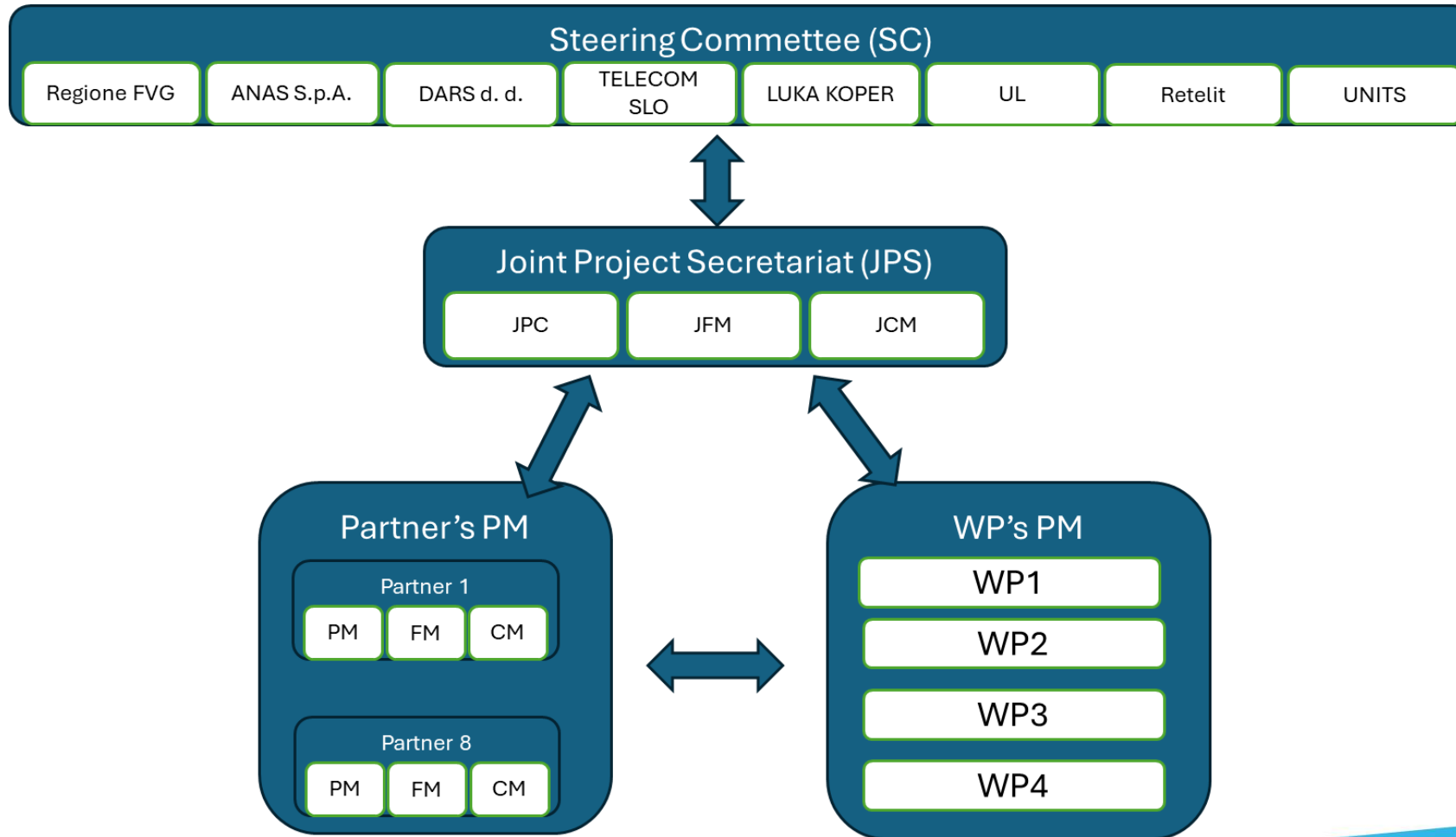
5G-SITACOR TIMETABLE

1 period = 1 week

ACTIVITY	TITLE	STARTING PERIOD	DURATION	Milestones / Deliverables
WP1	P.M. and communication	1	24	
T1.1	Project management	1	24	MS1 (wk 2); D1.2 (wk 24)
T1.2	Financial management	1	24	
T1.3	Communication	1	4	D1.1 (wk 4)
T1.4	Institutional cross-border cooperation	1	12	MS2 (wk 12)
T1.5	Integration of 5G with edge cloud and federated cloud facilities	1	8	MS5 (wk 8)
WP2	Stakeholders engagement	1	24	
T2.1	Public stakeholder consultation	1	24	MS3 (wk 6); D2.1 (wk 13)
T2.2	Business stakeholder consultation	1	24	MS4 (wk 6)
WP3	State-of-the-art analysis & use cases	1	12	
T3.1	Assessment of chorography&co	1	12	MS6 / D3.1 (wk 12)
T3.2	Assessment of terrestrial fixed-line&co	1	12	MS7 / D3.2 (wk 12)
T3.3	Assessment of CAM services	1	12	MS8 / D3.3 (wk 12)
T3.4	Identification of classical and quantum security solutions for CAM	1	12	MS9 / D3.4 (wk 12)
WP4	Actions design	9	18	
T4.1	Technologies & services analysis	5	20	D4.1 (wk 24)
T4.2	Fixed and 5G Network Planning	5	20	MS10 (wk 6); D4.2 (wk 24)
T4.3	Timeline and Cost-benefit analysis	15	10	D4.3 (wk 24)
T4.4	Legal constraints assessment	5	20	D4.4 (wk 24)

Months: Jan (M1: weeks 1–4), Feb (M2: weeks 5–8), Mar (M3: weeks 9–12), Apr (M4: weeks 13–16), May (M5: weeks 17–20), Jun/Jul (M6: weeks 21–24)

Co-funded by the European Union

Governance

Steering Committee (SC)

➢ **The Steering Committee (SC), chaired by the coordinator and composed by one representative for each**

➢ **beneficiary, holds a project meeting every month to check the progress, verifies the achievement of the**

➢ **expected deliverables, and possibly intervene to speed up the actions whenever delayed. The SC**

➢ **represents the project structure with decision-making capacity on all project-related issues.**

➢ **The SC also has the task of endorsing reports regarding the quality of project deliverables, outputs and results prepared by the JPS.**

Joint Project Secretariat (JPS)

✓ **The JPS is responsible for the overall project management until the project closure and represents the main project governance structure in charge of steering and monitoring the project implementation.**

✓ **It interfaces primarily with the SC and with the PMs, FMs, and CMs of each partner.**

✓ **JPS is supported by WPs Leaders and partner's representatives.**

Work Packages (WPs)

Each Work Package has a Coordinator and is composed of tasks managed by a leader that lead through milestones to deliverables (which are usually documents containing the outcomes).

Communication Platform

A dedicated webpage to 5G SITACOR project available on Regione Friuli-Venezia WebSite

Presentation of the main achievements and results of the activities carried out

Update of the project implementation to targeted audiences and general public

The platform will be operational from the beginning of the project and after the end of the project.

Useful tool to gain feedback from the public throughout its duration.

Communication Platform

Survey to Municipalities