European Global Navigation Satellite Systems Agency

ERSAT GGC

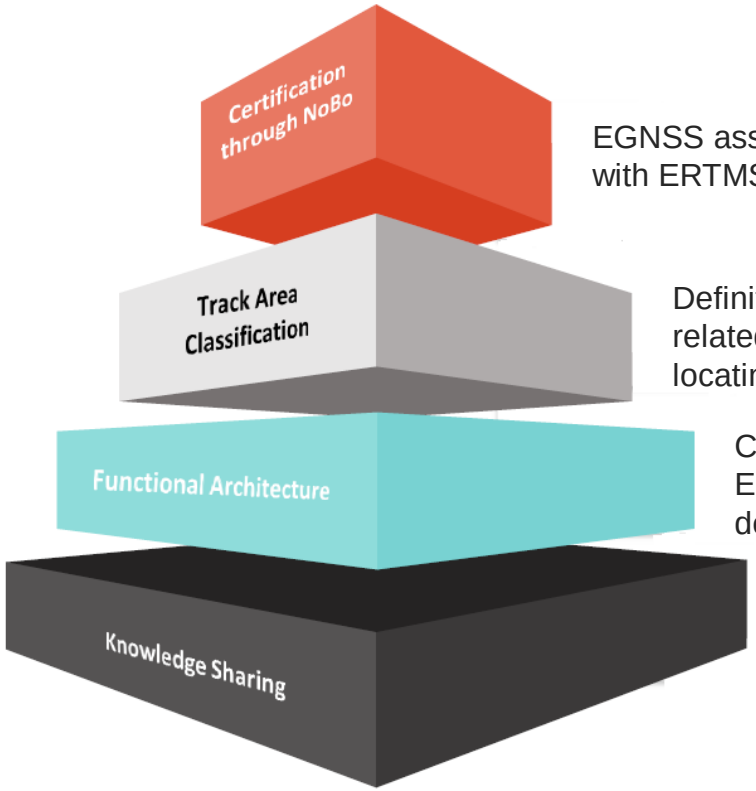
ERSAT GGC project overview

Massimiliano Ciaffi – RFI

ERSAT GGC Final Event

Praga, 26th November 2019

Target and objectives



EGNSS assets validation and relevant certification process compatible with ERTMS standards

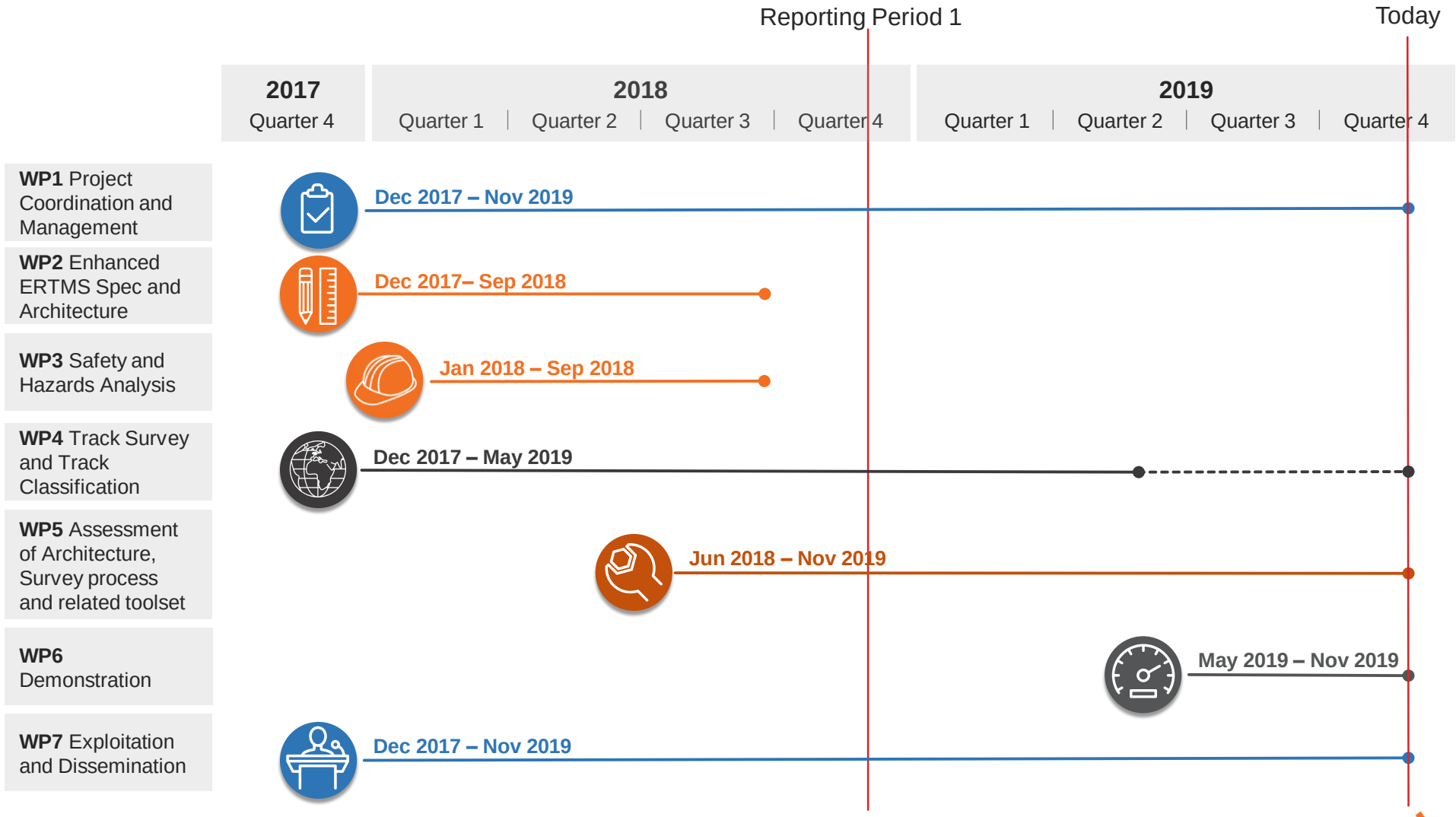
Definition and Certification of standard process, methodology and the related toolset for classifying track areas as suitable or not suitable for locating virtual balises

Consolidation and certification of the enhancement of the functional ERTMS architecture integrated with satellite based location determination system

Contribute to the standardization process & dissemination of results on the satellite and rail stakeholders

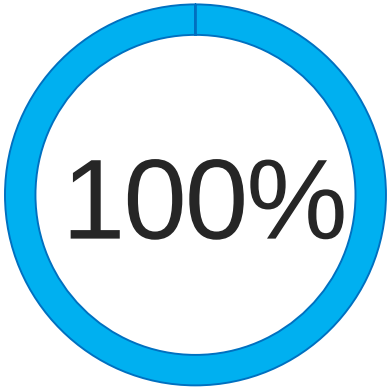
Front runner to integrate EGNSS into the ERTMS evolution

Project planning



Technical and Financial status

THE PROJECT IS PERFECTLY ON TIME



Time
End of the project

Deliverables
26 out of 26

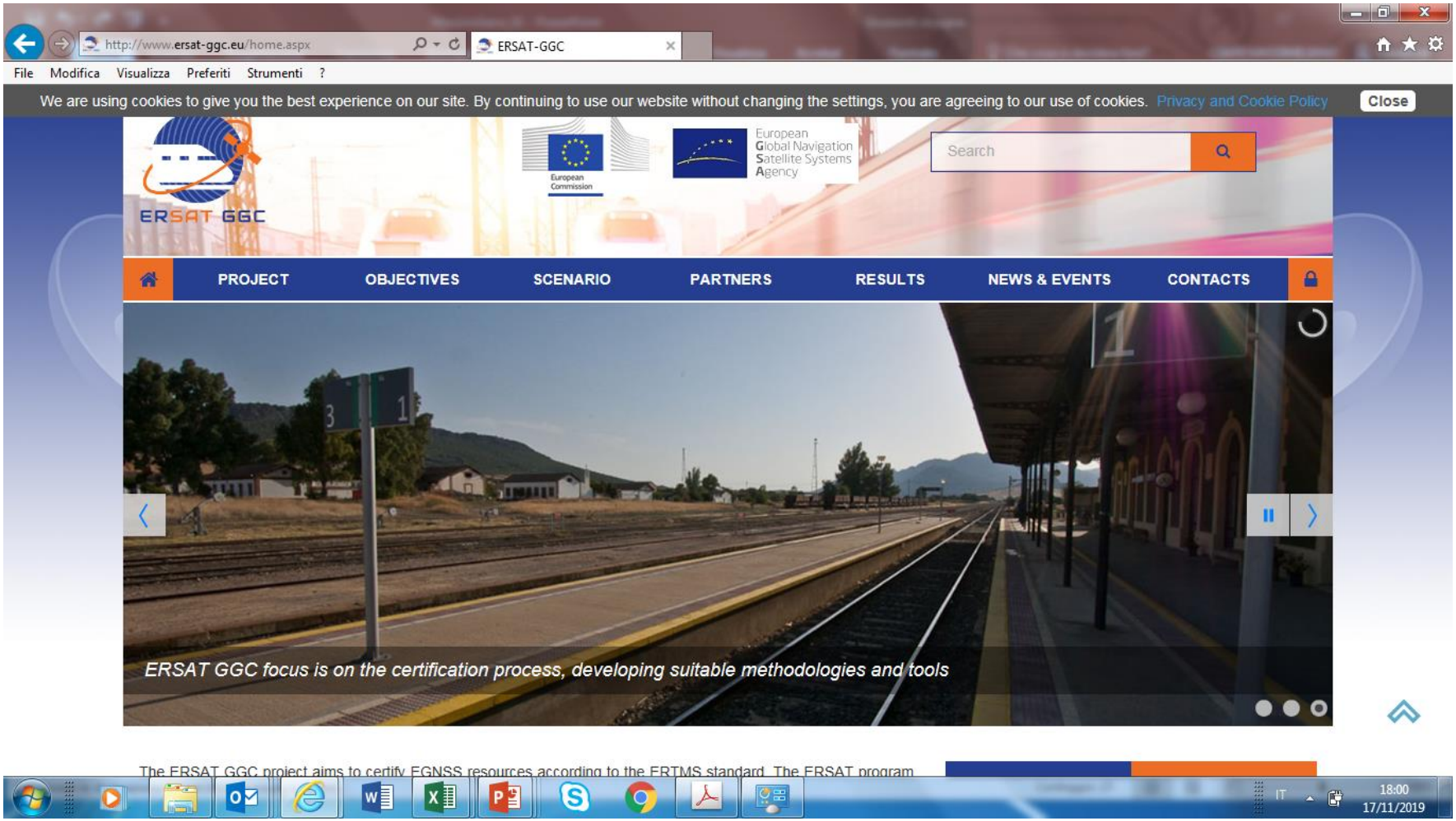
Costs
No Additional Costs Claimed

* costs referred to M18 of the project

List of Deliverables

Deliverable (number)	Deliverable name	Dissemination level
D1.1	Quality Plan	PU
D4.1	Procedure Specification Document	CO
D7.1	Dissemination Plan	CO
D7.2	Project Website	PU
D7.3	Project Leaflet	PU
D1.2	Data Management Plan	PU
D2.1	Enhanced Functional ERTMS Architecture Capable of using GNSS and Public Radio TLC Technologies	PU
D3.1	Safety Analysis of ERSAT ERTMS Application over GNSS	PU
D4.2	Technical Specification of Survey Toolset	CO
D4.3	Prototype Implementation of the Survey Toolset	CO
D2.2	Functional and Not Functional Test Specification	PU
D3.2	GNSS Quantitative Study for ERSAT GGC Project	PU
D4.4	Measurement Campaign Report	CO
D4.5	Process Execution Report	PU
D4.6	Technical Report about system integration in CEDEX laboratory	CO
D4.7	Technical Report about system integration in RFI laboratory	CO
D4.8	Technical Report about system integration in DLR laboratory	CO
D4.9	Technical Report about system integration in DAPP/RINA laboratory	CO
D4.10	Technical Report on application of the ERSAT GGC tool set in the GNSS Service Center	CO
D5.1	Assessment report of the enhanced functional ERTMS architecture	PU
D6.1	Track Survey Execution Report	PU
D5.2	Assessment report of the survey process	PU
D7.4	Project Leaflet – Updated	PU
D5.3	Assessment report of the related toolset	CO
D6.2	Field Data Analysis Report	PU
D7.5	Dissemination and Exploitation Report	PU

ERSAT GGC WEB SITE



http://www.ersat-ggc.eu/

Activities performed

- Engagement and coordination of all the 14 partners
- Internal meetings and sharing of information and documents
- Relation with GSA and official submission of deliverables

- Management of potential risks
- Respect of the schedule
- WPs harmonization

- Delivery of Project Quality Plan and Data Management Plan
- Check of all the submitted deliverables

Outcomes of the projects being used for

- RFI Project "Pilot Line" for the commissioning of the line Novara-Rho 2021
- Dissemination of the objectives of the project and of the approach
- Certification & Operational Activation

Roadmap to certification & operational activation

Cooperative effort involving Rail & Satellite community

ERTMS L2 baseline 3 – PILOT LINE

Activation of ERTMS L2
+ GNSS
+ Local Augmentation Network

ERA target window for upgrade of TSI

Implementation ERTMS L3
+ GNSS
+ IP Based Public TLC

L3 Impl. – Nov 29

2018 | 2020 | 2021 | 2022 | 2023 | 2024

Preparatory activities

Selection of Train and Logistic elements for deploying local Augmentation Network

Preparatory activities

Upgrade to ERTMS
+ GNSS
+ EGNOS Based SBAS

Readyness – Sep 25

Activation ERTMS L3
+ GNSS
+ IP Based Public TLC

Role of GSA-ESA

☞ ***Satellite asset to comply with ERTMS certification process***

A Great Team for a Challenging Project

European Global Navigation Satellite Systems Agency

Thank you

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