

LABORATORIO DI SIMULAZIONE «AEROSPAZIO»

CAGLIARI, 4 DICEMBRE 2019

FRANCESCO MOLINARI



www.sardegna programmazione.it

PROGRAMMA

MATTINO

10:00 Introduzione al Progetto Innovazione (NP)

10:15 Introduzione al Bando europeo (FM)

11:00 Domande e risposte

11:30 Esercitazione pratica: Individuazione di possibili idee progettuali (NP e FM)

12:00 Ricerca partner internazionali (FM)

12:30 Domande e risposte

POMERIGGIO

13:00 Break

14:00 Predisposizione della domanda (FM)

15:00 Domande e risposte

15:30 Esercitazione pratica: creazione di uno o più progetti (NP e FM)

16:30 Domande e risposte

17:00 Fine lavori

IL BANDO H2020

CAGLIARI, 4 DICEMBRE 2019

EGNSS APPLICATIONS FOR PUBLIC AUTHORITIES' PILOT SPACE-EGNSS-5-2020

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/space-egnss-5-2020>

Scadenza: 5 marzo 2020, 17:00 CET.

Budget: 3M€ destinati a 1-2 proposte al massimo.

EGNSS APPLICATIONS FOR PUBLIC AUTHORITIES' PILOT SPACE-EGNSS-5-2020

Specific Challenge:

Innovation procurement can drive the R&D and deployment of innovative solutions from the demand side through respectively pre-commercial procurement (PCP). This can open new market opportunities for companies in Europe, can contribute to speeding up public sector modernisation and can help to tackle societal challenges with innovative/breakthrough solutions for the benefit of the citizen.

Satellite navigation technology is an increasingly common component of innovative applications in different market segments. Involvement of public institutions is key in fostering the EGNSS adoption. Nowadays the maturity of EGNSS based solutions and their increased accessibility provide significant contribution to the achievement of Sustainable Development Goals of the governments.

The main challenge of this topic is to deepen user integration and thus foster exploitation of EGNSS applications to match the needs of public authorities at national, regional or local levels.

The innovative EGNSS solutions developed through this action should have been tested and have demonstrated success in smaller scale settings and have not yet been deployed on a large scale.

EGNSS APPLICATIONS FOR PUBLIC AUTHORITIES' PILOT SPACE-EGNSS-5-2020

Scope:

The objective is to launch demand-driven actions by public authorities aiming at customising EGNSS applications for their needs. Transnational cooperation has a key role to play in this context, as it can facilitate knowledge transfer and optimisation of resources for public authorities. Proposals should be building on procurement needs of the participating organizations. **The proposals should support the EGNSS market take-up across Europe and demonstrate a sustainability of solutions beyond the lifespan of the proposed project. The choice of EGNSS market segment and application is left to the proposer.** A non-exhaustive list of possible applications is presented below:

EGNSS for mobility as a service, cooperative ITS, public transport and smart cities,

Implementation of Performance Based Navigation procedures,

Integration of EGNSS into U-Space concept for drones,

Helicopter emergency medical services with EGNOS capabilities (operations and equipment).

Public rescue services with Galileo SAR capable helicopters, boats and drones

EGNSS to support port operations,

Monitoring of infrastructure with EGNSS (rail, road, critical infrastructure)

EGNSS APPLICATIONS FOR PUBLIC AUTHORITIES' PILOT SPACE-EGNSS-5-2020

Scope (foll.):

The consortium should engage **public procurers from each country represented in the consortium** (at national, regional or local level) that have responsibilities and budget control in the relevant EGNSS market segment.

Proposals should be built on the exploitation of the distinguishing features of EGNOS and Galileo signals and operational advantages in downstream applications.

EGNSS should be part and parcel of the envisaged solution(s). However, where a combination of EGNSS with other technologies is required to make the application(s) work, this is not excluded from the scope.

Proposals addressing PRS (Public Regulated Service) related applications are **not** in the scope of this topic.

The Commission considers that proposals requesting a contribution from the EU of between **EUR 1 and 3 million** would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

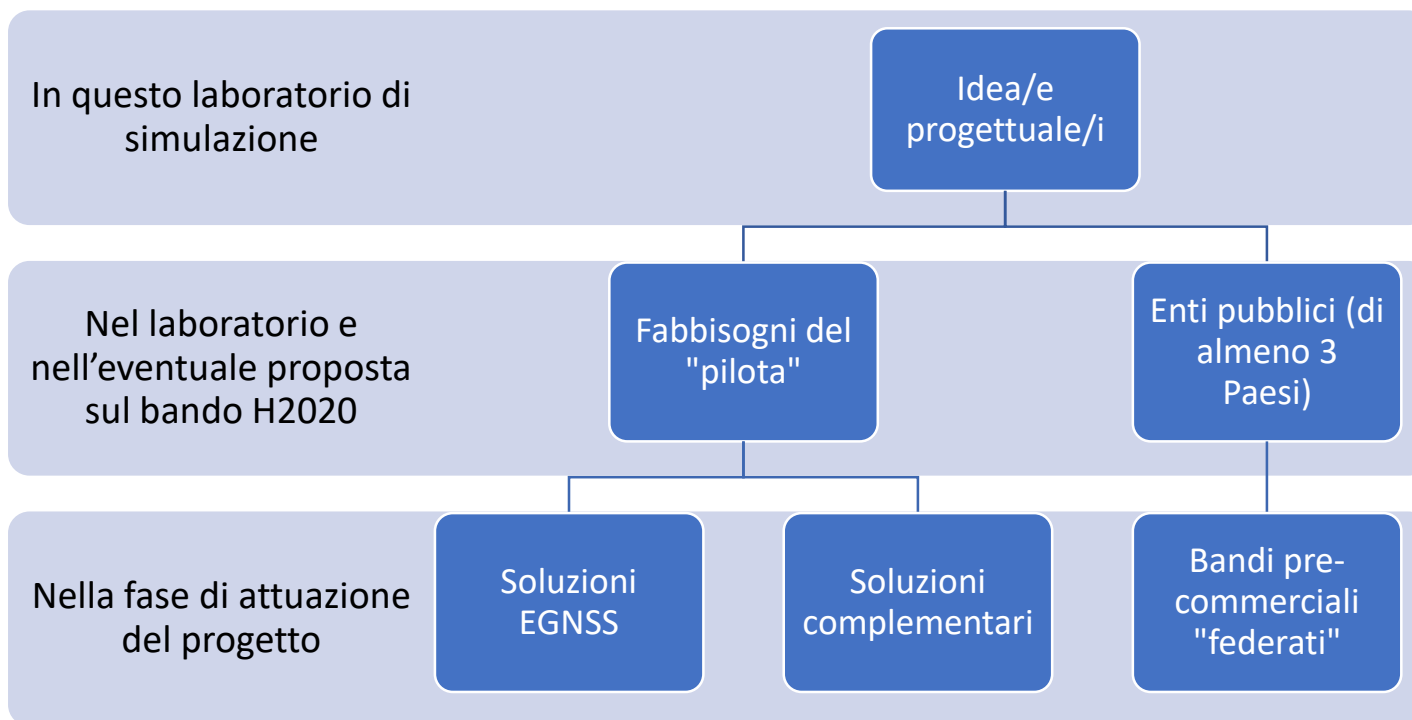
EGNSS APPLICATIONS FOR PUBLIC AUTHORITIES' PILOT SPACE-EGNSS-5-2020

Expected Impact:

Activities related to this topic should contribute to:

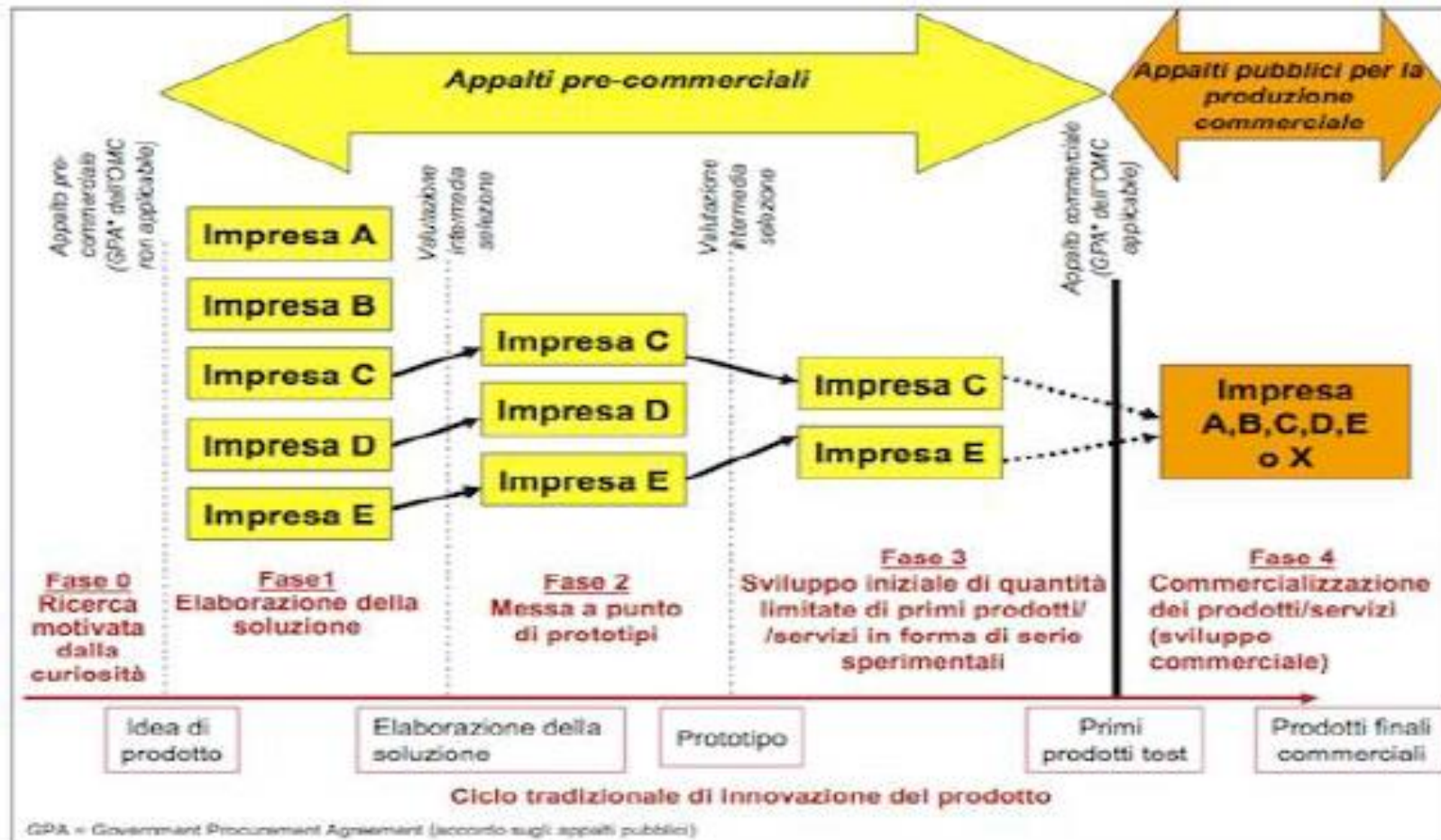
- The establishment of buyer groups for EGNSS application;
- Creation of EGNSS-enabled national, regional or local applications in support of public authorities;
- Fostering the emergence of similar EGNSS actions in smart specialisation strategies;
- Establishment of sustainable supply chains for delivery of downstream EGNSS applications to public authorities;
- Smart use of the procurement budget to remove supplier lock-in and obtain more open, standardized and better “value for money” solutions;
- Increase in quality, and decrease in prices, of EGNSS products and services;
- Increased exploitation of IPRs and R&D results;
- Creation of growth and jobs in Europe.

PROSSIME MOSSE



PROMEMORIA SUL PCP

CAGLIARI, 4 DICEMBRE 2019



COSA SONO EGNSS & EGNOS

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EGNSS SERVICE

<https://www.gsa.europa.eu/segment/egnss-service>



ESEMPI DI APPLICAZIONI

CAGLIARI, 4 DICEMBRE 2019

EGNSS SERVICE

<https://www.gsa.europa.eu/segment/egnss-service>



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What is GNSS?

Global Navigation Satellite System (GNSS) refers to a constellation of satellites providing signals from space that transmit positioning and timing data to GNSS receivers. The receivers then use this data to determine location.

By definition, GNSS provides global coverage. Examples of GNSS include Europe's Galileo, the USA's NAVSTAR Global Positioning System (GPS), Russia's Global'naya Navigatsionnaya Sputnikovaya Sistema (GLONASS) and China's BeiDou Navigation Satellite System.

GNSS performance can be improved by regional satellite-based augmentation systems (SBAS), such as the European Geostationary Navigation Overlay Service (EGNOS). EGNOS improves the accuracy and reliability of GPS information by correcting signal measurement errors and by providing information about the integrity of its signals.

EGNOS SERVICE

https://egnos-user-support.essp-sas.eu/new_egnos_ops/



EGNOS SERVICE

https://egnos-user-support.essp-sas.eu/new_egnos_ops/

About EGNOS

The European Geostationary Navigation Overlay Service (EGNOS) is Europe's regional satellite-based augmentation system (SBAS). It is used to improve the performance of global navigation satellite systems (GNSSs), such as GPS and Galileo in the future. EGNOS was deployed to provide safety of life navigation services to aviation, maritime and land-based users.

EGNOS uses GNSS measurements taken by accurately located reference stations deployed mainly across Europe and North Africa. All measurements are transferred to a central computing centre where differential corrections and integrity messages are calculated. These calculations are then broadcast over the covered area using geostationary satellites that serve as an augmentation, or overlay, to the original GNSS message.

EGNOS augments the GPS L1 (1575.42 MHz) Coarse/ Acquisition (C/A) civilian signal by providing corrections and integrity information for GPS space vehicles (ephemeris, clock errors) and most importantly, information to estimate the ionosphere delays affecting the user. EGNOS messages are broadcast through two geostationary satellites in compliance with applicable standards (MOPS and SARPS). The information provided by EGNOS improves the accuracy and reliability of GNSS positioning information while also providing a crucial integrity message. In addition, EGNOS also transmits an accurate time signal.



GNSS MARKET SEGMENTS

CONSUMER SOLUTIONS

ROAD TRANSPORTATION AND AUTOMOTIVE

MANNED AVIATION

DRONES

MARITIME

EMERGENCY RESPONSE

RAIL

AGRICULTURE

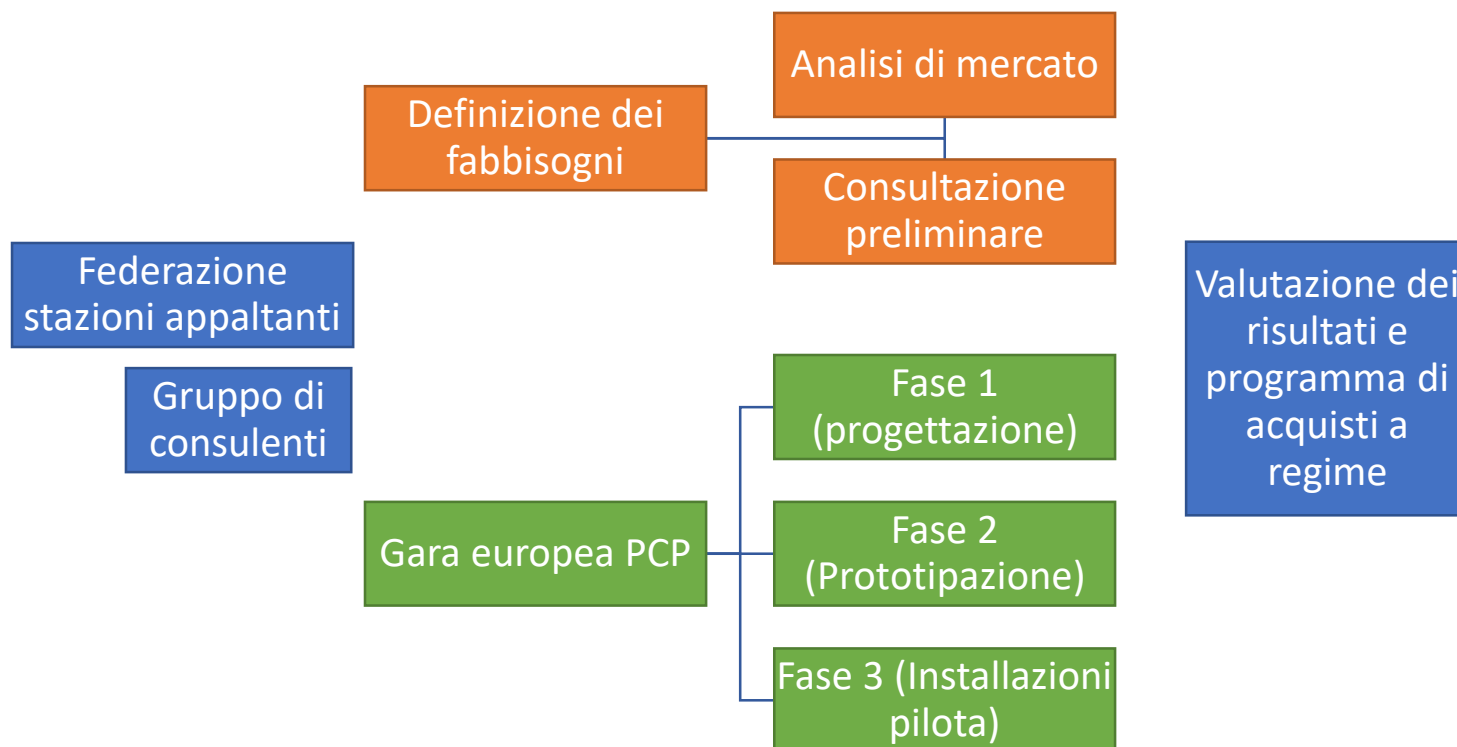
GEOMATICS

CRITICAL INFRASTRUCTURES



QUALI PROGETTUALITA'

CAGLIARI, 4 DICEMBRE 2019



GRAZIE PER L'ATTENZIONE E LA PRESENZA

I materiali di questa giornata saranno presto resi disponibili sul sito di Sardegna Ricerche, dove è possibile ricevere informazioni sui prossimi appuntamenti:
http://www.sportelloappaltimpreses.it/consulenza/progetto_innovazione/

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