

OPEN INNOVATION CHALLENGE

ON BLUE ECONOMY

CALL FOR SOLUTIONS

to select SMEs, STARTUP and SPINOFF
with innovative solutions to develop ideas, products and services and create
sustainable solutions to the challenges of the Blue Economy.

1. INTRODUCTION AND PRESENTATION OF THE INITIATIVE

Fabbrica Italiana dell'Innovazione launches with this Call, also thanks to the collaboration with **Intesa Sanpaolo Innovation Center**, an **Open Innovation Challenge** described below, considering the technical and business needs of the company **Next Geosolutions Europe Spa** (hereinafter also NEXTGEO), international leader in the marine geosciences sector and offshore constructions support services, to which SMEs, Startups and Spinoffs will be able to apply to respond with innovative solutions to develop ideas, products and services and create sustainable solutions for the challenge launched by NEXTGEO.

In fact, large companies are increasingly choosing Open Innovation to solve their need to innovate services and products. The methodology envisages that in response to a company need, a Challenge is launched aimed at startups and innovative SMEs at a national and international level, to select subjects that have a technological response to the need expressed by the company.

Selected companies will have the opportunity to actively participate in the program, concretely developing potential solutions to the Challenge launched by NEXTGEO. In fact, this activity represents a real investment project for NEXTGEO, to be carried out as part of the company development plan.

2. PROMOTERS

The program is promoted by **Fabbrica Italiana dell'Innovazione**, in collaboration with **Intesa Sanpaolo Innovation Center**, to meet the needs of the Challenge launched by **NEXTGEO**.

- **Fabbrica Italiana dell'Innovazione** is an incubator, accelerator and innovation hub that operates in the Blue & Green Economy sector, according to high national and international standards, focusing on business creation, advanced training and technology transfer. It stands out for being a competitive structure rooted in the territory of the Campania Region, but with global connectivity, collaborating with national and international entities in the sectors of research, innovation, production and finance.
- **Intesa Sanpaolo Innovation Center** is the Intesa Sanpaolo Group company dedicated to frontier innovation. It explores future scenarios and trends, develops multidisciplinary applied research projects, supports startups, accelerates the business transformation of companies according to the criteria of Open Innovation and Circular Economy, promotes the development of innovative

ecosystems and spreads the culture of innovation, to make of Intesa Sanpaolo the driving force of a more aware, inclusive and sustainable economy.

- **Next Geosolutions**: is among the leading international companies in the marine geosciences sector and offshore constructions support services. Next Geosolutions combines the knowledge, experience and resources of organizations and individuals with over 30 years of success in the offshore industry, whose technical and operational capabilities translate into rapid and effective solutions that cover the entire life cycle of projects.

3. SUBJECT OF THE CALL FOR SOLUTIONS

Fabbrica, in collaboration with Intesa Sanpaolo Innovation Center, launches this “Call for Solutions” to participate in the Open Innovation program and respond to the Challenge launched by NEXTGEO and described below. The objective is to select companies interested in developing, importing, testing, validating in collaboration with NEXTGEO, innovative systems, products, processes and technologies in the field of the Blue Economy, and more specifically, in the marine geosciences sector and offshore constructions support services.

Such solutions may have **already been developed** or may still be at the **prototype stage**, provided as long as they have the potential to quickly translate into an innovative product/service, with a scalable business model and to be enhanced through the technological and business collaboration pathway. Candidate projects must include the realization of specific **Proof of Concept (PoC)**, integrated with **high innovativeness** relating to the product/service and/or process; **concreteness** and **sustainability** on a technical, regulatory, economic-financial, environmental and social level; **high market potential**.

The "ideal project" is represented by an **innovative solution**, with a **working prototype** and **preferably with already active users**, which responds with scalability, coherence, innovativeness and feasibility of time and costs to the following challenge:

Creation of an augmented reality application for the inspection of underwater infrastructures and real-time identification of targets and unexploded ordnance with ROVs.

Marine underwater environments, due to high light attenuation and turbidity, can have a considerable reduction in visibility and effectiveness of ROV (Remotely Operated Vehicle) cameras. The augmented reality application would overlay the real-time video

feed with a series of data and information that would help operators in the assessment and identification of video shooting target.

Requirements:

This system, which can use high-resolution colour and/or high-sensitivity black-and-white cameras, should include:

- **Overlay of Historical and Geographical Data:** Using geospatial and historical databases, the application should identify areas of past conflicts where unexploded ordnances have been frequently detected, providing a contextual overview of the inspected area.
- **Advanced Geophysical Classification (ACG):** Utilize data, images, and vector files obtained from applied marine geophysics analysis, such as magnetometry and morphology, to support the identification of visualized targets.
- **Auxiliary Sensors:** Integrate real-time image analysis with acoustic (sonar) sensor measurements for targets precise georeferencing and measurement of three-dimensional dimensions.
- **3D Models and Formal Analysis:** Augmented reality would allow digital three-dimensional models of known ordnance to be superimposed directly onto video images for real-time comparison. These models, rendered in transparency, could align with the scanned object, helping the operator to recognise important details such as size, complete shape and corruption, facilitating correct identification.
- **Integrated Machine Learning Algorithms:** With the help of machine learning systems, the application would be able to compare the acquired image with a vast library of images and profiles of already known ordnances or targets. If a possible match is identified, the application could highlight the object, suggest a preliminary classification and provide further information on its characteristics.
- **Visualisation of Additional sensor Data:** The AR application would overlay data collected by auxiliary sensors directly onto the image in real time, such as readings of acoustic intensity or spatial distribution, allowing more accurate risk assessment.
- **Guides and Safety Protocols:** Augmented reality should also provide operational assistance by displaying safety procedures to be followed according to the detected object. Through the overlay of visual instructions, the operator should be guided step by step in risk assessment and, if necessary, in executing safety manoeuvres.

Goals:

1. **Increased Identification Accuracy:** Augmented reality allows operators to visually compare detected objects with known models in real-time, reducing the possibility of identification errors, which could have serious consequences.
2. **Creation of a database of correctly identified targets for post-processing and automatic generation of a report complete with a description of the detected target, geo-referencing data and physical characteristics.**
3. **Better Risk Assessment:** The integration of sensor data and visual analysis enables a more precise and immediate evaluation of the potential danger posed by the target or obstacle, allowing operators to make more informed and timely decisions.
4. **Reduction of Operational Time:** Having all critical information visible on the screen reduces the need to consult external documentation or perform multiple separate analyses, thus speeding up the inspection and decision-making process.
5. **Training and Education:** An AR application could also be used for educational purposes, creating realistic simulations for operator training. Thanks to the immersive visualization of scenarios, they could train to recognize ordnances and follow safety protocols more effectively and realistically than traditional methods.
6. **Creation of a computer structure capable of easily expanding identification classes for use in operations such as visual inspections of the status of underwater infrastructures and the presence of potential hazards or for environmental purposes such as the recognition of specific biotic populations in protected habitats.**

4. BENEFICIARIES

The Call is aimed at **SMEs, startups, and spinoffs** from any sector, **national or international**, that intend to respond to the Challenge launched by NEXTGEO and develop a PoC through collaboration with the company, and the support of the Fabbrica Team, in collaboration with Intesa Sanpaolo Innovation Center.

5. PROGRAM STRUCTURE

The operational program for companies deemed eligible to participate will last approximately 6 months (from PHASE 1 to PHASE 4), subject to variations or extensions, in addition to the time required for the implementation of the

experiment/product/service/PoC eventually defined with NEXTGEO. The phases defining the structure of the programme are set out below:

- **PHASE 1 – Scouting and collection of applications:** scouting and selection of startups and SMEs applying to the "Call for Solutions." In collaboration with the proposing company, a "long list" of the received applications will be drafted, from which a smaller number of startups/SMEs will then be shortlisted, considering that they have presented a solution potentially able to respond more effectively to the expressed innovation need. During this phase, some startup analysis actions will be performed, measuring the maturity and development potential of an innovative startup to provide relevant information in support of Open Innovation initiatives. The following aspects of a startup will be analyzed: team; marketing & strategy; legal & IP protection; product & industrial deployment; finance & economics; startup overview.
- **PHASE 2 – Assessment and candidate selection activities:** calls will be held with the innovative realities that have been selected by an initial assessment screening, to allow the final selection of the realities that will participate in the Investor Arena Meeting.
- **PHASE 3 – Investor Area Meeting:** closing of the selections and organization of an Investor Arena Meeting event for the award ceremony and presentation of the winning startups.
- **PHASE 4 - Initiation of collaborations:** The final phase involves initiating the collaborative process between the company that launched the Challenge and the selected startups/SMEs, aimed at refining/adapting the identified solution to the specific needs of the company and defining the terms of a potential contractual agreement between the parties. Specifically, a technological pathway will be jointly defined, which may include, for example but not limited to, customization/adaptation of the technology, realization of a Proof of Concept or Prototype, experimentation/testing of the solution in the operational environment of the proposing company, etc. The chosen solution will be tested, evaluated, and improved through a continuous feedback process involving all stakeholders to verify the feasibility and effectiveness of the identified solutions.

6. MODALITIES OF PARTICIPATION, DEADLINES AND TIMELINE

Interested parties must submit their application **no later than 20/12/2024**, unless an extension is granted, by sending it to info@fabbricaitalianainnovazione.it, with the digital signature of the company's legal representative, or with the handwritten signature

of the company's legal representative along with a copy of a valid identity document. The following attachments are required:

- **ATTACHMENT A - APPLICATION FORM:** Company presentation sheet signed by the legal representative; ID card and CV of the contact person.
- **ATTACHMENT B - PROJECT DESCRIPTION:** Description of the project to be implemented in response to the Challenge launched by NEXTGEO.

It is also recommended to attach any other relevant information (technical sheets, patents, etc.) and/or communication tools (.ppt, video, etc.) to "strengthen" the application and allow for a better evaluation of the technological solution. **Multiple applications from the same proposer are not permitted.**

To safeguard future intellectual property rights, submitted materials and the information they contain will be treated confidentially. The submitted materials for participation in the Call will not be returned.

From the applications submitted and following the evaluations of the projects presented, a maximum of 5 **companies will be selected for the "Short List,"** with solutions demonstrating high potential for industrial impact and/or business prospects, which will be included in the program and will participate in the "**Investor Arena Meeting,**" event, after which the startups and SMEs advancing to the final phase of the program will be chosen.

TIMELINE:



7. EVALUATION OF APPLICATIONS

Applications will be selected on the basis of a ranking evaluation procedure made by a specially established Commission, consisting of the teams from Fabbrica, Intesa, and NEXTGEO. Each candidate solution will receive a maximum score of 100, according to the following criteria:

- **Clarity, concreteness, and innovativeness of the proposed solution** (max 30 points);
- **Coherence of the proposed solution with NEXTGEO's business objectives and the Challenge** (max 30 points);
- **Previous experience of the company in Open Innovation Programs** (max 10 points);
- **Business maturity of the company** through evaluation of the current situation on the following topics: marketing & strategy; legal & IP protection; product & industrial deployment; finance & economics; startup overview (max 10 points);
- **Team skills and level of commitment in managing the Open Innovation process**, including the identification of dedicated personnel (max 20 points).

To be eligible to participate in the program, proposals must achieve a minimum score of 70. At the end of the evaluation, a ranking of eligible companies ("long list") will be drawn up, from which a smaller number of startups/SMEs will be shortlisted, considered to have presented a solution capable of more effectively responding to the expressed innovation need. These companies will participate in the "Investor Arena Meeting" event, after which those that will access to the final phase of the program, namely "Initiation of collaborations" will be selected.

Selected solutions will be published on the **promoters' websites and respective social channels**. Selected proposers will be notified by email.

8. PARTICIPATION REQUIREMENTS

At the time of submitting the application in response to this Call, the proposer must possess the following requirements:

- Ability to commit to the presented work plan with well-defined objectives (according to Attachment B);
- Capability to make any necessary adjustments to project development during the program;

- Compliance with current regulations on building and urban planning, labor, accident prevention, and environmental protection, and a commitment to adhere to them concerning activities carried out at operational sites;
- Not in any of the prohibitive conditions for contracting with Public Administrations (Articles 94 and 95 of Legislative Decree 36/2023) and compliant with all rules regarding social security, tax, and insurance contributions (DURC);
- No outstanding debts with the City of Naples for which a repayment plan has not been agreed upon, nor any pending administrative issues with the City;
- Not identifiable as a "company in difficulty" as defined by Article 2, paragraph 18, of EU Regulation 651/2014;
- Not in a state of judicial liquidation, compulsory liquidation, preventive agreement, or undergoing a procedure to access one of these procedures, as defined by Article 94(5)(d) of Legislative Decree 36/2023, except as provided by the Business Crisis and Insolvency Code;
- The company's legal representative must fully enjoy civil and political rights;
- The company's legal representative must not have been convicted by a final judgment or penal decree that has become irrevocable or a sentence upon request pursuant to Article 444 of the Code of Criminal Procedure, for any of the offenses provided for in Article 94 of Legislative Decree 36/2023.

9. OBLIGATIONS OF PROGRAM PARTICIPANTS

Selected entities have to **sign a contract** with Fabbrica Italiana dell'Innovazione and NEXTGEO, which will include the implementation plan of the selected project, and to **actively participate in all program activities**. If selected entities subsequently withdraw, the next eligible companies in the ranking will be invited to participate in the program.

10. USAGE RELEASE

Selected SMEs and startups authorize the partners to publish information related to the Challenge on their website and social channels, as well as on all channels and platforms consistent with the objectives of the Challenge itself. This information may be used within the program for communication, networking, and reporting activities.

11. WARRANTIES AND INDEMNITIES

Selected SMEs/startups expressly declare and recognize that any idea, know-how, or challenge presented is original and does not infringe in any way, neither in whole nor in part, the rights and/or exclusive rights of third parties, indemnifying all initiative partners from any responsibility, damage claims, and/or sanctions brought by third parties in this regard.

12. OWNERSHIP

The initiative is based on collaboration between startups and SMEs with NEXTGEO to solve the launched Challenge, in full compliance with confidential information and pre-existing intellectual property rights. Therefore, participants in the program will be required to sign a specific confidentiality agreement, provided that any new property rights generated by the program's activities may be subject to specific arrangements between the Parties.

13. INFORMATION AND CONTACTS

All information related to this program is available **on the websites of Fabbrica Italiana dell'Innovazione, Intesa Sanpaolo Innovation Center and the NEXTGEO**. For further information and clarifications, please send an email to: info@fabbricaitalianainnovazione.it.

BLUE ECONOMY OPEN INNOVATION CHALLENGE

CALL FOR SOLUTIONS

To select SMEs, STARTUP and SPINOFF
with innovative solutions to develop ideas, products and services and create sustainable solutions to the
challenges of the Blue Economy.

ATTACHED A:

A1 – COMPANY’S DATA

NAME OF THE COMPANY	
VAT NUMBER	
YEAR OF COMPANY REGISTRATION	
E-mail	
Web Site	
Social Network	
Registered office city	
Address	
Operational headquarters' city	
Address	

A2 - LEGAL REPRESENTATIVE

Name and Surname	
Tax ID code	
Born in	
Day of birth	
Living in	

Address	
Telephone Number	
E-mail	

The legal representative of the company, having reviewed the *Call for Solutions* and aware of the criminal penalties provided for by art. 76 of D.P.R. 445/2000 in case of false statements, forgery, and use of forged documents,

REQUESTS

to participate in the Open Innovation Program by responding to the innovation challenge described in Attachment B;

DECLARES

1. pursuant to articles 46-47 of DPR 445/2000, to meet the participation requirements set forth in the Call;
2. to be in compliance with current regulations on building and urban planning, labor, accident prevention, and environmental protection, and to commit to adhering to them in relation to activities carried out at operational sites;
3. not to be in any of the conditions that prevent contracting with Public Administrations (articles 94 and 95 of Legislative Decree 36/2023), and to be compliant with all rules regarding social security, tax, and insurance contributions (DURC);
4. not to have any outstanding debts with the City of Naples for which a repayment plan has not already been agreed upon, nor any administrative issues of any kind with the City;
5. not to be identifiable as a "company in difficulty" as defined by art. 2, paragraph 18, of EU Regulation 651/2014;
6. not to be, under art. 94, paragraph 5, letter d), Legislative Decree 36/2023, in a state of judicial liquidation, compulsory liquidation, preventive agreement, or undergoing a procedure to access any of these processes, notwithstanding the provisions of the Business Crisis and Insolvency Code;
7. that the company's legal representative fully enjoys civil and political rights;
8. that the legal representative has not been convicted by a final judgment or penal decree that has become irrevocable, nor a sentence upon request under

article 444 of the Code of Criminal Procedure for any of the offenses listed in art. 94 of Legislative Decree 36/2023;

9. to have read and to fully and unreservedly accept the contents and conditions of the *Call for Solutions*;
10. that the contact person for all communications regarding this Call is:

Name and Surname	
Role	
Telephone number	
E-mail	

COMMITTS

in the event of selection, to actively participate in the Open Innovation Program, as specified in the Call, and

ATTACHES

1. A photocopy of a valid identity document of the legal representative;
2. An updated company registration certificate;
3. Attachment B – PROJECT DESCRIPTION

Place and Date

Signature

BLUE ECONOMY OPEN INNOVATION CHALLENGE
CALL FOR SOLUTIONS

To select SMEs, STARTUP and SPINOFF
with innovative solutions to develop ideas, products and services and create
sustainable solutions to the challenges of the Blue Economy.

ATTACHED B:

B1 – DESCRIPTION OF THE PROJECT

Describe the project you intend to develop to solve the challenge and its objectives, clearly highlighting the concrete and innovative aspects of the proposed solution.

B2 – CONSISTENCY OF THE SOLUTION WITH NEXTGEO'S CORPORATE OBJECTIVES AND WITH THOSE OF THE CHALLENGE

Describe how the proposed solution can be included in NEXTGEO's strategic corporate planning and how it is in line with the objectives of the Challenge launched.

B3 – PREVIOUS EXPERIENCE IN OPEN INNOVATION PROGRAMS

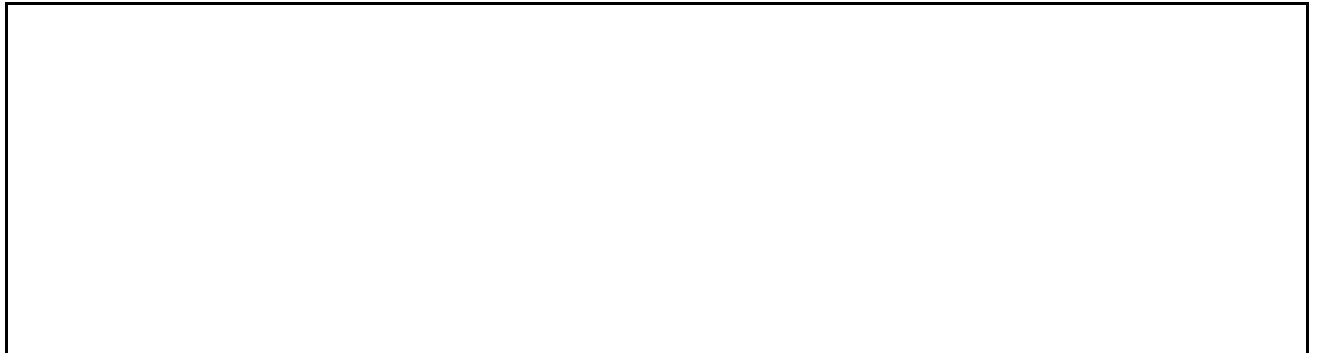
Describe any previous experiences in Open Innovation programs and the results achieved.

B4 – COMPANY BUSINESS MATURITY

Describe the current situation of the company on these topics: marketing & strategy; legal protection & IP protection; product & industrial deployment; finance & economics; startup overview.

B5 – TEAM SKILLS AND LEVEL OF COMMITMENT

Describe the skills of the team and the current situation of the company in the management of Open Innovation projects, also providing information and elements that demonstrate the commitment of the proposing company in participating in the Open Innovation Program.



Place and Date

Signature
