

Innovation Prize Open Call

Submission starts on: 09 December 2024 at 08:00 CET

Submissions deadline: 31 January 2025 at 17:00 CET

Call: HORIZON-CL3-2022-DRS-01-05 Project Number: 101121135





Must read brief

<u>GOBEYOND</u> is a Horizon Europe innovation action aiming to develop, test and demonstrate **Multi-Risk Impact-based Early Warning System (MR-IEWS)** for geo and weather hazards, specifically designed to support Civil Protection Authorities and first responders in Europe and beyond.

As part of this initiative, we are excited to announce the launch of the GOBEYOND Innovation Prize, aimed at identifying innovative ideas and solutions to enhance the MR-IEWS currently being developed by the GOBEYOND consortium.

To ensure a clear understanding of the call and the submission process, all applicants are required to review the complete call documentation. Key details are summarized below:

- This is a call for applications from university groups, innovation and technological centres, and technological small and medium sized enterprises (SMEs).
- The call is launched by the GOBEYOND project, co-funded by European Union's Horizon Europe.
- The call is open between the 09th of December 2024 at 08:00 CET and the 31st of January 2025 at 17:00 CET. On 01st of March 2025, 2 finalists will be announced and invited to pitch their ideas at the GOBEYOND Workshop to be held in Sevilla from 18th to 20th March 2025, where the winner will be selected.
- This call seeks for innovative ideas/solutions to enhance or complement the GOBEYOND MR-IEWS.
- The selected winner will receive €50,000 to cover the work to integrate their solution into the GOBEYOND platforms and execute the plan described in the proposal.
- Solution implementation shall have a duration of 26 months.

Roadmap



To get a complete overview of the call, the following resources are available:

- This Guide for Applicants
- The GOBEYOND website: <u>https://gobeyond-project.eu</u>
- The <u>Frequently Asked Questions</u> section
- Application form <u>template</u>

For additional questions, contact us by email <u>innovation_gobeyond@crahi.upc.edu</u>. Queries will only be answered up to six calendar days before the submission deadline.





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1. About the GOBEYOND project

<u>GOBEYOND</u> (GeO and weather multi-risk impact Based Early warning and response systems supporting rapid deploYment of first respONders in EU and beyonD) is an innovation action <u>co-funded by the Horizon Europe programme</u>. It aims to **develop, test** and demonstrate Multi-Risk Impact-based Early Warning System (MR-IEWS) platforms for geo and weather hazards adapted to support Civil Protection Authorities (CPAs) and first responders in their situational awareness and rapid deployment in Europe, countries of the Union for Mediterranean (UfM) and beyond. In this line, the project has six specific objectives:

- 1. Capitalize on the most recent advancement on Impact-based Early Warning Systems (IEWS) for weather hazards and **extend the experience to geo hazards**.
- 2. Convert the present Multi-Hazard-EWS into a Multi-Risk-IEWS, including capacities to trigger actionable decisions and support the reaction of the citizens through **Site-Specific Warnings**.
- 3. **Co-design** with selected early-adopter authorities and first responders the MR-IEWS prototypes **to ensure their integration** into the tools.
- 4. Develop **MR-IEWS platforms** with great specificity in time and space, adapted to operate at **European-scale** and for the **countries of the UfM**.
- 5. **Test and improve** the co-designed MR-IEWS prototypes in operational environment on **real-time demonstrations** during geo and weather events to **reach a Technology Readiness Level (TRL) 7 to 8** at the end of the project.
- 6. Design an innovation plan to **facilitate the MR-IEWS platforms scalability at low cost** and their **implementation anywhere in Europe and beyond**, to support international policy initiatives (<u>UN Early Warnings for all</u>).

The project applies a user-centred participatory framework in which multiple stakeholders are actively engaged in co-design and co-creation roles. The platforms will be tested in regional and municipal Pilot Sites, through real-time 24/7 demonstrations, that will be running for 24 months, under operational conditions.

To foster innovation, GOBEYOND invites scientists, technological institutions, and SMEs to participate in its **Innovation Prize** by proposing cutting-edge algorithms targeting either geo or weather hazards (e.g., Earthquakes, Volcanic Ash Dispersion, Tsunamis, Landslides, Floods, Windstorms, Heatwaves, or Droughts).

The objective is to select the most innovative solution, which will be integrated into the GOBEYOND Multi-Risk Impact-based Early Warning System (MR-IEWS) processing core. This advanced MR-IEWS will feed a range of front-end platforms tailored to meet diverse needs, enabling the development of highly customized Decision Support Systems (DSS) at three levels:

- 1. EW4EUrope for the European countries,
- 2. EW4MED for the Union for the Mediterranean countries, and
- 3. local/regional adapted DSS for planning authorities, CPAs and First Responders.

As a reference of some of the tools already included in the GOBEYOND project, see



Appendix 1. These algorithms integrate real-time observations and forecast with high-resolution vulnerability, exposure and risk information at regional and local levels.

2. About the Innovation Prize

Within the GOBEYOND Innovation Prize we are seeking **innovative ideas/solutions to complement the Multi-Risk Impact-based Early Warning System (MR-IEWS)** developed in GOBEYOND.

The goal of this call is to identify a state-of-the-art solution on the topics of the project, and **successfully integrate it on the GOBEYOND MR-IEWS and platforms**. The implementation should enable a **real-time demonstration** on the pilot site demonstrations throughout the project's duration and a first **showcase of the outcomes** in April 2026 at the 2nd GOBEYOND Workshop.

The proposed solution should provide impact products that will assess the magnitude of the consequences of the selected geo or/and weather hazards to support the decision making (e.g., to support the rapid deployment of first responders in affected areas). The hazards considered include those that affect more people and cause larger economic losses in Europe (floods, storms, droughts, heatwaves and earthquakes), and also storm surges, forest fires, landslides, tsunamis or volcanic eruptions.

For instance, the proposed solutions may cover one of the following topics (but not limited to this list):

- Tools for impact assessment for geological and geophysical hazards;
- Weather hazard forecast or nowcast algorithms that improve the spatial accuracy and lead time of current tools;
- Models for impact assessment on buildings, population or critical infrastructures caused by weather or geo hazards, at various spatial scales;
- Approaches for assessing compound hazards and/or cascading effects;
- Operational tools (e.g., communication, visualisation, monitoring, warning dissemination) that improves the situational awareness or facilitate the management of the crisis by civil protection authorities.

We are looking for **universities**, **innovation and technological centres**, **or technological small and medium sized enterprises**¹ which already provide EWS services and have experience in operational environments. We encourage them to propose algorithms and developments to complement and improve the proposed MR-IEWS, ultimately boosting the innovation capacity of GOBEYOND's advancements in decision-supporting tools for geo and weather hazards.

The selected winner will receive **a grant of €50,000** to cover the work to integrate their solution into the GOBEYOND platforms and execute the proposal.

The IPR of the proposed solution will remain property of the developer.

The details of the call are published through the <u>Participant Portal of the European</u> <u>Commission</u>, and disseminated at relevant events.

¹ Established in any EU Member States and its Overseas Countries and Territories or Horizon Europe Associated Countries. See Section 3.1 - Admissibility and Eligibility c.



2.1. **Proposal outlines**

All proposals must contain the following elements:

- General information about the applicant;
- Brief presentation of the proposed solution;
- Short description of the developing team, and;
- Descriptions of three segments of the solution: Excellence, Impact and Implementation

These segments efficiently divide the presentation of the solution, as follows:

| 1. Excellence | 2. Impact | 3. Implementation |
|--|---|---|
| Describe the objectives of the proposal and its relevance. Demonstrate soundness of the proposed methodology. Outline the experience, skills and advantages of the working team. | Explain what is the solution resolving. Describe how this idea will enhance the GOBEYOND platforms. Detail the expected outcomes and impacts. | Outline an effective work plan to ensure the implementation of the proposed algorithm/tool as encapsulated module, external data API or executable program in the MR-IEWS. Describe the required efforts/investments to integrate the solution to the GOBEYOND platforms. Include evidence of the solution tests. |

To facilitate your submission, you will find a template on the GOBEYOND website, to be filled in with the description of the proposed solution.

In addition, the applicant is free to provide any relevant supporting materials, such as research papers and prototypes as annex to this document.

2.2. Submission guidelines

If you want to apply to the GOBEYOND Innovation Prize, please note that:

- The proposal must be submitted through the following website: <u>https://gobeyond-project.eu/innovation-prize-open-call/</u>
- The submission form is accessed through a dedicated login page:
 - First, you will need to create an account (choose "register"). After providing the required details. you will receive a verification email to activate your account.
 - If you have an account, after login you will be automatically directed to the form.
- Only proposals submitted through the previously mentioned website and before the deadline (31st January 2025 at 17:00 CET) will be evaluated.
- Proposals and supporting materials must be written in English.
- All sections of the application form are mandatory.



- Limit your proposal to 5 pages in total.
- All files, including annexes must be in PDF format.
- If more than one proposal from the same applicant is identified, only the last proposal which has been submitted in order of time will be evaluated.
- Potential conflict of interests will be taken into consideration.
- By applying to this call, the applicant agrees with rules and regulations detailed in this Guide for Applicants.

3. Evaluation process

Our evaluation process is intended to be transparent, fair and equal to all applicants. In general, there are three stages, described in the following sections:

Admissible and eligible proposals will be allocated for evaluation.

Admissibility and

Eligibility check.



Experts evaluate and rank the proposals.

The **two top proposals** will be announced as **finalists**.



Pitch presentation and Final Voting

Finalist will deliver a **Pitch Presentation** at the GOBEYOND 1st Workshop. Partners will cast their **vote** to decide the **final winner** at the General Assembly.

3.1. Admissibility and Eligibility check

Once the call is closed, **admissibility conditions** of all proposals will be evaluated, according to the following items:

- Applications must be submitted before the call deadline: 31st of January 2025 at 17:00 CET
- Applications must be submitted electronically on the GOBEYOND website: <u>https://gobeyond-project.eu/innovation-prize-open-call/</u>
- Applications must be complete and contain all mandatory sections.
- Applications must be readable, accessible and printable.
- Proposals and supporting materials must be written in English.
- Proposals must be a maximum of 5 pages long.
- Only one proposal per applicant can be submitted, there is an exception for different research groups within the same University. If more than one proposal from the same applicant is identified, only the last proposal which has been submitted in order of time will be evaluated.
- During this process, clarifications may be asked and applicants will have 3 calendar days to respond.

If admissible, the **eligibility conditions** will be checked. The applicant must be one of the following type of institutions:





Innovation and Technological Centres



Small and medium sized enterprises



Universities

Established in any EU Member States and its Overseas Countries and Territories² or Horizon Europe Associated Countries³. The Declaration of Honour or self-declarations in the application form will also be reviewed.

Applications not complying any of the above criteria or including one of the following, will be excluded and marked as ineligible:

- Be affected by any EU restrictive measures⁴.
- Be one of the GOBEYOND partners, their affiliates or employees, even as subcontracted external service providers.
- Have any conflict of interest⁵: We will take into consideration the existence of a
 potential conflict of interest among the applicant and one or more GOBEYOND
 partners. Consortium partners, their affiliated entities, employees and permanent
 collaborators cannot take part in the open call. All situations of potential conflict
 of interest will be assessed case by case.
- Be under liquidation or under difficulty according to the Commission Regulation No 651/2014, art. 2.18, or excluded from the possibility of obtaining EU funding under the provisions of both national and EU law, or by a decision of both national and EU authority. Or meeting national regulations regarding bankruptcy.

3.2. Finalist selection

To ensure the process transparency and obtain results in line with the needs of the project, this procedure will be followed to evaluate the admissible and eligible proposals:

1. Evaluation Committee

The Evaluation Committee will consist of a panel of experts, carefully selected to ensure a balanced combination of knowledge and expertise across three key areas: 1) geohazards, 2) weather hazards, and 3) implementation processes. Each area will be represented by two experts, with an additional chairperson overseeing the process to ensure smooth facilitation and consistency in evaluations. In total, the panel will include seven experts from the Consortium Partners.

Every application will be assessed by three evaluators, each representing one of the three key areas of expertise.

2. Evaluation criteria

² <u>http://europa.eu/about-eu/countries/index_en.htm</u>

³ Horizon Europe Associated Countries as of 25.06.2024: Albania, Armenia, Bosnia and Herzegovina, Faroe Islands, Georgia, Iceland, Israel, Kosovo, Moldova, Montenegro, North Macedonia, Norway, Serbia, Türkiye, Tunisia, Ukraine, United Kingdom. For the most up-to-date list please go to the <u>complete list</u>. For the avoidance of doubt, New Zealand is not eligible for this open call.

⁴ The applicants who are subject to EU restrictive measures under Article 29 of the Treaty on the European Union (TEU) and Article 215 of the Treaty on the Functioning of the EU (TFEU - Please note that the EU Official Journal contains the official list and, in case of conflict, its content prevails over that of the EU Sanctions Map) are not eligible to participate.

⁵ All situations of potential conflict of interest will be assessed case by case.



The evaluation criteria of this call are in line with the award criteria of the EU Horizon Europe Work Programme and the segments on the template, considering:

- Excellence (5 points): Ability to present and summarise the proposed solution. Evaluators will consider factors like clarity, structure, innovation, completeness, and the overall coherence of the proposal.
- Impact (5 points): The extent to which the proposed solution aligns with the goals of the project. Parameters include complementarity, relevance, strategic fit, and potential for added value to ongoing efforts.
- Implementation (5 points): Specific steps for deploying the solution on GOBEYOND platforms, including adaptability across different contexts or target groups. Key considerations may include clarity, scalability and resource requirements.

Every application will be evaluated using a standard scoring scale, where each evaluation criterion is evaluated from 0 to 5 points, for a maximum of 15 points in total.

3. Consolidation of ranking

After completing individual assessments, the experts' scores are averaged to produce a preliminary ranking, identifying the top-performing applications.

4. Consensus Meeting

The evaluation committee will convene to review the consolidated ranking and discuss the highest-scoring submissions. Particular attention will be given to cases where there are significant discrepancies in evaluators' scores, allowing for thorough discussion and resolution. If consensus is reached, adjustments to the final ranking may be made.

Following this process, the top two proposals will be officially announced as finalists.

3.3. Final voting procedure

Finalists will be invited to present their ideas at the first GOBEYOND Workshop, scheduled to take place in Sevilla from March 18th to 20th, 2025. As part of the GOBEYOND Innovation Prize Open Call, the project will cover travel expenses (transportation, meals, and accommodation) associated with their participation in the workshop.

Each finalist will deliver a **10-minute "Elevator Pitch" presentation** to the General Assembly, using any resources of their choice. Following each pitch, a 20-minute Q&A session will provide GOBEYOND partners with the opportunity to engage directly with the finalists and explore their proposals in greater detail.

After the presentations, a dedicated voting session at the General Assembly will be held, where GOBEYOND partners will cast their votes to select the winner of the Innovation Prize.



4. Payment arrangements

Before the winner can begin executing the proposal, they will need to sign a **Sub-grant Agreement (SGA)** with the GOBEYOND Consortium. Prior to signing this SGA, the winner must provide documents regarding their formal status. The GOBEYOND Consortium, will proceed to verify these documents to prove their eligibility. In the event of failure to deliver the requested documents on time, without clear and reasonable justification, the winner will be excluded from further formal assessment and will be replaced with the fellow finalist.

Once the eligibility has been confirmed following the formal check, the winner must provide an extended implementation plan to be included as an annex of the sub-grant agreement. This plan must be in line with the proposal, including a list of three Deliverables, Milestones and KPIs.

The grant amount should be used to cover the costs of integrating the selected innovative solution in the GOBEYOND platforms as an additional encapsulated module, external API or executable algorithm, what will be considered a sub-project.

The winner will receive fixed financing to cover the estimated expenses included in the proposal following a **lump sum scheme**. The lump sum is a simplified method of settling expenses in projects financed from the Horizon Europe funds. It means that the winner is **not** required to present strictly defined accounting documents to prove the costs incurred (e.g., invoices). However, the winner is obliged to demonstrate that the implementation of their project is in line with the plan set for it through the presentation of the sub-project Deliverables and the achievement of project milestones. Simply speaking it means that we will carefully assess the sub-project's progress and the quality of the work during Deliverable Reviews, not accountancy.

Deliverables and milestones will be detailed and calendarized in the Implementation Plan annexed to the Subgrant Agreement. Payments will be made against these Deliverables and milestones. The sub-project progress and the quality of work will be assessed during Deliverable Reviews. This will be performed by the **GOBEYOND** experts in each payment milestone established.

Following the rules of the Horizon Europe program, a delayed payment mechanism will be applied to the 15% of the financial support amount awarded to the sub-project, which will be paid to the winner once the whole **GOBEYOND** project is completed. This should happen within 9 months after the end of the **GOBEYOND** project, expected on the 30 September 2027.



5. Further questions

To support the preparation of applications, please look at our FAQs, or contact <u>innovation_gobeyond@crahi.upc.edu</u>. The subject of your email should include: [GOBEYOND Innovation Prize] *The name of your solution*.

Applicants are encouraged to submit any questions regarding the GOBEYOND Innovation Prize Open Call at least six calendar days before the submission deadline. This will ensure that we have sufficient time to respond and address any inquiries before the final submission.



6. Appendix 1 – GOBEYOND catalogue of tools and technologies

| No. | Category | Tool/Technology Name |
|-----|--------------------------------|--|
| 1 | | European Flood Awareness System (EFAS) |
| 2 | Flood EWS | National Hydrometeo Services (FFC) |
| 3 | | Global Flood Awareness System (GloFAS) |
| 4 | Flash flood EWS | Regional flash flood systems (FF-EWS) |
| 5 | Min data wasa | Meteoswiss - Impact forecasting pipeline |
| 6 | Windstorms | CLIMADA platform |
| 7 | Storm surge | National platforms (UK, Netherlands) |
| 8 | | ANYWHERE solutions |
| 9 | Heat wave | Local Forecasts (Swiss system) - SMHI |
| 10 | | European-wide Systems - Heat Health Indices |
| 11 | Droughts | Local and European Forecasting systems |
| 12 | | European and Global Drought Observatory (EDO, GDO) |
| 13 | | National Warning Systems - SMHI |
| 14 | Fire danger | European scale system - EFFIS |
| 15 | | Global Wildfire Information System - GWIS |
| 16 | | PRESTo: Source-based impact estimates |
| 17 | Earthquake Early | QuakeUp: P-wave based impact estimates |
| 18 | Warning | SAVE: OnSite Alert Level |
| 19 | | P-alert: Onsite P-wave based warnings |
| 20 | | USGS services - ShakeMap, ShakeCast and PAGER |
| 21 | | SIGE - Information System for Emergency Management in Italy |
| 22 | Earthquake Rapid | Bayesian updating of loss estimates |
| 23 | Response and Loss Estimates | SEISAid-Antilles tool: rapid response in French West Indies |
| 24 | | ELER system - Earthquake Loss Estimation Routine for Turkey |
| 25 | | QLARM - Quake Loss Assessment for Response and Mitigation |
| 26 | Volcano Early Warning | EASE system for volcanoes |
| 27 | & Volcano Rapid | Volcanic Ash Dispersion EWS |
| 28 | Response | Volcanic Ash Rapid Response (VRR) |
| 29 | | ICG/NEAMTWS - North-eastern Atlantic, the Mediterranean |
| 30 | Tsunami Early | Tsunami DSS - Vigirisks platform |
| 31 | Warning Systems | CAT - Tsunami warning in Italy |
| 32 | | VOlcano Notice for tsunami Threat (VONUT) |
| 33 | | The Norwegian LEWS |
| 34 | Landslide EWS | The Italian (Tuscany) LEWS |
| 35 | | The Catalan LEWS |
| 36 | Operational Platforms | ARGOS Services: Multi-Hazard Impact Based Early Warning System platform |
| 37 | • | Wiki-Predict: Real-time risk management platform |



| No. | Category | Tool/Technology Name |
|-----|---|---|
| 38 | | beAWARE platform: Real-time natural disaster management with AI capabilities |
| 39 | | Suricate-Nat: Continuous Monitoring and Analysis of tweets after natural disaster (flood & earthquakes) |
| 40 | Social Media Monitoring Tool | AIDR: Twitter monitoring (natural disasters, landslides) |
| 41 | | A near-real-time global landslide incident reporting tool |
| 42 | | beAWARE modules: Social Media Analysis for gathering and verifying Twitter posts and Social Media Clustering |
| 43 | Remote Sensing: IoT applications & Platforms Platform | Copernicus Emergency Management Service (CEMS) |
| 44 | | PANGEA: PANhellenic GEophysical observatory of Antikythera |
| 45 | | Maestro: Managing Forest Fires via IoT |
| 46 | Crowdsourcing for data collection and rapid impact | beAWARE crowdsourcing solutions for incident reporting |
| 47 | | FloodTags: Chatbot for geolocated reports |
| 48 | | RiskMap: Chatbot to be reached via direct messaging |
| 49 | assessment | LastQuake: Multi-channel to collect and share reports. |
| 50 | Alert and communication systems | Location-based SMS technologies: EU-Alert, FR-Alert, BE-Alert, ES-Alert, Sweden (VMA) |
| 51 | | A4alerts mobile app: Dissemination platform for the warnings triggered by the location or site-specific impact-based flood early warning system |
| 52 | | SeismUP: Mobile app that warns Android users in southern Italy of small to moderate earthquakes |
| 53 | | GIN – Meteoswiss: displays measurements, forecasts and natural hazard warnings and collects crowdsourcing observations |
| 54 | | Public location-based alerts for emergencies, Satellite-based (NINA) |