

Executive Summary

Safecast's "Open=Safe" project seeks €500,000 in funding from the European Union's Horizon Europe programme to deliver a series of community-based workshops across Europe. Over 24 months, we will host 25 hands-on workshops (each with up to 10 participants) led by three certified instructors. Participants will assemble and calibrate open-source BGeigie Zen radiation detectors, learn data-collection protocols, and contribute to Safecast's global open-data platform. By empowering communities with the tools and knowledge to measure and share real-time radiation data, "Open=Safe" will foster transparency, citizen science, and a safer, more informed Europe.

1. Project Background and Rationale

Since the Fukushima Daiichi nuclear accident in 2011, Safecast has pioneered open-source radiation monitoring, running over 150 workshops worldwide and building a community of over 5,000 contributors. However, Europe's diverse regulatory environments and public awareness levels mean that many regions still lack local capacity for transparent radiation monitoring. The "Open=Safe" project addresses this gap by:

- **Empowering citizens** with practical skills and low-cost, open-source hardware.
- **Strengthening resilience** through locally generated, verifiable data.
- **Promoting open science** and data-sharing practices across borders.

By leveraging Safecast's proven methodology and network, "Open=Safe" will standardise best practices and create a pan-European community of radiation monitors.

2. Objectives

1. **Capacity Building:** Train 250 participants in open-source radiation monitoring techniques.
 2. **Hardware Deployment:** Distribute and assemble 250 BGeigie Zen kits.
 3. **Data Generation:** Contribute at least 10 million data points to the Safecast platform.
 4. **Community Formation:** Establish 10 active regional user groups to sustain local monitoring.
 5. **Open-Data Advocacy:** Publish workshop materials and datasets under open licenses.
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3. Methodology and Work Plan

Work Package	Activities	Deliverables	Timeline
WP1: Coordination & Management	Project planning, reporting, financial oversight	Inception report; quarterly financial & progress reports	Months 1–24
WP2: Curriculum Development	Adapt existing Safecast workshop materials for EU contexts; translate into 5 EU languages	Workshop manuals; slide decks; video tutorials	Months 1–4
WP3: Workshop Implementation	Recruit participants; procure BGeigie Zen kits; deliver 25 workshops (3 instructors per workshop); post-workshop support	25 workshop reports; assembled kits; participant feedback surveys	Months 5–22
WP4: Data Integration & Analysis	Upload and validate data; conduct quality assurance; visualise results on Safecast platform	Dataset releases; interactive maps; final data analysis report	Months 6–24
WP5: Dissemination & Sustainability	Host webinars; publish open-access articles; establish regional user groups; engage with policymakers	Webinar recordings; policy briefs; user-group charters	Months 12–24

4. Project Management and Implementation

- **Consortium Lead:** Safecast International (non-profit, Japan-based; EU liaison office in Berlin)
- **Instructors:** Three senior Safecast trainers with 13+ years of workshop experience. Travel and accommodation arranged per EU travel guidelines.
- **Local Partners:** Maker spaces and universities in each host city will provide assembly tools and workspace at no cost.
- **Quality Assurance:** All kits tested pre-deployment; data undergo automated QA/QC routines; participant proficiency assessed via practical exams.

5. Budget and Justification

Cost Category	Unit Cost (€)	Quantity	Total (€)
Personnel			250,000

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– Lead Project Manager	80,000/year	2 years	160,000
– Instructors (3 × 25 days)	500/day	75 instructor-days	37,500
– Data Analyst	50,000/year	1 year	50,000
Travel & Subsistence			75,000
– Instructors' travel	400/trip	75 trips	30,000
– Accommodation & per diems	150/day	225 instructor-days	45,000
Equipment & Materials			150,000
– BGeigie Zen kits	400/kit	250 kits	100,000
– Electronic components	80/kit	250 kits	20,000
– Workshop consumables	120/workshop	25 workshops	3,000
– Shipping & logistics	—	—	27,000
Dissemination & Outreach			25,000
– Translation & printing	5,000 total	—	5,000
– Webinar platform fees	1,000/webinar	10 webinars	10,000
– Policy briefs & events	—	—	10,000
Total			500,000

6. Expected Impact and Sustainability

- **Immediate Impact:** 250 trained citizen scientists; 250 new detectors feeding real-time data.
 - **Long-Term Impact:** Self-sustaining regional groups continuing monitoring beyond project end; heightened public awareness of environmental radiation.
 - **Sustainability Plan:**
 - Regional user groups will meet quarterly, supported by online resources.
 - Safecast's platform will maintain open access to data.
 - Local partners will host annual “radiation hackathons” to attract new participants.
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7. Dissemination and Exploitation

- **Open-Access Resources:** All curricula, code, and data published under CC-BY and MIT licenses.
- **Academic Publications:** At least two peer-reviewed articles in open-access journals.

- **Policy Engagement:** Briefings to EU agencies (e.g., European Radiation Protection Research Platform) and national regulators.
 - **Public Outreach:** Social-media campaigns and media partnerships to showcase community success stories.
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8. Conclusion

“Open=Safe” leverages Safecast’s 13 years of proven expertise to build European capacity for transparent radiation monitoring. By funding workshops, hardware, and expert instructors, the EU will catalyse a pan-European citizen-science network, driving data-driven environmental governance and reinforcing public trust. We respectfully request €500,000 to realise this vision of an open and safe Europe.