



Blue Culture Technology Excellence  
Hubs in EU Widening Member States

## **OPEN CALL FOR PROCUREMENT**

**Project Title:** Blue Culture Technology Excellence Hubs in EU Widening Member States (BCTHubs)

**Grant Agreement Number:** 101087146

**Funding Scheme:** HORIZON-WIDERA-2022-ACCESS-04-01

**Project Duration:** 01/01/2023 - 31/12/2026

**Total Budget for this Procurement:** €22,000 (maximum)

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### **1. Introduction**

This document constitutes an Open Call for Procurement within the scope of the BCTHubs project, funded by the European Commission under Horizon Europe. The aim is to identify a provider to support the definition of technical specifications, software development, and prototype fabrication of three marine environmental monitoring tools: the QUBE Data Logger (Cube), the DiveSense system, and the Surface Buoy.

The call will be published on the official DAN Europe website: [www.daneurope.org](http://www.daneurope.org).

## **2. Objectives of the Procurement**

- Define final technical specifications for hardware and software for the Cube and DiveSense units, as well as the Surface Buoy.
- Manufacture 10 units of the Cube, 10 units of DiveSense, and 1 functional Surface Buoy prototype.
- Ensure integration and interoperability of all components.
- Enable real-time underwater monitoring of environmental and physiological parameters during SCUBA diving operations.

## **3. Scope of Work**

The selected contractor will:

- Finalize hardware/software specs in collaboration with DAN Europe.
- Assemble and test the Cube and DiveSense prototypes using provided initial documentation.
- Produce and deliver prototypes according to the standards established in the Acceptance Testing protocol.
- Ensure BLE, acoustic, and satellite/GSM communication interfaces are functional.
- Implement and test the integration with the DAN Europe cloud-based DANA Health portal.

## **4. Description of Deliverables**

### **Hardware Prototypes:**

- 10 units of Cube datalogger devices.
- 10 units of DiveSense physiological monitoring devices.
- 1 functional prototype of Surface Buoy (Buoy).

### **Documentation:**

- Updated technical specifications for hardware/software.
- Operational and maintenance manuals.
- Integration report with cloud and app interfaces.

### **Testing:**

- Lab and In-Situ Acceptance Testing reports.
- Compliance with TRL6 validation levels.

## **5. Technical Specifications**

Key features:

- QUBE and DiveSense: pressure, temperature, and heart rate sensors; BLE 5.0; onboard flash memory; waterproof to 150m; low power MCU.
- Buoy: data relay via BLE, GSM/SAT, acoustic modem; GPS tracking; solar power optional.

## 6. Eligibility and Participation Conditions

Participation is open to:

- SMEs, research centers, spin-offs, or specialized engineering firms legally established in the EU.
- Proven expertise in underwater electronics, embedded software, and BLE/acoustic communication systems.

## 7. Budget and Financial Conditions

The maximum available budget is **€25,000** (VAT included). All costs including development, materials, testing, personnel, and shipping must be covered within this amount. Co-funding is allowed but must be clearly indicated.

## 8. Evaluation Criteria

Submissions will be evaluated based on:

- Technical capacity and past experience (30%)
- Quality and feasibility of the proposed solution (40%)
- Budget adequacy and value for money (20%)
- Delivery timeline and risk mitigation strategy (10%)

## 9. Submission Procedure

**Deadline:** 30 June 2025

**Submission Email:** ffigurella@daneurope.org

**Required Documents:**

- Technical offer including a descriptive part outlining the proposed solution, methodology, technologies used, and team qualifications.
- Financial offer with detailed breakdown of costs.
- Project Gantt chart indicating development phases and expected delivery times.
- CVs of key personnel.
- Declaration of honour.
- Company registration certificate.

## 10. Contract Terms and Implementation Timeline

**Start of Contract:** Within 15 days of award

**Duration:** Maximum 4 months from contract signature

**Penalties:** In case of delay or failure to meet specifications, penalties will be applied as per EU procurement rules.

## 11. Confidentiality and Ethics Requirements

All data and results are confidential and will be treated in compliance with the GDPR and BCTHubs ethics policy. Intellectual property generated will remain within the BCTHubs consortium unless otherwise negotiated.

## 12. Contact and Clarifications

For further information or questions: **Project Responsible:** Fabio Figurella

**Email:** ffigurella@daneurope.org

**Phone:** +39 3331796279

## 13. Annexes

- **Annex A:** Declaration of Honour Template

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*This call is published under the HORIZON-WIDERA-2022-ACCESS-04-01 framework. All procurement must comply with EU financial and ethical standards.*