



Welcome

Blue Bastion Call & Kick-off Day
26.08.2026



Today's program

09:30 Registration
10:00 Introduction
10:15 Call themes
10:45 BB Research call
11:15 BB Demo call
11:30 BB project applications
11:45 Q&A – end of session

12:00 Lunch
13:00 BB Demo 2026-1 results
13:20 Project presentations
15:00 Break
15:20 Project presentations
17:00 Start networking reception
18:00 End of day



Blue Cluster is an independent and neutral partner supporting Flemish and Belgian companies in setting up **partnerships** with other companies, knowledge institutions and government partners with a view to developing and promoting **sustainable offshore economic activities** including **Maritime Security** and **the protection of critical maritime infrastructure (CMIP)**.

Innovation Domains



**SUSTAINABLE
MARINE FOOD**



**MARITIME
SECURITY**



**OFFSHORE
RENEWABLE ENERGY**



**SHIPPING &
HARBOURS**



**SUSTAINABLE
COASTAL MANAGEMENT**



**DIGITAL
SEA**

RHID Assignment & Ecosystem Rationale



BUILDING A MARITIME
SECURITY INNOVATION
ECOSYSTEM

**STRATEGIC VISION
BELGIAN DEFENCE**

respond to the **growing strategic importance** of innovation and the need to move beyond fragmented, stand-alone innovation projects.

RHID ASSIGNMENT

to assess the feasibility feasibility and added value of a **coordinated, ecosystem-based approach**.

GOAL

create a **structured, scalable, and demand-driven ecosystem** integrating **defence, civilian, and dual-use** capabilities.

FOCUS AREAS

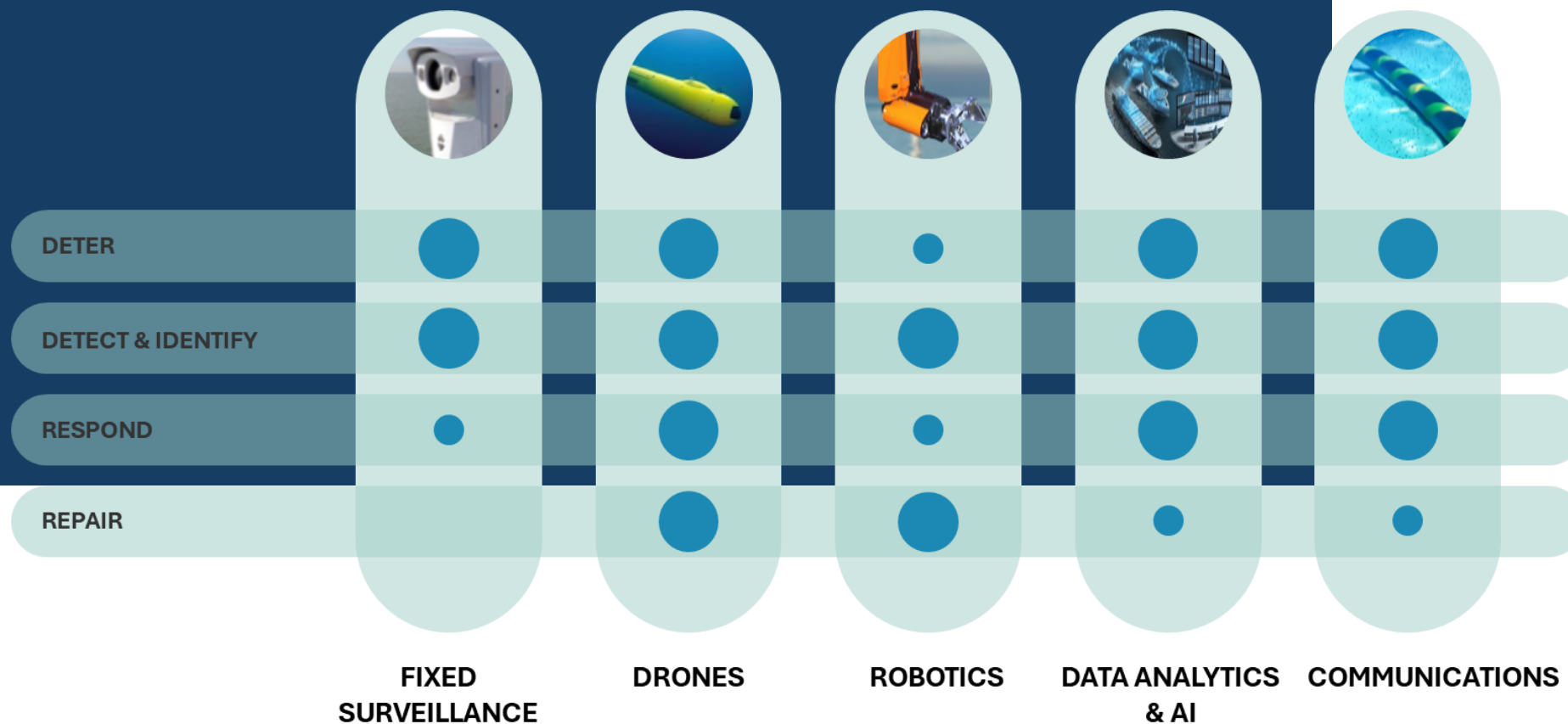
offshore energy, subsea infrastructure, coastal zones, and maritime traffic



Our Mission

A mission-driven “**Made in Belgium**” innovation ecosystem to build a strong **Maritime Security & defence industry**, accelerate **dual-use market valorisation** and achieve **international** scale-up.

Technology Domains



The CMIP ecosystem



NETWORK BUILDING

Thematic workshops
CMIP summit
In-Situ demos
Thematic groups
Online collaboration



KNOWLEDGE EXCHANGE

Knowledge repository
Threat briefings
Post-incident analysis
Expert exchange programs



COLABORATIVE INNOVATION

Roadmap
Joint innovation programs
Testbeds & living labs
Tech scouting
Innovation challenges



INTERNATIONALISATION

International fora
Bilateral coöperation
Export promotion
Joint product development



SCALING & VALORISATION

Incubator/accelerator
Funding & investors
Venture building
Opportunity scanning
GTM support



POLICY DEVELOPMENT

Policy advisory
Public engagement
Interoperability task force

Blue Cluster Support



The Blue Cluster supports Blue Bastion projects across their full lifecycle by acting as a **neutral** ecosystem orchestrator.



Before the project: aligns project ideas with the maritime security roadmap, mobilises and connects partners, and supports consortium building and proposal shaping.



During the project: facilitates coordination, stakeholder engagement, cross-project synergies, and high-visibility demonstrations such as the Navy Captains of Industry Day and participation to other events.



After the project: ensures valorisation and upscaling by promoting results, supporting market and operational uptake, and feeding lessons learned back into the maritime security research and innovation agenda.

[Home](#)

Become a member or partner

Choose the membership that suits your organisation and strengthen your role within the blue economy's innovation landscape

 [Join Blue Cluster](#)

Benefits of joining Blue Cluster

- Discover the potential of the blue economy for your organisation and keep track of the latest developments
- Become part of the leading innovative network for the blue economy both for businesses and for knowledge institutions
- Join other companies and partners in setting up innovation projects that boost your competitiveness

The different possible formulas are explained below. Also check out the testimonials of our members.

Looking for more information or a customised proposal?

CALL +32 50 34 75 15 | [mailto:info@bluecluster.be](#)

We are Blue Cluster



RHID at a Glance



Royal Higher Institute for Defence (RHID)

- The reference body of the Belgian Ministry of Defence in the field of security and defence
- Responsible to manage and facilitate the scientific and technological research and development programme of the Ministry of Defence
- To foster growth of the Belgian scientific and technological research/development in the defence and security domain, to restore and reinforce the links between government, academia and industry
- To promote and facilitate Belgium's and Belgian Defence participation in national and international research programmes

RHID in Innovation Ecosystems



- Driver of mission-oriented defence innovation
- Facilitates dual-use technology development and market valorisation
- Supports ecosystem building through partnerships (e.g. clusters, consortia)

Key role in programmes such as Blue Bastion:

- Roadmap alignment
- Scientific advisory and evaluation
- Linking innovation to operational defence needs

RHID - The need for Operational Collaboration



Close collaboration with the Navy, infrastructure owners, and security authorities ensures:

- Operational relevance
- Validation in realistic maritime environments
- Alignment with existing concepts and standards

An innovation call operationalises the ecosystem:

- Enables **consortium**-based collaborative projects
- Uses funding as a strategic tool to **catalyse cooperation** and **de-risk innovation**
- Blue Bastion strengthens the ecosystem by linking RHID-anchored strategy to tangible, scalable innovation outcomes.

RHID - Feasibility & Ecosystem Governance



A RHID-mandated feasibility study confirmed the need for a **coordinated maritime security ecosystem** due to:

- Increasing vulnerability of critical maritime infrastructure
- Fragmented and siloed solutions
- Strong dual-use potential between civilian and defence maritime security needs.

RHID provides the strategic framework; **Blue Cluster acts as ecosystem integrator**, aligning:

- Research, industry, and operational needs
- SMEs and technology providers with long-term defence and security priorities
- Shift from isolated technologies to system-level, interoperable solutions.

Blue Bastion instruments



RESEARCH



TRL 3-5



Applied research,
up to 2 years.

BUDGET €2M



DEMONSTRATOR



TRL 5-6



Prototype demos,
3 to 6 months.

BUDGET €350K



OPERATIONAL



TRL 6-7



Near operational,
up to 2 years.

BUDGET €2M

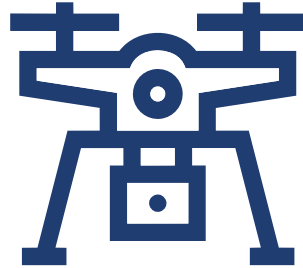
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TRL 6-7



Near operational,
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RESEARCH

Blue Bastion Research targets applied **research and early-stage development activities** aimed at **maturing new concepts, technologies, and methodologies** for maritime protection. Projects at this level focus on technical feasibility, functional validation, and concept integration **beyond basic research**.

DEMONSTRATOR

Blue Bastion Demonstrator projects focus on the **demonstration of solutions in relevant and representative maritime environments**, demonstrating possible integration, performance, and added value under near-realistic conditions.

OPERATIONAL

Blue Bastion Operational Innovation supports projects that **bring solutions close to operational deployment**. Activities may include large-scale testing, pilot implementations, integration with existing systems, and validation with end users in operational contexts.

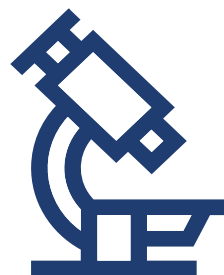
FOCUS CALL 2026-2



RESEARCH



TRL 3-5



Applied research,
up to 2 years.

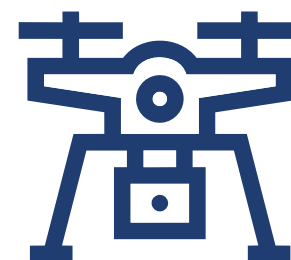
BUDGET €2M



DEMONSTRATOR



TRL 5-6



Prototype demos,
3 to 6 months.

BUDGET €350K

Challenge-Driven Innovation Approach



- Themes are derived from **operational input** provided by **Defence, MIK, port authorities, maritime authorities, offshore infrastructure operators and other critical infrastructure stakeholders**.
- Demonstrator and Research topics are selected where multiple challenge owners identify **common operational needs** and deployment opportunities.
- The themes cover both near-term **demonstration** opportunities and longer-term **research** challenges related to underwater security, autonomous systems, critical infrastructure protection and maritime resilience.
- Themes are **aligned** with emerging **European and NATO priorities** to maximise future deployment, scaling and international collaboration opportunities.

Research Call



RESEARCH



TRL 3-5



Applied research,
up to 2 years.

BUDGET €2M

Blue Bastion Research objectives



- Advancing critical maritime infrastructure protection through **high-quality applied research** (TRL 3-5)
- **Building strategic knowledge and future capabilities**
- **Building critical mass** in maritime security research and innovation
- Stimulating **collaborative research through consortia**, bringing together knowledge institutions, industry and operational stakeholders
- Developing and validating **innovative concepts and technologies**
- **Aligning research with the roadmap** on Maritime Security
- **Reducing technological uncertainty** and increasing maturity
- **Strengthening** the maritime security **research ecosystem**:
- Creating pathways **towards European programmes** and value chains
- Generating knowledge, intellectual property and future innovation opportunities
- Enabling **progression towards operational validation** and deployment

Blue Bastion Research



- **Generate new scientific and technological knowledge** addressing priority challenges in maritime security and critical infrastructure protection.
- Develop and validate an **innovative** technology, concept, methodology, architecture or prototype **beyond the current state of the art**.
- Demonstrate feasibility and performance through **experimental validation in controlled and representative environments** relevant to maritime security applications.
- Contribute to priority capability domains in the roadmap and research themes identified.
- **Provide a clear transition pathway towards TRL 5–6** demonstrator projects, including identified use cases, remaining risks and recommendations for further maturation.
- Create value for the broader maritime security ecosystem by strengthening knowledge, industrial capabilities and future innovation opportunities at regional, national and European level.
- Position the developed solutions for future participation in European and international programmes, value chains and collaborative security initiatives.

Blue Bastion **research themes**



The call focuses on two research domains:

THEME 1

Integrated detection, attribution & response for underwater threats.

THEME 2

Next-generation protection & resilience of critical maritime infrastructure

Theme 1: Integrated Detection, Attribution & Response for Underwater Threats



Research scope may include:

- fusion of acoustic, optical, sonar, magnetic and environmental sensors;
- detection of small, passive, biologically masked or low-signature objects.
- underwater imaging in turbid and congested waters.
- differentiation between normal activity, anomalies, sabotage and hostile preparation;
- human-in-the-loop classification and decision support;
- legal, technical and operational conditions for intervention;
- preventive and proportionate response concepts.

Theme 2: Next-Generation Protection & Resilience of Critical Maritime Infrastructure



Research scope may include:

- adaptive barriers and protected zones around critical assets;
- security-by-design for ports, offshore assets, cables and nautical infrastructure;
- resilient materials, components and infrastructure architectures;
- autonomous inspection, local protection and intervention systems;
- damage assessment and robotic support for repair;
- temporary energy, communication or operational continuity solutions;
- rapid recovery and reconfiguration of critical infrastructure.



DEMONSTRATOR



TRL 5-6



Prototype demos,
3 to 6 months.

BUDGET €350K

Demonstrator Call

Blue Bastion Demo objectives



- Accelerate deployable innovation for the protection of critical maritime infrastructure through **rapid demonstrations in relevant maritime environments** (TRL 5–6).
- Stimulate **collaborative, consortium-based innovation**, bringing together industry, knowledge institutions, and operational stakeholders to develop integrated system-level solutions.
- Demonstrate performance, integration, and interoperability of solutions under **near-realistic operational conditions**.
- **Align projects with the strategic roadmap**, ensuring contribution to priority capability gaps, use cases, and development lines.
- Reduce innovation and implementation risks through **short, focused projects (3–6 months)**.
- Generate validated **input for the research and innovation agenda**, feeding follow-on activities at regional, national, and European level.
- **Prepare European scaling and operational follow-up**, laying the groundwork for progression towards TRL 6–7 and future deployment.
- **Build cumulative ecosystem impact** through the six-monthly repetition of the demonstrator call.

Blue Bastion demonstrator



A Blue Bastion Demonstrator is expected to deliver at least:

- A **functional demonstrator** (technology, integrated solution, or system-of-systems) tested in a near-realistic maritime environment or setting.
- A clearly defined and operationally **relevant use case** addressing the protection of critical maritime infrastructure.
- Documented technical and operational performance, including **lessons learned**, limitations, and conditions for further development or scaling.
- A substantiated **pathway towards follow-on activities**, such as progression to higher TRLs (TRL 6–7), operational innovation projects, European-level scale-up, and/or clearly identified open research questions.

Demonstration & feedback



- Demonstrator results must be actively demonstrated and shared within the ecosystem.
- Where feasible, testing or validation in **operational exercises** is expected: Belgian level (e.g. Belgian Navy or maritime security actors) European level through international exercises or test environments
- Such demonstrations strengthen operational credibility and support European innovation and market readiness.

Blue Bastion demonstrator themes



The call focuses on four priority demonstration domains:

- Rapid **underwater threat detection** and incident assessment
- Persistent **autonomous surveillance** of critical maritime infrastructure
- Underwater **threat verification** & infrastructure assessment
- Rapid **protection and resilience solutions** for maritime assets and infrastructure.

Theme 1: Underwater Quick Scan & Rapid Incident Assessment



- Rapid **detection and localization underwater anomalies, intrusions or threats** around critical maritime infrastructure.
- **Deployable and ship-borne sensing solutions** for ports, offshore assets, subsea cables and maritime access routes.
- **Integration** of sonar, underwater imaging, acoustic sensing and autonomous platforms.
- **Fast situational assessment** to support incident commanders and infrastructure operators during the first hours of an event.
- Demonstration of operational concepts enabling continuous monitoring **until specialized assets arrive**.
- Key Message: **Deliver a trusted underwater operational picture within minutes instead of hours.**

Theme 2: Persistent Autonomous Surveillance Around Critical Maritime Infrastructure



- **Continuous monitoring** of offshore energy assets, wind farms, ports and strategic maritime corridors.
- **Deployment of autonomous UAV, USV and UUV solutions** for long-endurance surveillance missions.
- Autonomous launch, recovery, charging and coordination of **multiple platforms**.
- Utilization of **fixed and mobile infrastructure** as surveillance and communication nodes.
- Demonstration of scalable and cost-effective monitoring concepts requiring **minimal human intervention**.
- Key Message: **Maintain continuous awareness around critical maritime assets through autonomous maritime security systems.**

Theme 3: Underwater threat verification & infrastructure assessment



- **Rapid verification of underwater threats, incidents and anomalies** affecting critical maritime infrastructure.
- **Verification via autonomous and remotely operated inspection** of subsea assets, ports and offshore infrastructure.
- **Detection, classification and assessment** of suspicious objects, damage and activities.
- **Evidence gathering and decision support** for faster and more effective interventions.
- Key message: **Enable rapid verification of underwater threats and incidents to reduce uncertainty and accelerate response actions.**

Theme 4: Rapid Protection and Resilient Operations for Critical Maritime Infrastructure



- Demonstration of technologies **that mitigate, contain and recover from security incidents.**
- **Autonomous inspection and intrusion detection** for ports, locks, offshore installations and energy infrastructure.
- **Deployable physical protection systems,** barriers and emergency response solutions.
- Improved **continuity of operations** during disruptions affecting critical maritime services.
- **Enhanced resilience** against sabotage, intrusion, hybrid attacks and infrastructure failures.
- Key Message: **Increase the ability of critical maritime infrastructure to withstand, absorb and rapidly recover from disruptions.**



Applying for the **BB** call

Eligibility



Open to **Belgian** research institutes (public & private non-profit) and Belgian companies (including SMEs)

All partners (and subcontractors) must:

- Have legal personality and registered office in Belgium
- Conduct operational and/or research activities in Belgium
- Foreign partners are not eligible
- All consortium partners must be members of the Blue Cluster
- Projects must follow a triple-helix approach, combining academia and industry
- Security check (see further)

Partnership



Partnerships between research and industry are mandatory.
All types of organisations can act as project leader.

Partnership:

- At least one private company
- At least one research institute
- Belgian Defence research institutes (Royal Military Academy (RMA), Military Hospital Queen Astrid (MHQA), the Defence Laboratories (DLD)) and Blue Cluster are eligible partners.

No single project partner may claim more than **80%** of the total subsidy awarded to the demo project.

Stakeholders



- Demonstrator and Research projects must engage key stakeholders (end users, operators, authorities, industry) early and continuously.
 - Engagement includes use-case definition, feedback during research or development, and – for demonstration - validation in real or realistic operational settings.
 - The Blue Cluster supports and facilitates this interaction.
- Effective stakeholder engagement ensures operational relevance, feasibility, early adoption, and increases the likelihood of scaling and follow-on deployment.

Budget rules



- **Public research institutes & private non-profit research centers:**
 - Up to 100% of eligible costs
- **Private companies:**
 - Large enterprises: up to 65% of eligible costs
 - SMEs (small & medium enterprises): up to 80% of eligible costs

Ethics



- All projects must comply with the Code of Ethics for Scientific Research in Belgium.
- Applicants are responsible for consulting their relevant Ethical Board, where applicable, before proposal submission.
- Compliance with ethical standards is the sole responsibility of the applicants.

Submission documents

DEMO AND FIRST ROUND RESEARCH (tenpager)



- The title and acronym of the project
- Keywords
- Theme
- Coordinates of the foreseen partners (funded and non-funded)
- PROPOSAL (**10 pages**)
 - Executive Summary of the project
 - Graphical overview project concept
 - Scope and objectives
 - State of the art and innovative character
 - Relevance and potential impact
 - Quality of the project consortium
- Focus and setup demo/research
- Methodology
- Work plan: work packages
- Risk assessment
- SEPARATE DOCUMENTS
 - The GANTT chart
 - Data Management Plan
 - Budget file
 - Ethics Self-Assessment
- Templates on website
<https://www.bluecluster.be/blue-bastion>

Submission documents

SECOND ROUND RESEARCH (full proposal)



- The title and acronym of the project
- Keywords
- Theme
- Coordinates of the foreseen partners (funded and non-funded)
- PROPOSAL (**30 pages**)
 - Executive Summary of the project
 - Graphical overview project concept
 - Scope and objectives
 - State of the art and innovative character
 - Relevance and potential impact
 - Quality of the project consortium
 - Focus and setup demo/research
 - Methodology
 - Work plan: work packages
 - Risk assessment
- SEPARATE DOCUMENTS
 - The GANTT chart
 - Data Management Plan
 - Budget file
 - Ethics Self-Assessment
- Templates on website
<https://www.bluecluster.be/blue-bastion>

Submission documents - eligibility



- **Companies, a(i)sbl and foundations** (partners and subcontractors) must deliver the extract of the **Ultimate Beneficial Owner (UBO)** register as an annex to the proposal (in pdf format) and sent it by e-mail to blue-bastion@blauwecluster.be
- The same applies to the document “**Company Honourability & Vulnerability self-assessment declaration**” and the related **criminal records**. (e-mail to blue-bastion@blauwecluster.be)
- The form “**veiligheidsverificatie_toestemming / vérification de sécurité_consentement**” of the **coordinator and promoters** of the industrial partners must be sent to: IRSD-SECURITY@mil.be
- **Documents to be submitted before 1 October 2026 (23h59)**

Evaluation procedure - DEMO



- | | |
|---------------|--|
| STEP 0 | Pre-Proposal Consultation |
| STEP 1 | Eligibility Check |
| STEP 2 | Alignment with Roadmap and Scope |
| STEP 3 | Evaluation by the scientific advisory board,
challenge owners and industrial partners
steering committee |
| STEP 4 | Consolidation & Recommendation (DBC Steering Board) |
| STEP 5 | Final Decision (RHID & Navy) |

Evaluation procedure - RESEARCH



---- FIRST STAGE ---- Pre-proposal 10-pager

- STEP 0 **Pre-Proposal Consultation**
- STEP 1 **Eligibility Check**
- STEP 2 **Alignment with Roadmap and Scope**
- STEP 3 **Evaluation by the scientific advisory board, challenge owners and industrial partners steering committee**
- STEP 4 **Consolidation & Recommendation (DBC Steering Board)**
- STEP 5 **Final Decision 1st round (RHID & Navy) + feedback**

---- SECOND STAGE ----- Full proposal 30 pager

- STEP 1 **Remote scientific peer review evaluation**
- STEP 2 **Scientific Experts Committee (SEC) evaluation, including interviews with the applicants**
- STEP 3 **Selection proposal formulated by the Scientific Committee of the RHID**
- STEP 4 **Final selection of proposals by the Board of Directors of the RHID**

Exclusion Criteria



ELIGIBILITY CHECK

Blue Cluster and RHID will perform an eligibility check on the basis of the proposal documents.

ALIGNMENT CHECK

Blue Cluster and RHID check if the proposal falls clearly within the thematic and strategic focus of the call, and contributes to the capability priorities identified in the roadmap.

Evaluation Criteria



Excellence:

The quality of the proposal, based on the clarity of the project objectives, the level of innovation with respect to the state of the art, the targeted TRL, the methodology, and the proposed validation approach.

Implementation:

The quality and adequacy of the partnership and the feasibility of the implementation, taking into account the work plan, timing, budget, task distribution, integration between partners and activities, and the management of key risks.

Impact:

The relevance and potential impact for Defence, including the expected added value, potential for adoption and scalability, valorisation prospects, and contribution to future operational use or capability development.

*Each criterion is scored on a scale from 0 to 5. A **minimum score of 3/5 must be achieved for each criterion.***

Proposals receiving a score between 3 and 4 on a criterion may be subject to additional conditions or recommendations, which must be addressed during project implementation or prior to the project start.

Blue Bastion **DEMONSTRATOR** timeline



	Date	At/via
Ideation phase	June-August	Blue Cluster
Information session	26 August 2026	Oostende
Deadline proposal	1 October 2026 (23h59)	Mail
Eligibility and alignment check	8 October 2026	Blue Cluster & RHID
Steering Committee evaluation	28 October 2026	Blue Cluster
Final selection of proposals	30 October 2026	RHID
Communication of results to applicants	30 October 2026	Mail

Blue Bastion RESEARCG timeline



	Date	At/via
Ideation phase	June-August	Blue Cluster
Information session	26 August 2026	Oostende
Deadline pre-proposal	1 October 2026 (23h59)	Mail
Eligibility and alignment check	8 October 2026	Blue Cluster & RHID
Steering Committee evaluation	28 October 2026	Blue Cluster
Final selection of pre-proposals	30 October 2026	RHID
Communication of results to applicants	30 October 2026	Mail
Deadline full proposal	1 December 2026	Mail
External evaluation	8 January 2027	Blue Cluster
Panel evaluation	1 February 2027	RHID
Final decision proposal	15 February 2027	RHID
Communication of results to applicants	16 February 2027	Blue Cluster
Start research projects	1 April 2027	Consortia

Project ideas



Prior to the submission of a full proposal, applicants are strongly **encouraged** to discuss their project idea with The Blue Cluster innovation managers by means of a concise **two-page pre-proposal**.

Deadline pre-proposal consultation:
18 September 2026

Blue cluster will:

- provide early feedback on strategic fit with the Blue Bastion programme
- identify potential improvements in scope, focus, or consortium composition,
- facilitate early connection with relevant ecosystem partners where appropriate.

Deadline



Your pre-proposal (research tenpager) or proposal (demo) and the required documents must be submitted at the latest on:

1 October 2026 – 23:59

by e-mail to:

blue-bastion@blauwecluster.be

www.bluecluster.be/blue-bastion





Blue Bastion 2026

Key take-aways

- Find the right partners early - build a strong and complementary consortium
- Take into account the thematic focus areas (research/demo)
- Discuss your project idea with The Blue Cluster innovation managers
- Pre proposal phase deadline - Don't wait until the deadline to discuss your project idea
- Check the eligibility (!) and participation requirements - Take enough time for the budget file and annexes (UBO, self-assessment - veiligheidsverificatie_toestemming
- Page limits (!) – be to the point

Team Maritime Protection

bluecluster.be/about/staff



Hanne Van Kerckhoven



Yves Muysen



Arnaud Vandamme



Daniel Du Seuil



Joeri Vanbelle



Eveline Buyck



Thank you



We are Blue Cluster

