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# BRISK II

## Mapping relevant initiatives

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BRISK II Core Project Team

BALTIC SEA

This document is developed within the BRISK II project to map initiatives within the Union Civil Protection Mechanism (UCPM) funded under the call UCPM-2024-KAPP-PV relevant for BRISK II and to evaluate potential synergies with ongoing initiatives. It also covers ongoing initiatives funded by other mechanisms.

BRISK II, Long-term risk analysis for oil and hazardous and noxious substances (HNS) pollution from shipping accidents to the marine environment in the Baltic Sea, is a project co-funded by the EU UCPM.

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# 1 Introduction

This report outlines the other initiatives with synergies to the project BRISK II - Long-term risk analysis for oil and hazardous and noxious substances (HNS) pollution from shipping accidents to the marine environment in the Baltic Sea. BRISK II started in January 2025 and will end in December 2026. The project is coordinated by Kotka Maritime Research Association and managed by HELCOM, and project beneficiaries include Denmark, Finland, Sweden. The rest of the Baltic Sea countries, excluding Russia, are associated partners of the project.

The project's main objectives are:

- 1) Disaster Risk management support to develop the preparedness to match the changed risk pattern in Baltic Sea; and
- 2) Facilitating dialogue between Baltic Sea EU Member States on enhancing the common preparedness.

These objectives will be achieved by further modifying and using the causal method for modelling traffic, accidents, spills and environmental damage, as well as producing risk scenarios, developed within in BRISK and BE-AWARE I and II. Cooperation among Baltic Sea countries on method, input data and presentation of results will facilitate a common culture of risk and prevention. The final output is a scenario-based risk assessment which will provide the Baltic Sea countries guidance on further developing their risk management preparedness to oil and HNS spills and to enhance cross border collaboration.

The report serves as a practical tool to identify synergies between BRISK II and other relevant initiatives in the Baltic Sea region and beyond. The mapping exercise highlights projects and networks working on complementary aspects of risk analysis, environmental vulnerability, and maritime safety. BRISK II intends to use these findings to strengthen knowledge exchange and experience, thereby adding value to ongoing work in related projects. Where relevant, we recommend establishing dialogue and cooperation with the listed initiatives and consortia. This may include sharing knowledge or exploring opportunities for joint activities and dissemination. Such collaboration may enhance the overall impact of BRISK II and contribute to more coherent efforts for maritime risk management across regions.

## 2 Mapping relevant initiatives

### 2.1 Ongoing and closed initiatives with relevance to BRISK II

Initiatives with relevance to the BRISK II project are listed in the table below. Each initiative is described in detail in the subsequent sections. Further, there are nine initiatives funded under other EU programmes or funding instruments (2.1.7-2.1.14). None of them show direct synergies with BRISK II. However, there may be thematic connections or overlapping target groups, meaning that participation in each other's events and sharing BRISK II outputs could be mutually beneficial.

For most relevant projects, the simplest way forward is to directly contact the initiatives for clarifying discussions on possible sharing knowledge or exploring opportunities for joint activities and dissemination. The most cost-effective way to do this is likely through online meetings, unless there is a known event or forum where representatives of projects funded under the programme could be met.

Table 1. Synergies between BRISK II and other initiatives.

Initiative Funding instrument	Full name of project	Objective	Comments
<b>AHEAD</b> (2.1.1)	Advanced disaster damage and loss data information system for enHancEd impAct-based knowledge	Improving and developing engineered information system (IS) for collecting and analysing post disaster damage and loss data for Europe.	The output of BRISK II could potentially be used in this project, depending on their data parameters. This can only take place after BRISK II has finished.
<b>Manifests Genius</b> (2.1.2) /Funded under KAPP 2023	From Gases and Evaporators risk assessment towards an Integrated management of sea and land pollution incidents	Manifests Genius aims to strengthen preparedness and response capabilities for integrated management of coastal water pollution. The main focus will be on the release of HNS. The project outputs will include the creation of operational guidelines and the upgrading of the MANIFESTS DSS, new experimental data on the behaviour and impacts of HNS, good practices and recommendations to improve emergency plans for refuelling stations.	Links to BRISK II through developing preparedness and response to impacts of HNS spills on the environment. The projects will learn from each other, and a short online meeting between the projects could be arranged to further specify opportunities for collaboration.
<b>IMAROS and IMAROS 2</b> (2.1.3) /Funded	Impacts And Response Options regarding low sulphur marine fuel oil Spills.	The project is focused on two main challenges; 1) Improve understanding of oil spill behaviour of LSFOs, and consequently decision making on all levels of response	IMAROS 2 supports the BRISK II project by providing knowledge on LSFO properties, behaviour at sea, and mechanical recovery. It also analyses changes in ship fuels since the IMO

under DC ECHO / KAPP 2023		operations, and 2) Improve capacities of mechanical recovery and shoreline response.	sulphur cap, offering valuable insights into fuels used in the Baltic Sea, assessing the suitability of recovery equipment, and improving oil drift modelling for spill response. IMAROS partners are also involved in the BRISK II project, ensuring natural knowledge exchange between the initiatives.
<b>NAMIRS Project</b> (2.1.4) /European Union (DG ECHO)	North Adriatic maritime Incident Response System	The NAMIRS project enhances preparedness and coordinated response to marine pollution incidents in the North Adriatic Sea, a semi-enclosed basin shared by Croatia, Italy, and Slovenia. By strengthening regional cooperation, updating contingency plans, and developing SOPs with training and exercises, NAMIRS establishes a transnational mechanism for effective oil spill and pollution response, aligned with the Barcelona Convention and transferable across the Adriatic-Ionian region.	NAMIRS established a (sub-) regional approach to acute pollution, especially in spill impact monitoring and assessment. These results are highly relevant for BRISK, as harmonized practices support regional cooperation and response capacity. Since NAMIRS has ended, its publications and outputs can be used to inform BRISK activities.
<b>EMMERA project</b> (2.1.5) / KAPP 2023	East Med Cross-border Marine Environmental Risk Assessment through E-Platform Integrated Data Management.	Coastal cities are growing hubs for trade, but marine and coastal infrastructure contribute to pollution through oil discharges, chemicals, ballast water, and other sources. Recent incidents, such as oil spills off Israel and Lebanon, show that marine pollution can have cross-border effects. However, cross-border risk assessments and information sharing remain fragmented. The EMMERA project addresses this by uniting Eastern Mediterranean partners to develop a methodology for joint risk assessments and an e-platform for sharing, analyzing, and warning about marine pollution events, creating a foundation for coordinated regional action.	Collaboration could involve sharing information for risk assessment work. The project is still ongoing, so participation could include a Teams meeting or, at minimum, subscribing to the project newsletter.
<b>BALEX DELTA 2018</b> (2.1.6) / DG		The BALEX DELTA 2018 EU project is a time-limited EU project supporting	The BALEX DELTA exercises have directly utilized results from the BRISK project,

ECHO Civil Protection Mechanism Exercise Programme		the organization of the 2018 edition of the HELCOM BALEX DELTA exercise. The scope of the exercise includes chemical and shore response in addition to oil spill response at sea. The project has been selected a flagship project of the EU Strategy for the Baltic Sea Region	and it is expected that future exercises will similarly benefit from BRISK II outcomes.
<b>OpenRisk II</b> (2.1.7) / Interreg Baltic Sea Region / OpenRisk II - Interreg Baltic Sea Region	Tools for shared & dynamic maritime traffic risk picture of the Baltic Sea region	To equip maritime authorities and intergovernmental organizations with risk assessment and risk management tools to minimize maritime accidents and their footprint on the marine environment. It aims to deliver new, practical, and user-centered risk management tools designed to assist in preventing accidents, minimizing human and environmental consequences, and enhancing overall maritime risk management in the Baltic Sea.	OpenRisk II enhances Baltic Sea maritime safety and environmental protection by developing advanced risk assessment and management tools, which support oil spill preparedness and response efforts by minimizing accident risks and improving understanding of spill consequences. OpenRisk II provide practical tools that Baltic Sea countries can use to meet the recommendations produced within BRISK II.
<b>MARISEC</b> (2.1.8) / Ministry for Foreign Affairs in Finland / MARISEC	New Technologies Supporting the Prevention of Environmental Damage on the Coast of the Baltic Sea	To collect best practices in the Baltic Sea region for combating oil and chemical spills, test the efficiency of response equipment, and develop an action plan to enhance performance and training activities. The project aims to strengthen the Baltic Sea region's resilience to maritime environmental accidents by promoting risk awareness, preparedness, and response capabilities, and to enhance cross-sectoral co-operation and mutual interaction among the Baltic Sea coastal states.	Oil & chemical spill combat; Best practices collection; Response equipment testing; Action plan development; Performance & training enhancement; Risk awareness; Preparedness; Cross-sectoral cooperation; Coastal state interaction; Utilizes latest technology; Directly complements the focus of BRISK II on oil spill preparedness and response by enhancing regional capabilities and knowledge base.
<b>WATERWAYS</b> (2.1.9) / Finnish Strategic Research Council	Marine waterways as a sustainable source of wellbeing, security, and safety	The Waterways project aims to ensure the sustainable use of maritime routes in the Northern Baltic Sea. It does this by developing innovative data and AI tools for monitoring, assessing risks, and strategic planning, all while	The project provides foundational knowledge and tools for improving maritime well-being, safety, and security, and fosters collaboration, thereby complementing other maritime security and environmental initiatives, such as BRISK II.

		considering evolving risks, regulations, and societal values.	
<b>Digimaris</b> (2.1.10) / Interreg Central Baltic Programme	Digital solutions for the harmonized and cost-effective Finnish-Estonian marine response service	Digimaris will introduce a new digital service for marine spill response teams in Finland and Estonia, aiming to enhance preparedness by evaluating and advancing robotics (USVs/UGVs) and sensors for effective tracking and assessment of marine spills. This service will provide a comprehensive situational overview, enable faster response times, improve safety for personnel, and enhance collaboration at both national and cross-border levels.	Complements BRISK II by providing advanced technological solutions for spill detection, tracking, and response, thus strengthening overall regional preparedness.
<b>CoWup</b> (2.1.11) / Finnish Strategic Research Council	Coastal waters under pressure – safeguarding a healthy Gulf of Finland in a changing geopolitical and environmental landscape	The CoWup project identifies, analyses and quantifies risks to the marine environment of the Gulf of Finland in the current geopolitical situation, where Russia's war against Ukraine has ended cooperation with Russia and raised new risks to the marine environment.	Both BRISK II and CoWup projects contribute to enhancing maritime safety and environmental protection in the Baltic Sea.
<b>EUROWILD</b> (2.1.12) / EU Erasmus+ Programme / EUROWILD	European Oiled Wildlife Response Life-long learning Development	EUROWILD improves the life-long learning of the EUROWA network, grows the pool of experts and develops new training. It aims to deliver a larger pool of trained experts and engage with authorities who benefit from training on how EUROWA can assist in oil spill preparedness to deliver a successful response.	While EUROWA focuses on improving wildlife response preparedness and BRISK II on response at sea, they both work on improving preparedness to accidents involving oil spills, and complement each other.
<b>BE-AWARE Project</b> (2.1.13) /European Union (DG ECHO)	Area-wide Assessment of Risk Evaluations	The BE-AWARE project developed an area-wide marine pollution prevention policy. The project quantified available resources, current and future maritime activity levels, and environmental sensitivity, and produced a well-understood and unanimously accepted blueprint for disaster prevention at the regional level, which was tested and validated.	Although the scope of this project is different from BRISK II, the sensitive socioeconomic features identified in this project might inspire the BRISK II project.



<b>BE-AWARE-II Project</b> (2.1.13) /European Union (DG ECHO)	Area-wide Assessment of Risk Evaluations 2 (BE-AWARE-2)	The project that was the follow-up of the 2012 BE-AWARE project, aimed to feed the results into the 2016-2019 Bonn Agreement Action Plan in line with the conclusions from each sub-region, possibly with political endorsement from a Ministerial Meeting in 2016. In addition, the project also aimed to feed the results into EMSA through both the Board and CTG meetings to allow the planning of EMSA response capacities to benefit from the work, as well as DG ECHO for the inclusion of environmental and socioeconomic sensitivity maps in the CECIS database.	The socio-economic indicators further developed in BE-AWARE II are influencing the work on environmental and sociological indicator selection in BRISK II.
<b>BALEX DELTA 2021</b> (2.1.14) / IBA funding, Ministry of Foreign Affairs Finland		The annual HELCOM Balex exercise, hosted this year by Finland in Kotka and the eastern Gulf of Finland, brings together units and experts from across the Baltic Sea to practice joint response to a major maritime accident. The scenario involves a tanker collision causing oil and chemical spills, testing multinational cooperation in rescue and pollution control. With the Baltic among the world's busiest and most vulnerable seas, Balex ensures that coastal states are prepared to lead large-scale response operations using both national and international resources.	The BALEX DELTA exercises have directly utilized results from the BRISK project, and it is expected that future exercises will similarly benefit from BRISK II outcomes

### 2.1.1 Advanced disaster damage and loss data information system for enhanced impact-based knowledge (AHEAD)

AHEAD builds on prior efforts to deliver a fully engineered information system (IS) for collecting and analysing post disaster damage and loss data for Europe. The IS will permit to input geolocated data on damage to multiple sectors and to query the system to obtain data reporting and visualization for different purposes. The latter include accounting for the Sendai indicators, requests to the Solidarity Fund,

compensation either by state or insurance, improvement of risk analysis, evidence based early warning, forensic investigation to support DRR and climate adaptation measures.

With respect to prior efforts that will be included in the AHEAD system, and which cover already a number of sectors, the following will be the object of detailed data modelling and implementation as fields in the IS: damage to cultural heritage, waste and water systems, structural defences, and natural ecosystems. Stakeholders of the AHEAD hub will be invited first to co-create the relational data model and second to test the IS. IS Development and testing will occur in parallel: starting with the sectors for which fields of the database and the input interface are already available whilst developing the new ones. The testing will be done by stakeholders willing to use their own data and in the testbeds of the project. The latter will provide the data on recent events which the consortium have direct access to. The testbeds will complement the knowledge shared by stakeholders with empirical evidence from three real cases.

Three main outcomes are expected: the integration of the fully engineered AHEAD IS, completed with the above-mentioned sectors in the Risk Data Hub of the JRC, and a list of requirements that can be used by developers of IS that are already in use by Member States and Regions. Finally, a kit for training on the advantages and the needs of post disaster damage data collection and reporting will be built to support administrations at different levels.

### **2.1.2 From Gases and Evaporators risk assessment towards an Integrated management of sea and land pollution incidents (Manifests Genius)**

Accidental water pollution involving HNS that behave as gases or evaporators can pose significant risks to both the environment and public health, particularly when located in ports or coastal waters. Due to their potential to form toxic gas clouds, it is of primary importance to provide accurate information on these substances to help defining appropriate response techniques. Moreover, if an incident occurs in areas where multiple administrations, regions, or even countries are involved in the response, effective cross-sectoral information exchange becomes crucial. Yet, the flow of information between these entities is often not as smooth as necessary for effective response efforts. MANIFESTS Genius (From Gases and Evaporators risk assessment towards an Integrated management of sea and land pollution incidents) aims to strengthen preparedness and response capabilities for integrated management of coastal water pollution. The main focus will be on the release of HNS, including alternative fuels such as HVO, ammonia, methanol and LNG, which could form a toxic gas cloud and potentially drift towards the shoreline and impact local communities.

Two scenarios will be considered: 1) a subsurface leak from a pipeline and 2) a leak at water surface from a port fuelling station or a coastal facility. The project outputs will include the creation of operational guidelines and the upgrading of the MANIFESTS DSS, new experimental data on the behaviour and impacts of HNS, good practices and recommendations to improve emergency plans for refuelling stations that will work with new propulsion energies (methanol, ammonia...) as well as for coastal industries that use ammonia in their cooling system, and the establishment of intervention protocols at cross-sectoral scale. Bespoke training materials and exercises will be designed to transfer knowledge and decision-making tools developed in MANIFESTS Genius and other relevant EU and national projects to target stakeholders. The MANIFESTS Genius project ends in November 2025.

### **2.1.3 Impacts And Response Options regarding low sulphur marine fuel oil Spills (IMAROS and IMAROS 2)**

Ship accidents can result in oil spills that require time-consuming and costly response operations. A successful response, supported by adequate equipment and methods, can significantly reduce the impacts on the environment and on affected coastal communities. In recent years, however, a new generation of fuel oils – low sulphur fuel oils (LSFOs) – has posed new risks and created challenges for oil spill responders.

The IMAROS 2 project builds on gaps identified in the earlier IMAROS project, with a focus on two main challenges:

1. improving understanding of LSFO spill behaviour and thereby supporting decision-making at all levels of response operations, and
2. strengthening the capacities for mechanical recovery and shoreline response.

To achieve these goals, data is being collected across Europe to enhance risk perception and to ensure representative oil sample collection. The samples are characterized for their physical and chemical properties to deepen knowledge of how LSFO behaves when spilled into the marine environment. These results are used to assess response options and to feed into models of oil properties, transport, and drift. Problems previously observed with oil recovery will be addressed through three trial periods. Equipment manufacturers are invited to take part in recovery trials under controlled conditions at test facilities in Norway and Finland, aiming to identify effective approaches for recovering oils with adverse properties. Shoreline response will also be studied, including oil behaviour, environmental impacts, and the performance of clean-up techniques. Activities will range from laboratory and meso-scale experiments to practical trials of cleaning methods. The project consortium combines operational and scientific expertise and will synthesize results from all work packages into conclusions and operational guidelines. IMAROS 2 runs until December 2025.

IMAROS 2 creates synergies with the BRISK II project. While IMAROS 2 focuses on the chemical properties of LSFOs, their behaviour at sea, and their mechanical recovery, it also includes trend analyses of how ship fuel grades and properties have changed since the IMO sulphur cap came into force. In the Baltic Sea, the strictest sulphur emission regulations apply, allowing only 0.1% sulphur in ship exhaust gases. The statistics gathered by IMAROS 2 show how shipping companies have adapted to these regulations, providing the BRISK II team with valuable insights into the oil types currently used in the Baltic Sea. This helps assess whether existing recovery equipment is suitable for mechanical recovery of oils that may be discharged in accidents. Recovery tests within IMAROS 2 further demonstrate how LSFO behaves when drifting to shorelines. The chemical property data produced by the IMAROS 2 scientific team is also being integrated into oil spill drift models, supporting responders in understanding how LSFO spreads at sea.

### **2.1.4 North Adriatic Maritime Incident Response System (NAMIRS)**

The NAMIRS project has enhanced preparedness and coordinated response to marine pollution incidents in the North Adriatic Sea, a semi-enclosed basin shared by Croatia, Italy, and Slovenia. By strengthening regional cooperation, updating contingency plans, and developing standard operating procedures (SOPs) with training and exercises, NAMIRS established a transnational mechanism for effective oil spill and pollution response. The project aligns with the Barcelona Convention and provides a framework transferable across the Adriatic-Ionian region.

A key achievement of NAMIRS was the establishment of a (sub-)regional approach to acute pollution, particularly in spill impact monitoring and assessment. These results are highly relevant for the BRISK project, as harmonized practices and methodologies support regional cooperation and response capacity. With NAMIRS concluded, its publications and outputs serve as valuable resources to inform ongoing and future BRISK activities.

#### **2.1.5 East Med Cross-border Marine Environmental Risk Assessment through E-Platform Integrated Data Management (EMMERA)**

Coastal cities are expanding hubs for trade, yet marine and coastal infrastructure contributes to pollution through oil discharges, chemicals, ballast water, and other sources. Recent incidents, such as oil spills off the coasts of Israel and Lebanon, demonstrate that marine pollution can have cross-border impacts. The EMMERA project addresses these challenges by bringing together partners from the Eastern Mediterranean to develop a methodology for joint risk assessments and an integrated e-platform for sharing, analyzing, and issuing warnings on marine pollution events. This initiative establishes a foundation for coordinated regional action. Collaboration opportunities include sharing information for risk assessment work. As the EMMERA project is ongoing, project teams can organize a short information-sharing meeting via Teams. EMMERA is publishing project newsletter, which could be subscribed.

#### **2.1.6 BALEX DELTA 2018 – EU Covil Protection Cooperation in the Baltic Sea**

The BALEX DELTA 2018 project, funded under the DG ECHO Civil Protection Mechanism Exercise Programme, supported the organization of that year's HELCOM BALEX DELTA exercise. The 2018 edition expanded its scope to include chemical and shoreline response alongside oil spill response at sea. Recognized as a flagship project of the EU Strategy for the Baltic Sea Region, it highlighted the importance of multinational preparedness and cooperation. BALEX DELTA exercises have already drawn on results from the BRISK project, and future editions are expected to benefit from BRISK II outcomes.

#### **2.1.7 Tools for shared & dynamic maritime traffic risk picture of the Baltic Sea region (OpenRisk II)**

Open Risk II is funded by Interreg Baltic Sea Region, co-funded by the European Union and runs from November 2023 - October 2026. The objective of Open Risk II is to equip maritime authorities and intergovernmental organizations with risk assessment and risk management tools to minimize maritime accidents and their footprint on the marine environment. It aims to deliver new, practical, and user-centered risk management tools designed to assist in preventing accidents, minimizing human and environmental consequences, and enhancing overall maritime risk management in the Baltic Sea. Project partners include Finnish Transport and Communication Agency (lead), Aalto University, Norwegian Coastal Administration, Gdańsk University of Technology, University of Tartu, Helsinki University and Northern Dimension Partnership of Transportation and Logistics (NDPTL Secretariat). The geographical focus of the project is the Baltic Sea Region. Both BRISK II and OpenRisk II projects significantly contribute to enhancing maritime safety and environmental protection in the Baltic Sea. The advanced risk assessment and management tools developed by OpenRisk II (e.g. AISyRISK, EcoSensitivity tool for oil spills, and R-Mare matrix) help minimize accident risks and evaluate oil spill consequences. This provides foundational data, analytical capabilities, and improved understanding of risks, which will provide further aid to BRISK II's target audience.

### **2.1.8 New Technologies Supporting the Prevention of Environmental Damage on the Coast of the Baltic Sea (MARISEC)**

MARISEC is funded by the Ministry for Foreign Affairs in Finland (with the Ministry of the Interior as the responsible ministry) and runs from November 2024 – January 2026. The objective of MARISEC is to collect best practices in the Baltic Sea region for combating oil and chemical spills, test the efficiency of response equipment, develop an action plan to enhance performance and training activities, strengthen the Baltic Sea region's resilience to maritime environmental accidents by promoting risk awareness, preparedness, and response capabilities, and enhance cross-sectoral co-operation and mutual interaction among the Baltic Sea coastal states.

Project partners include the Kotka Maritime Research Association, Kymenlaakso Rescue Services and the South-Eastern Finland University of Applied Sciences (Xamk) and the geographical focus of the project is the Baltic Sea region (with a specific focus on the Gulf of Finland for some activities and coastal areas in general). Synergies between BRISK II and MARISEC are both projects address oil spill preparedness and response in the Baltic Sea. MARISEC directly contributes by testing response equipment, collecting best practices, assessing capabilities, and developing action plans to enhance performance and training, which directly strengthens the core objectives of BRISK II concerning oil spill readiness and response.

### **2.1.9 Marine waterways as a sustainable source of wellbeing, security, and safety (WATERWAYS)**

WATERWAYS is funded by the Finnish Strategic Research Council and runs from December 2024 – November 2027, with possible continuation until November 2030. The objective of WATERWAYS is to strengthen the long-term positive impacts of maritime routes on well-being, safety, and security in the northern Baltic Sea, by developing innovative data- and AI-based methods for monitoring and assessment and by examining ecological, social, technological, and legal perspectives, producing new tools and knowledge to support strategic planning and decision-making. Project partners include Aalto University, Kotka Maritime Research Association, University of Helsinki, Åbo Akademi University, and Finnish Meteorological Institute and the geographical focus of the project is the northern Baltic Sea.

Both BRISK II and WATERWAYS examine aspects of maritime activity and its impacts, with WATERWAYS focusing on sustainable use of maritime routes amidst changing risks and regulatory frameworks, aligning with the broader goals of strengthening well-being, safety, and security, which could complement BRISK II's focus on oil spill preparedness and response.

### **2.1.10 Digital solutions for the harmonized and cost-effective Finnish-Estonian marine response service (DIGIMARIS)**

DIGIMARIS is funded by Interreg Central Baltic Programme Co-funded by the European Union and runs from September 2025 – February 2028. The objective of DIGIMARIS is to introduce a new digital service for marine spill response teams in Finland and Estonia, aiming to enhance preparedness by evaluating and advancing robotics (USVs/UGVs) and sensors for effective tracking and assessment of marine spills. This service will provide a comprehensive situational overview, enable faster response times, improve safety for personnel, and enhance collaboration at both national and cross-border levels. Project partners include Kotka Maritime Research Association, South-Eastern Finland University of Applied Sciences (Xamk), Kymenlaakso Rescue Services, Tallinn University of Technology, Estonian State Fleet. The geographical focus of the project is the Gulf of Finland, in the Baltic Sea (focusing on Finland and Estonia).

Both BRISK II and DIGIMARIS aim to enhance marine spill preparedness and response in the Baltic Sea region. DIGIMARIS can complement BRISK II by introducing advanced digital services, robotics, and sensors for real-time tracking and assessment of spills, which will significantly improve situational awareness and operational efficiency for response teams, thereby strengthening the overall readiness and response capabilities that BRISK II focuses on.

#### **2.1.11 Coastal waters under pressure – safeguarding a healthy Gulf of Finland in a changing geopolitical and environmental landscape (CoWup)**

CoWup is funded by the Finnish Strategic Research Council, co-funded by the European Union and runs from 2025 – 2027. The CoWup project identifies, analyses and quantifies risks to the marine environment of the Gulf of Finland in the current geopolitical situation, where Russia's war against Ukraine has ended cooperation with Russia and raised new risks to the marine environment. By creating knowledge-based scenarios related to environmental risks and analysing the cause-and-effect relationships related to risks, the project promotes preparedness for proactive decision-making and minimisation of adverse impacts. The CoWup project develops new methods and models that can be used to assess the impacts of risks on the marine environment, also taking into account the uncertainties associated with them. Project partners include Finnish Meteorological Institute, Finnish Environment Institute, University of Helsinki and Demos Helsinki. The geographical focus of the project is the Gulf of Finland in the Baltic Sea. Both BRISK II and CoWup projects contribute to enhancing maritime safety and environmental protection in the Baltic Sea.

#### **2.1.12 European Oiled Wildlife Response Life-long learning Development (EUROWILD)**

EUROWILD is funded by the EU Erasmus+ Programme, co-funded by the European Union and runs from December 2024 - November 2026. The objective of EUROWILD is to improve the life-long learning of EUROWA network, grow the pool of experts and develop new training. It aims to deliver a larger pool of trained experts and engage with authorities who benefit from training on how EUROWA can assist and what is required for a better preparedness to deliver a successful response. Project partners include Sea Alarm, VOC Oostende, PRO Bird, SUBMON and WWF Finland.

The geographical focus of the project is the European seas. Both BRISK II and EUROWILD projects significantly contribute to enhancing preparedness of response to the negative environmental effects of oil spill accidents. The increased wildlife response preparedness will complement the preparedness.

#### **2.1.13 Area-wide Assessment of Risk Evaluations 2 (BE-AWARE and II)**

##### **BE-AWARE (2012–2014)**

The BE-AWARE project focused on developing a comprehensive marine pollution prevention policy. The project's main accomplishments included quantifying available resources, maritime activity levels, and environmental sensitivity across an area that covered the North Sea, the Skagerrak, the English Channel, the Irish Sea, and the waters west of Scotland and Ireland. It also created and validated a widely accepted blueprint for regional disaster prevention.

##### **BE-AWARE II (2013–2015)**

The BE-AWARE II project was a two-year initiative that served as a follow-up to the BE-AWARE I project. Co-financed by the European Union (DG ECHO), Ireland, and Germany, it included participation from the Bonn Agreement Secretariat and several European countries.

The primary objective of BE-AWARE II was to conduct a more detailed analysis to determine which methods and technologies would be most effective in responding to and reducing oil pollution. The project aimed to:

- Identify future scenarios for risk reduction and response capacities.
- Assess the vulnerability of coastlines and offshore areas to marine pollution.
- Evaluate the impact of predicted spills for each scenario.
- Develop risk management conclusions for each sub-region.

Co-financed by the European Union (DG ECHO), Ireland, and Germany, the BE-AWARE II project involved numerous partners, including the Bonn Agreement Secretariat, Belgium, Denmark, France, Germany, Ireland, the Netherlands, Norway, Sweden, and the United Kingdom. The project's results were intended to be integrated into the Bonn Agreement Action Plan, the planning of EMSA's response capacities, and the CECIS database managed by DG ECHO for environmental and socioeconomic sensitivity mapping.

A wide variety of socio-economic indicators were used in these projects. The indicators are grouped into four categories: Fisheries, Aquaculture, Tourism and Recreation, and Other (which includes Heritage sites, Ports, Mineral extraction sites, Offshore windfarms, and Water intakes). These indicators may influence the BRISK II project. Additionally, a method for weighting ratios of feature groups—such as habitats, species, protected areas, and socio-economic features—was applied and could also be used in the BRISK II project.

#### **2.1.14 BALEX DELTA 2021 – Strengthening Baltic Sea Preparedness**

Finland hosted the annual HELCOM BALEX DELTA exercise in Kotka and the eastern Gulf of Finland, bringing together international units and experts to rehearse joint response to a major maritime accident scenario. The exercise tested rescue operations and pollution control following a simulated tanker collision involving oil and hazardous chemicals. As one of the busiest and most vulnerable seas in the world, the Baltic requires strong multinational cooperation. BALEX DELTA ensures that each coastal state is ready to lead large-scale response operations with support from neighbours. The exercise was supported by IBA funding from the Ministry for Foreign Affairs of Finland. BALEX DELTA exercises have already built on results from the BRISK project, and future events are expected to benefit from BRISK II outcomes.

## 3 Conclusions

The BRISK II Core Project Team identified several past and ongoing initiatives with clear synergies to BRISK II. The BRISK, BE-AWARE, and BE-AWARE II projects provide a foundation from which BRISK II objectives can be further developed and refined.

The outputs of BRISK II may later be applied in the AHEAD project, depending on data requirements. Through Manifests Genius, both projects can exchange knowledge on preparedness and response to HNS spills, with the possibility of holding an online meeting to explore collaboration opportunities. The IMAROS and IMAROS 2 projects directly support BRISK II by contributing expertise on LSFO properties, fuel changes, recovery equipment, and oil drift modelling. Since many partners are involved in both initiatives, knowledge exchange occurs naturally. The results of the completed NAMIRS project are also highly relevant, as its publications can inform BRISK II activities. Collaboration with the ongoing EMMERA project could involve sharing information for risk assessment, participating in meetings, or following project updates through its newsletter.

In addition, cooperation is also natural with OpenRisk II, MARISEC, WATERWAYS, EUROWILD, CoWup, and DIGIMARIS (starting in September 2025). OpenRisk II, MARISEC, and DIGIMARIS are developing tools that could support the implementation of improvements proposed in BRISK II. WATERWAYS provides knowledge and tools to strengthen maritime well-being, safety, and security, supporting the sustainable use of waterways. CoWup contributes to maritime safety and environmental response in the changing geopolitical situation in the Gulf of Finland, while EUROWILD builds capacity for wildlife response operations and shoreline cleanup in the event of oil spills.

For most projects, the easiest way forward is to directly contact the initiatives to discuss knowledge sharing or joint activities. Online meetings are likely the most cost-effective option, unless a relevant event or forum allows for in-person interaction.





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