

# **Project idea form - small projects**

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Registration no. (filled in by MA/JS only)

# **Project Idea Form**

Date of submission 04.06.2025

# 1. Project idea identification

Project idea name	FLOOD-WISE BALTIC – Modular GIS platform integrating satellite imagery and AI-driven flood simulations to enhance resilience in small communities.	
Short name of the project	FLOOD-WISE BALTIC	
Previous calls	yes ○ no <b>⑥</b>	
Seed money support	yes ○ no <b>⑤</b>	

# 2. Programme priority

# 3. Programme objective

2.1. Sustainable waters

# 4. Potential lead applicant

Name of the organisation (original)	Filmuniversität Babelsberg KONRAD WOLF
Name of the organisation (English)	Film University Babelsberg KONRAD WOLF
Website	https://www.filmuniversitaet.de
Country	DE





Type of Partner	Higher education and research institution	
Contact person 1		
Name	Martin Gordon	
Email	m.gordon@filmuniversitaet.de	
Phone	+4915208814105	
Contact person 2		
Name	Björn Stockleben	
Email	b.stockleben@filmuniversitaet.de	
Phone	(max. 100 characters incl. spaces)	

Which organisation(s) in the planned partnership take part in a project within the Interreg Baltic Sea Region Programme for the first time? Please list the respective partners.

Filmuniversität Babelsberg KONRAD WOLF

#### 5.1 Specific challenge to be adressed

Small Baltic catchments suffer increasingly frequent flash-floods driven by climate change. Local authorities — especially in rural areas — lack (i) consistent cross-border data, (ii) affordable, user-friendly modelling tools, and (iii) staff capacity to interpret complex EO products. Result: late warnings, infrastructure damage and rising social costs. FLOOD-WISE BALTIC tackles this gap by fusing near-real-time satellite imagery, GPU-accelerated flood simulation and an intuitive dashboard. The target groups are municipal planners, civil-protection officers and volunteer responders who need actionable maps within minutes of the occurrence of events, rather than subsequent analysis which often takes several months to develop.

#### 5.2 Focus of the call

The proposal supports the cohesive development of small places and rural areas by giving them the same cutting-edge risk-management capability enjoyed by large cities. Three pilot municipalities (PL, FI, DE) will co-design and test the service; their feedback will shape open training materials to be made





available to any community in the BSR. By removing expensive licence barriers and packaging the workflow as open-source containers, we create a replicable, low-threshold solution that empowers local administrations, boosts public trust and keeps economic activity resilient following flooding.

#### 6. Transnational relevance

Floodwaters and data do not respect borders. River basins, satellite overpasses and supply chains all cut across national lines, making isolated solutions ineffective. The consortium pools complementary expertise: Finnish EO-provider Zero Gravity Oy supplies rapid SAR/optical scenes; Estonian-based Kontur delivers a pan-BSR hazard-feed and modelling pipeline; the German Filmuniversität ensures inclusive UX and capacity-building. Joint work allows harmonised standards (INSPIRE, OGC), shared calibration datasets and interoperable APIs, creating economies of scale unattainable by any single region.

#### 7. Specific aims to be adressed

### Building trust that could lead to further cooperation initiatives

Open governance, public dashboards and Creative-Commons training assets will foster transparency and invite additional municipalities and NGOs to join future up-scaling bids.

#### Initiating and keeping networks that are important for the BSR

We will establish a "Flood-Wise Community of Practice" mailing list and quarterly webinars, anchoring the solution inside existing EUSBSR PA Secure networks.

#### Bringing the Programme closer to the citizens

Interactive story-maps and short explainer videos (produced by Filmuniversität) will translate technical outputs into plain language supporting residents' understanding of and engagement with flood risk and preparedness options.

### Allowing a swift response to unpredictable and urgent challenges

The platform's live alert API (CAP compliant) streams new simulations within 30 minutes of each satellite overpass, giving local responders critical lead-time during rapidly evolving flood events.





## 8. Target groups

Small and rural municipalities across the Baltic Sea Region are the primary beneficiaries: civil-protection officers, spatial planners and IT/GIS staff who currently lack fast, affordable flood-risk intelligence. Hydrological agencies and river-basin authorities will use the open API to complement existing monitoring networks. Volunteer rescue organisations (e.g., Red Cross branches) need intuitive maps for early mobilisation. Finally, regional SMEs in the geospatial and insurance sectors can build value-added services on top of the open-source outputs, creating a multiplier effect beyond the pilots. Target groups will be involved from day one through co-design workshops, beta-testing and a Community-of-Practice mailing list, ensuring sustained uptake after project end.

	Please use the drop-down list to define up to five target groups that you will involve through your project's activities.	Please define a field of responsibility or an economic sector of the selected target group	Specify the countries and regions that the representatives of this target group come from.
1.	Local public authority	Municipal civil- protection & land-use departments responsible for flood contingency planning	Poland – Pomeranian Voivodeship; Finland – Southwest Finland; Germany – Brandenburg
2.	Sectoral agency	Regional hydrological & river-basin authorities managing water infrastructure	PL, FI, DE, plus open invitation to EE & LV
3.	NGO	Volunteer rescue organisations & civil-society groups supporting disaster response	Local Red Cross units in pilot zones
4.	Higher education and research institution	University departments focused on climate-adaptation and remotesensing research	BSR-wide; initially DE, FI
5.	Small and medium enterprise	Geo-IT and insurance tech companies developing downstream risk products	Entire BSR internal market





#### 9. Contribution to the EU Strategy for the Baltic Sea Region

Please indicate if your project idea has the potential to contribute to the implementation of the Action Plan of the EU Strategy for the Baltic Sea Region (https://eusbsr.eu/implementation/).
yes ● no ○
Please select which policy area(s) of the EUSBSR your project idea contributes to most.
PA Hazards
PA Safe
PA Spatial Planning
The MA/JS may share your project idea form with the respective policy area coordinator(s) of the EUSBSR. You can find contacts of PACs at the EUSBSR website ( <a href="https://eusbsr.eu/contact-us/">https://eusbsr.eu/contact-us/</a> ).
If you disagree, please tick here.

# 10. Partnership

The consortium unites three complementary actors from three EU member states. Lead applicant Film University Babelsberg KONRAD WOLF (DE) brings expertise in user-centric design, digital storytelling and capacity-building for non-experts. Kontur Inc. (EE) is an SME specialised in real-time hazard data and open-source GIS; it will develop the technical backbone and orchestrate pilot operations. ZeroGravity Ltd. (FI) supplies rapid SAR / optical satellite products and ensures Earth-observation standards compliance. All partners have previous Horizon/ESA experience but have not yet collaborated under Interreg BSR, bringing fresh perspectives. The geography deliberately spans the southern, central and northern parts of the sea basin to capture different hydrological realities. We may add one observer partner from a Baltic NGO network (e.g. Baltic Sea NGO Forum) to widen civil-society outreach; no further funded partners are required.

#### 11. Workplan

Main activities & outputs

- 1. Concept & System Design stakeholder mapping, user stories, system architecture, FAIR data plan.
- 2. EO Data Pipeline automated ingestion of Sentinel-class imagery (ZeroGravity) and DEM conditioning (Kontur) with OGC API-Records catalogue.
- 3. Flood-Model Integration containerised REOR model on GPU, synthetic rainfall generator, uncertainty layers, CAP-compliant alert API.
- 4. Platform Development Disaster Ninja dashboard with depth/velocity/exposure analytics, user & org management, audit trail; deployment in three pilot municipalities.





- 5. Training & Dissemination workflow documentation, video micro-courses, on-site workshops (>50 disaster management professionals) Community-of-Practice mailing list, policy brief.
- 6. Pilots & Evaluation live operation in Poland, Finland and Germany; impact measured via warning lead-time, user satisfaction and policy uptake KPIs.

# Target-group involvement

- Municipal staff co-create UX prototypes and act as beta testers.
- Hydrological agencies supply validation data and participate in evaluation panels.
- Volunteers join scenario-based training, ensuring outputs are actionable during real emergencies.

#### Use of final outcomes

After project close, each pilot municipality retains a fully operational instance hosted by Kontur or on local cloud. All code is MIT-licensed; datasets and documentation remain openly accessible, allowing fast replication across the BSR.

## 12. Planned budget

Total budget (including preparatory costs)	EUR 400,000.00
Norwegian budget (planned expenditure of partners from Norway)	EUR 0.00
ERDF budget (planned expenditure of partners from the EU)	EUR 400,000.00

## 13. Project consultation

Please indicate if you wish to have a consultation (online meeting) with the MA/JS to discuss your project idea



# 14. Questions to the MA/JS

Questions related to the content of the planned project	Would including an open-source licence for all software be regarded as sufficient evidence of long-term sustainability, or should we also commit to a minimum hosting period on EU servers?
Questions related to budgeting and expenditure	Can GPU cloud credits be budgeted under "external expertise and services", and if so, are there ceiling percentages we must observe?
Any other questions	Are letters of intent from the three pilot municipalities mandatory at PIF stage or only for the full application?





# 15. Additional information

(max. 1.000 characters incl. spaces)

### Your account in BAMOS+

Please remember that to officially submit your application you need to access our electronic data exchange system BAMOS+. More information about the process of applying for your account in BAMOS+ you will find here:

https://interreg-baltic.eu/gateway/bamos-account

