Promoting ocean and water literacy in school communities

Call HORIZON-MISS-2022-OCEAN-01

Deliverable D1.2 – Risk Management Plan

Lead Beneficiary: CSIC

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2.0	Final version	31 July 2023	Jaume Piera, CSIC

Executive Summary

ProBleu's Deliverable 1.2 is named "Risk Management Plan". This document delineates the risks acknowledged by the consortium during the project's inception phase. Furthermore, it offers a comprehensive outline of how these risks will be documented and managed throughout the project's duration. The document also incorporates a system for monitoring discussions, activities, and any necessary adjustments. It's essential to emphasise that this particular document is strictly intended for internal use within the consortium.

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1. Introduction

In the context of EU projects' risk management procedures, establishing a risk register holds immense significance. Right at the project's initiation, it becomes imperative to evaluate and document all potential risks that could potentially impact the smooth execution of the work plan. For the risk register to serve its purpose effectively, it must adhere to specific requirements (1.1) and follow a designated format (1.2).
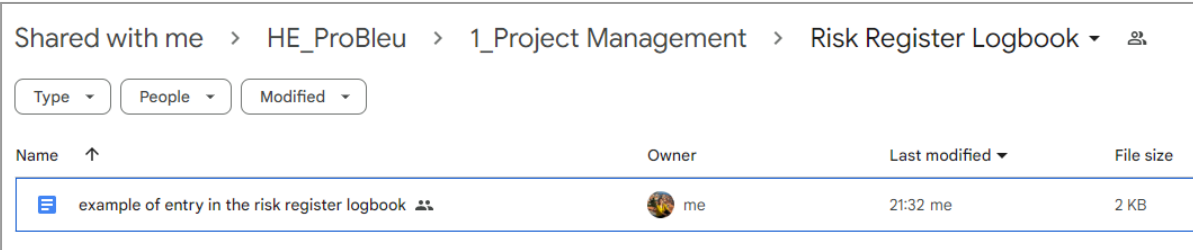
1.1 Requirements for the Risk Register

The risk register for ProBleu must adhere to the following requirements, aligned with standard procedures:

- Ensure all partners are aware of the project risks and contingency measures.

- Ensure confidentiality is maintained.

- Facilitating the identification of potential risks beyond the initial assessment.

- Enabling discussions on risk levels during the Steering Committee (SC) meetings.

- Being user-friendly and allowing easy updates.

- Tracing responsibilities for risk monitoring.

1.2 Format of the Risk Register

The Risk Register is maintained as a dynamic spreadsheet document on the project management portal, accessible to all members of the ProBleu consortium, but editable exclusively by the **Project Management Panel (PMP)**. The PMP is composed of the Coordinator, the Project Manager (both representing CSIC, the Project Coordinator), and the Principal Researcher (who is affiliated with Earthwatch, as described in D1.1).

The risk register should include the following headings (which can be expanded if needed):

Risk ID	A sequential identifier assigned to each risk
Description of the Risk	A brief explanation of the nature of the risk

WP number	Work Package(s) affected by the risk
Likelihood (Scale 1 to 5)	An assessment of how likely the risk is to occur (1 being least likely, 5 being most likely)
Impact (scale 1 to 5)	An evaluation of the impact the risk could have on the project (1 being low impact, 5 being high impact)
Risk Level	Categorization of risk level using the Risk Matrix (refer to the matrix below)
Mitigation measures	Proposed actions to mitigate or prevent the risk
Monitored by	The person(s) or entity(ies) responsible for monitoring the risk
Last discussed	Date, project month, or event when the risk was last discussed
Urgent review request (Y/N)	Indicates if those responsible for monitoring have requested an urgent review for the risk
Active (Y/N)	Specifies whether the risk is still active or resolved
Materialised (Y/N)?	Indicates if the risk has actually materialised and required implementation of mitigation actions. If "N," set "n/a" (not applicable) in the "How?" column
How?	Description of how the risk has materialised (set as "n/a" for risks with "N" in the "Materialised" column)
Implemented Actions	List of actions taken to mitigate the impact of risks that have materialised (set as "n/a" for risks with "N" in the "Materialised" column)

Risk Matrix: The Risk Level is determined based on the combination of Likelihood and Impact scores.

Note: The risk register will be continuously updated and maintained as part of the project's risk management process.

1.3 Risk Matrix

The table below presents the ProBleu risk matrix that will be used to assess and evaluate the potential likelihood and impact of the identified risks.

Likelihood	Impact on the Project				
	1 Negligible	2 Minor	3 Moderate	4 Significant	5 Severe
5. Very Likely	Medium Risk	High-Risk	High Risk	Very High Risk	Very High Risk
4. Likely	Low-Risk	Medium Risk	High-Risk	High-Risk	Very High Risk
3. Possible	Low-Risk	Medium Risk	Medium Risk	High-Risk	High Risk
2.Unlikely	Low-Risk	Low Risk	Medium Risk	Medium Risk	High Risk
1.Very Unlikely	Low-Risk	Low-Risk	Low-Risk	Medium Risk	Medium Risk

2. ProBleu Initial Risk Assessment

The ProBleu consortium possesses a wealth of experience in both research and industrial project management, complemented by a vast network of collaborative relationships. These strengths empower them to adeptly handle potential risks and explore alternative strategies to accomplish the project objectives. Moreover, their track record showcases exceptional communication skills, encompassing stakeholder engagement and widespread dissemination, affirming the likelihood of the project's valuable utilisation by European and other communities.

Despite these favourable aspects, the ambitious and extensive scope of the ProBleu project entails probable challenges. Some of these challenges encompass issues regarding the availability of key personnel, effective internal and external communication among partners, potential delays or unanticipated obstacles in delivering project results, resource availability, increased costs in certain activities, reduced stakeholder engagement, difficulties in seamless collaboration across significant geographical distances and difficulties that 3rd partners organisations might face when implementing their projects.

The following risks were thoroughly assessed during the proposal preparation stage and are included in the Description of the Action (DoA) within the Grant Agreement. Nevertheless one new risk was already included:

Risk no.	Description of risk (likelihood and impact)	WP(s) involved	Proposed risk-mitigation measures
1	Implementation difficulties due to personnel changes at partner organisations (L: medium; S: medium)	WP1, WP2, WP3, WP4, WP5, WP6	ProBleu would make use of other partners' expertise and engage external specialists.
2	Lack of internal resources to complete all tasks as planned (L: low; S: medium)	WP1, WP2, WP3, WP4, WP5, WP6	Tasks are planned with cross-partnership support, so, if one partner has limited resources, another can support the task. If resources are lacking in the whole consortium, efforts will be focused on areas with the highest importance and potential for success.
3	Opt-out of a consortium member (L: low; S: high)	WP1	The likelihood will be kept low through continuous consultation, high-frequency communication, and clear conflict-resolution procedures. If one of the partners is forced to withdraw, the consortium will invite suitable members from industry or academia to replace the missing party, thus minimising the negative impact.
4	Failure to produce deliverables on time or to sufficient quality (L: low; S: high)	WP1	The project plan (D1.1) set out a rigorous framework for delivery, including internal peer review. Reports and key outputs will be developed in stages so that basic functionality is reached relatively early and a lack of progress can be detected.
5	Low-level response to the call for proposals or an insufficient number of applications from third parties	WP4	If the promotion of calls is unsuccessful, the communication plan will be reviewed and alternative methods considered, such as paid targeted advertising on Facebook. The

	(L: low; S: medium)		incentives for applicants will also be examined to ensure they meet schools' needs.
6	Requirements and feedback from interested parties and actors resulting in conflicting demands (L: medium; S: medium)	WP2, WP3, WP4	Requirements will be transparently classified in terms of relevance, effort and impact, and distributed into the design of outputs accordingly. The project will explain this risk to interested parties and actors to prevent conflict through negotiation.
7	Tools and guidance becoming redundant, irrelevant or superseded (L: low; S: medium)	WP2, WP3, WP6	The iterative approach of the project towards feedback and development will ensure tools and guidance are constantly adapted to changing needs. The Advisory Board will assist with horizon scanning, and solutions from external sources will be adopted and supported if they are judged more likely to succeed.
8	Biased panel members for grant selection (L: low; S: medium)	WP4	All panel members will be required to sign and adhere to a list of ethical principles produced within WP4. Before acceptance, selections will be assessed for geographic, cultural, and age group spread.
9	Epidemics or other crises affecting international engagement and school activities (L: low; S: medium)	WP1, WP2, WP3, WP4, WP5, WP6	Many meetings and most project support provided are planned to be online. If restrictions hinder in-person meetings and school activities, the consortium will review the project plan and put more effort into communication and online support.
10	Schools receiving financial support from the project don't finalise the project (L: medium; S; medium)	WP2, WP3, WP4	Technical and educational supporting tools designed in the project and offered to the selected schools will be complemented with a monitoring process which will enable the consortium to understand the implementation status of the projects and identify potential problems in advance, offering solutions.

3. ProBleu Risk Register

The ProBleu Risk Management Plan has been formulated by converting the impact information from the Description of the Action (DoA) into the standard EU risk matrix format. This conversion entailed adjusting the likelihood and impact levels of each risk accordingly. Below is the ProBleu Risk Register, where active risks are colour-coded based on the risk matrix, and risks marked for urgent review are highlighted in red font.

Risk no.	Description	WP	Likelihood	Impact	Level	Risk-mitigation	Monitored by	Last discussed	Urgent review? (Y/N)	Active (Y/N)	Materia-lized (Y/N)	How?	Imple-mented Actions
1	Implementation difficulties due to personnel changes at partner organisations	WP1, WP2, WP3, WP4, WP5, WP6	Possible	Moderate	Medium Risk	ProBleu would make use of other partners' expertise and engage external specialists.	Coordination, WP Leaders	Not yet discussed	N	Y	N	n/a	n/a
2	Lack of internal resources to complete all tasks as planned	WP1, WP2, WP3, WP4, WP5, WP6	Unlikely	Moderate	Medium Risk	Tasks are planned with cross-partnership support, so, if one partner has limited resources, another can support the task. If resources are lacking in the whole consortium, efforts will be focused on areas with the highest importance and potential for success.	Coordination, WP Leaders	Not yet discussed	N	N	N	n/a	n/a
3	Opt-out of a consortium member	WP1	Unlikely	Significant	Medium Risk	The likelihood will be kept low through continuous consultation, high-frequency communication, and clear conflict-resolution procedures. If one of the partners is forced to withdraw, the consortium will invite suitable members from industry or academia to replace the missing party, thus minimising the negative impact.	CSIC	Not yet discussed	N	N	N	n/a	n/a
4	Failure to produce deliverables on time or to sufficient quality	WP1	Unlikely	Significant	Medium Risk	The project plan (D1.1) will set out a rigorous framework for delivery, including internal peer review. Reports and key outputs will be developed in stages so that basic functionality is reached relatively early and a lack of progress can be detected.	CSIC	Not yet discussed	N	N	N	n/a	n/a
5	Low-level response to the call for proposals or an insufficient number of applications from third parties	WP4	Unlikely	Moderate	Medium Risk	If the promotion of calls is unsuccessful, the communication plan will be reviewed and alternative methods considered, such as paid targeted advertising on Facebook. The incentives for applicants will also be examined to ensure they meet schools' needs.	INOVA+	Not yet discussed	N	N	N	n/a	n/a

6	Requirements and feedback from interested parties and actors resulting in conflicting demands	WP2, WP3, WP4	Possible	Moderate	Medium Risk	Requirements will be transparently classified in terms of relevance, effort and impact, and distributed into the design of outputs accordingly. The project will explain this risk to interested parties and actors to prevent conflict through negotiation.	Earthwatch, PML & INOVA+	Not yet discussed	N	N	N	n/a	n/a
7	Tools and guidance becoming redundant, irrelevant or superseded	WP2, WP3, WP6	Unlikely	Moderate	Medium Risk	The iterative approach of the project towards feedback and development will ensure tools and guidance are constantly adapted to changing needs. The Advisory Board will assist with horizon scanning, and solutions from external sources will be adopted and supported if they are judged more likely to succeed.	Earthwatch, PML & OCT	Not yet discussed	N	N	N	n/a	n/a
8	Biased panel members for grant selection	WP4	Unlikely	Moderate	Medium Risk	All panel members will be required to sign and adhere to a list of ethical principles produced within WP4. Before acceptance, selections will be assessed for geographic, cultural, and age group spread.	INOVA+	Not yet discussed	N	N	N	n/a	n/a
9	Epidemics or other crises affecting international engagement and school activities	WP1, WP2, WP3, WP4, WP5, WP6	Unlikely	Moderate	Medium Risk	Many meetings and most project support provided are planned to be online. If restrictions hinder in-person meetings and school activities, the consortium will review the project plan and put more effort into communication and online support.	Coordination, WP Leaders	Not yet discussed	N	N	N	n/a	n/a
10	Schools receiving financial support from the project face constraints in finalising their projects due to local risks or contingencies	WP2, WP3, WP4	Possible	Moderate	Medium Risk	Technical and educational supporting tools designed in the project and offered to the selected schools will be complemented with the suggestion of a monitoring process which will enable the consortium to understand the implementation status of the projects and identify potential problems in advance, offering solutions.	Earthwatch, PML & INOVA+	Not yet discussed	N	N	N	n/a	n/a

4. Management Procedures related to the Risk Management Plan

4.1 Responsibilities

The **Project Management Panel**, bears the responsibility of updating the risk register. Any Consortium member or External Advisory Board Member can propose risks for inclusion in the register. However, before adding them, the **Project Management Panel** will assess the relevance and specificity of each proposed risk.

The risk register will undergo review during each Steering Committee (SC) meeting. Specific risks flagged for discussion in the meeting agenda will be labelled as "requested for urgent review." Further responsibilities concerning Consortium members are outlined in the Consortium Agreement, which takes precedence in case of conflicts.

4.2 Actions

During risk reviews, the Steering Committee (SC) can undertake the following actions:

- Update mitigation strategies

- Adjust Risk Levels

- Modify responsibilities for monitoring a risk

- Deactivate risks that are no longer pertinent

- Flag risks for urgent review in the next meeting

- Identify new risks.

Certain actions should be avoided, such as:

- Modifying a risk description directly. Instead, if needed, a new and specific risk shall be created, while deactivating any previous risk that is no longer accurate.

- Deleting risks from the register without proper justification.

- Leaving risks without assigned mitigation strategies or designated responsibility for monitoring.

The Risk Register is not a plan for actions. However, when necessary, the SC will formulate specific, measurable and time-bound actions to mitigate those risks, which will be recorded within the risk register.

4.3 Process Diagram

The following diagram illustrates the responsibilities and actions described in the preceding sections.
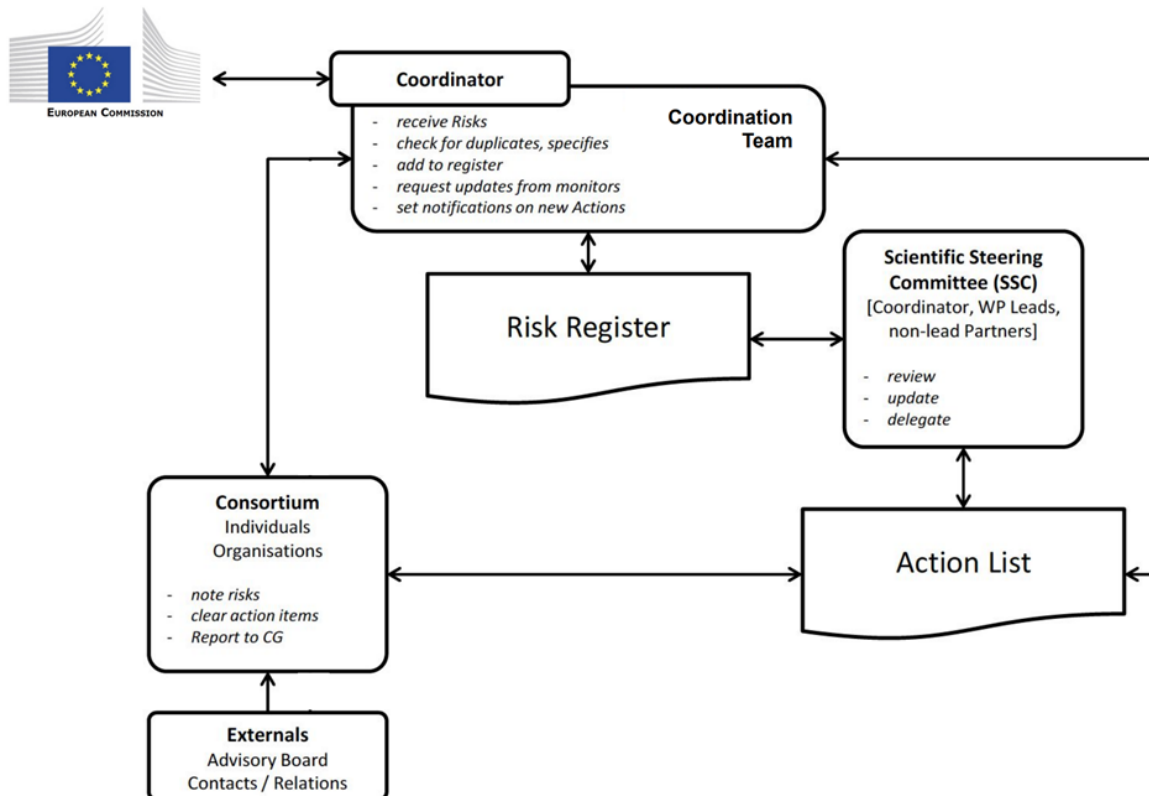
4.4 Risk Register Logbook

The risk register log book serves the purpose of documenting all revisions, decisions, and actions undertaken for risk management throughout the entire project duration. Regular updates to this document follow the procedures outlined in the previous sections, ensuring that all entries are recorded chronologically based on their respective occurrences. This includes instances where revisions were requested, proposed, or approved. Any newly arising events are appended to the end of the logbook.

Below is an example of a typical entry in the risk register logbook:

Date: 2023.03.26

- No review request received for risks: #1, #2, #3, #4, #5, #13, #14, and #15

- No proposed mitigation actions for risks #14 and #15

- Coordinator designated as the partner responsible for monitoring risks #14 and #15, with the task of defining mitigation measures before SCM #3

- Partner X endorsed to define a new risk (#16) reflecting... (this has been included as a central topic in the agenda of SCM #2) before SCM #3.

Throughout the project and with the realisation of the Steering Committee meetings, the Risk Register log book will be updated according to the decisions and actions to be taken in case any of the risks were to materialise.