



Net0Pathways through impRoved IAMs across Sectors, diMensions, and scAles

Critical Risks Analysis

WP7 - Management and Dissemination

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1. Executive Summary

PRISMA aims to inform and guide European climate policy design by consistently bridging the lessons learned from past policies with understanding prospective challenges, including those perceived and recognized by the relevant stakeholders. This is an ambitious goal, and there are significant risks associated with its achievement.

The Critical Risks analysis aims to identify all these potential risks that might occur during the implementation of the project and affect its success.

Starting from the analysis of all relevant risks identified, the document lists several mitigation measures to avoid or reduce the probability of negative occurrence and addresses the strategy the Consortium will adopt to manage all potential risks.

The main objective of this deliverable is to explore, identify and handle relevant risks related both to the research and the management activities of PRISMA.

KEY WORDS

Risk, Mitigation measures, Risk management

2. Critical risks for implementation

2.1 Risk Management

Given the very ambitious goal of PRISMA, it is important to understand any potential risk and have a good process for managing it. As described in the Grant Agreement (GA), The Critical Risks Analysis is related to Task 7.3 - *Monitoring and quality assurance* – lead by the Project Coordinator (CO), which concerns the identification of monitoring and quality assurance mechanisms to ensure the timely and efficient delivery of all projected-related outputs and research.

The entire Consortium, in the way that each partner in PRISMA undertakes to implement the action tasks assigned and will be responsible for the efficient implementation the project¹, will be involved in identifying any potential risks that can occur during the implementation of the tasks assigned and this will facilitate to implement correcting measures.

During the proposal preparation, the CO and Work Package Leaders identified and examined the entire list of critical risks that were re-examined/updated during the G.A. preparation and will be updated during the lifetime of PRISMA.

Furthermore, the Project Steering Committee (PSC) will supervise the project's work plan implementation, ensure coordination between different WPs, and the timeliness and quality of the deliverables. This will help identify and manage every risk in a timely manner.

As a member of the PSC, each WP leader informs the PSC immediately if any problem arises, allowing the PC and the PSC to take and implement the appropriate and timely corrective actions. The PSC takes decisions at the strategic and financial level to ensure the representation of all consortium partners. The decisions will be taken by a simple majority.

2.2 Risk areas

There are significant risks associated with the implementation of PRISMA, that can be grouped into the following areas:

2.2.1 Research- related risks

Some research objectives may prove harder to reach (e.g., due to missing data, the difficulties associated with stakeholder engagement, etc.). These risks are typical in research projects and can be successfully managed by continuously sharing information among partners and redirecting research where dead ends are reached without compromising the scientific excellence of all PRISMA research.

2.2.2 Time-related risks

There are two types: (i) preventing the achievement of the objectives on time, or (ii) related to the coordination of multiple, interconnected activities over the same period of time. These risks will be minimized through continuous monitoring by the PC and PSC.

¹ Consortium agreement – 4. Responsibilities of Parties

2.2.3 Budget-related risks

The results may not be attainable within the planned budget. Continuous monitoring and the devising of contingency plans will ensure these risks are minimized.

2.2.4 Management-related risks

The risks associated with the ability to manage the project effectively. The redundancy in the governance organization of PRISMA has the purpose of minimizing any risk associated with management, as these several bodies will provide continuous checks and balances.

3. Strategy

To proactively deal with risk management, at every meeting of the PSC, specific time will be devoted to carrying out a forward-looking six-month risk assessment for all WPs. If some critical situations emerge, the PC will convene an extraordinary meeting of the PSC for immediate and corrective action. Risk management and contingency planning activities will be carried out continuously over the duration of the project to ensure that the project strategy, tasks, results, and budget remain on track. Contingency plans will be proposed where necessary to address any specific identified risks.

As illustrated by the ongoing COVID-19 pandemic, all these risks may be exacerbated in unusual situations in which research is carried out while in lockdown, without access to office facilities or the possibility to move freely within and across countries. Note that all members of the Consortium have established specific procedures, above and beyond those set up at the single project level, to ensure the least disruption in case exceptional circumstances arise again. In addition, all personnel have now been equipped with the appropriate set of tools (including laptops, additional screens, etc.) to carry out research also under these unusual circumstances.

4. List of critical risks

Risk number	Description	WP	Proposed Mitigation Measures
1	Continuation of the COVID19 pandemic's restrictions for the organization of stakeholder's and projects meeting in presence (Medium; Low)	WP7, WP1, WP3, WP5, WP6, WP2, WP4	PRISMA's partners gained during the last two years the extensive experience organizing event and online format (e.g., webinars, workshop, consortium meeting, ...). This will avoid any delay or problems in the implementation of project meetings and event.
2	Delays within and between WPs tasks, milestones and deliverables (Low; Medium)	WP7, WP1, WP3, WP5, WP6, WP2, WP4	Continuous monitoring of the project implementation by the PC and PSC. If some critical situations emerge, the PC will convene an extraordinary meeting of the PSC for immediate and corrective action. Notably, a reasonable adjustment in the precise content of a deliverable and/or personal reassignment within partners will be proposed in order to make sure that deliverables are submitted on time.
3	UK association to Horizon Europe will not be in force by the time of the signature of the grant agreement (Medium; Medium)	WP7, WP1, WP3, WP5, WP6, WP2, WP4	Extension of current short-term guarantee by UK government covering UK beneficiaries on funded Horizon Europe grants, as indicated on 4 Feb 2022 by UK Science Minister. In the unlikely event of no UK association to Horizon Europe, tasks allocated to UOX will be reallocated to IIASA, and tasks allocated to UCAM will be reallocated to CMCC.
4	Limited participation of stakeholders in the stakeholder engagement process (Low; Medium)	WP1	To ensure participation, PRISMA's partners will leverage their strong networks within the three types of target groups. BRUEGEL has an excellent track record of organising and promoting stakeholder engagement activities
5	Automatic linking of existing In-code documentations with central IAM documentation has not been tested yet and might deem infeasible or impractical at the end. (Low; Low)	WP1	Continuous monitoring of the process will allow to adjust the development process and potentially scale down the automatization to a degree which makes most sense to ensure upto- date model documentations.

6	Modelling improvements for structural, sectoral and distributional analysis delayed to inform policy analysis in D2.4 (Medium; Low)	Wp2	Milestone 2.1 will consolidate the data sources for granular sectoral and distributional modelling analysis already in M18 to allow enough time to IAMs to integrate them in their modelling frameworks
7	New empirical results on heterogeneous cost of capital and/or technology cost trajectories cannot be readily integrated into all IAMs to be used in the WP (Medium; Medium)	WP3	In implementing the planned extensions to the IAMs, modelling teams will coordinate closely with the teams carrying out empirical research to ensure compatibility. Also, several IAM formulations already allow for heterogeneous cost of capital, but lack the empirical results to be developed in WP3
8	Newly extended IAMs are too diverse in terms of incorporated features to allow for an analysis of common scenarios on financing and innovation needs (Medium; Medium)	WP3	Modelling teams will coordinate as closely as possible in their work on extending the IAMs and scenarios to be analysed will be defined as early as possible.
9	New empirical results on lifestyle heterogeneity cannot be readily integrated into all IAMs to be used in the WP (Medium; Low).	WP4	Test implementations with pioneer models will be draw on strong collaborative track records between empirical and modelling teams. Both soft-coupling and exogenous formulations (from empirical data to IAMs) will be developed.
10	Several tasks in WP5 (5.1, 5.3, 5.4) depend on the contribution of several partners - increasing the risks that one team cannot deliver in time (Medium; Medium).	WP5	For most topics, more than 1 team can provide the relevant data so that the risk of delivery failure is mitigated
11	Model extensions developed in WP2-5 are late, or too diverse, to allow for integration in common scenarios in integration and synthesis tasks (Low; Medium).	WP6	Regular exchanges and continuous monitoring of the developments will allow to adjust the scope of the synthesis tasks.

5. Conclusions

This document analyses specific risks related to the main activities of the PRISMA project: research, management, and coordination within the consortium.

Only a few risks identified here have a medium probability of occurrence, and the likelihood of most risks is low, facilitating their management.

The corresponding mitigation actions as mechanisms to prevent these risks partially or completely, as well as mitigation measures to solve them in case of their occurrence have been carefully elaborated and will be discussed during the overall life cycle of the project.

The PRISMA consortium is built to deliver its overall ambition and features world-leading interdisciplinary expertise in all domains necessary to successfully deliver the project's objectives, including expertise in integrating knowledge across disciplines.

The PRISMA project's organizational structure and decision-making mechanism are designed to achieve effective and smooth coordination and implementation of the project considering.

The consortium's expertise, together with the structure of the consortium bodies, is the strong point of the management of the risks the project might incur.

During the PSC calls the risk registry will be reviewed and critical or materialized risks will be assessed and mitigation measures will be proposed/implemented.