31/07/2019

D1.1 QUALITY MANAGEMENT PLAN

WP1 – Project Management
version: 1.00

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Project Coordinator	National Technical University of Athens – NTUA			
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Reviewer(s):	Glen Peters (CICERO); Haris Doukas, Alecos Kelemenis (NTUA)			
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EC Summary Requirements

1. Changes with respect to the DoA

No changes with respect to the work described in the DoA.

2. Dissemination and uptake

This deliverable will serve as a reference document among consortium partners (experts and non-experts), to be aware of and kept up to date with the project's quality management procedures, responsibilities and requirements. It may also be used by individuals outside the consortium, including policymakers and scientists, as a documentation of the quality management plan and the rigorous procedures underpinning the legitimacy of the scientific processes carried out in the project and the results and policy recommendations.

3. Short summary of results (<250 words)

The Quality Management Plan defines the quality policy and plan to be applied in the PARIS REINFORCE project. Its purpose is to establish the roles, procedures, metrics, and tools necessary to ensure that the PARIS REINFORCE project is implemented smoothly and that all project deliverables are of high quality and of scientific added value and are submitted to the EC services on time. Complying with the quality management procedures falls under the responsibility of the Project Coordinator, the Project Manager, the Quality Manager, the Work Package leaders and the Tasks leaders.

Effective channels of internal communication have been established since Month 1, enabling smooth exchange of all necessary information among project partners.

A thorough quality procedure has been established: each project deliverable will be quality-reviewed by two internal reviewers (members of the consortium partners), as well as by the Project Coordinator and Project Manager, before being accordingly revised and finally reviewed and edited by an additional member of the management team from NTUA, securing that the submitted deliverable adequately satisfy the quality criteria of clarity, completeness, accuracy, relevance, and technical compliance.

Specific performance indicators have been set and monitoring data will be collected regularly, aimed at fully informed reporting. Finally, a risk management plan is put into place, consisting of the identification of the technical (research-oriented) and management (project implementation-related) risks.
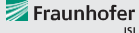
4. Evidence of accomplishment

This report.

Preface

PARIS REINFORCE will develop a novel, demand-driven, IAM-oriented assessment framework for effectively supporting the design and assessment of climate policies in the European Union as well as in other major emitters and selected less emitting countries, in respect to the Paris Agreement. By engaging policymakers and scientists/modellers, PARIS REINFORCE will create the open-access and transparent data exchange platform I^2AM PARIS, in order to support the effective implementation of Nationally Determined Contributions, the preparation of future action pledges, the development of 2050 decarbonisation strategies, and the reinforcement of the 2023 Global Stocktake. Finally, PARIS REINFORCE will introduce innovative integrative processes, in which IAMs are further coupled with well-established methodological frameworks, in order to improve the robustness of modelling outcomes against different types of uncertainties.

NTUA - National Technical University of Athens	GR	
BC3 - Basque Centre for Climate Change	ES	
Bruegel - Bruegel AISBL	BE	
Cambridge - University of Cambridge	UK	
CICERO - Cicero Senter Klimaforskning Stiftelse	NO	
CMCC - Fondazione Centro Euro-Mediterraneo sui Cambiamenti Climatici	IT	
E4SMA - Energy, Engineering, Economic and Environment Systems Modelling Analysis	IT	
EPFL - École polytechnique fédérale de Lausanne	CH	
Fraunhofer ISI - Fraunhofer Institute for Systems and Innovation Research	DE	
Grantham - Imperial College of Science Technology and Medicine - Grantham Institute	UK	
HOLISTIC - Holistic P.C.	GR	
IEECP - Institute for European Energy and Climate Policy Stichting	NL	
SEURECO - Société Européenne d'Economie SARL	FR	
CDS/UnB - Centre for Sustainable Development of the University of Brasilia	BR	
CUP - China University of Petroleum-Beijing	CN	
IEF-RAS - Institute of Economic Forecasting – Russian Academy of Sciences	RU	
IGES - Institute for Global Environmental Strategies	JP	
TERI - The Energy and Resources Institute	IN	

Executive Summary

The deliverable at hand entitled "Quality Management Plan" defines the quality policy and plan to be applied in the PARIS REINFORCE project. Its purpose is to establish the roles, procedures, metrics, and tools necessary to ensure that the PARIS REINFORCE project is implemented smoothly and that all project deliverables are of high quality and of scientific added value and are submitted to the EC services on time.

Complying with the quality management procedures falls under the responsibility of the Project Coordinator, the Work Package leaders and Tasks leaders.

The PARIS REINFORCE Project Coordinator (PC) oversees the scientific and technical direction of the project and the quality of the project deliverables, as well as the financial aspects. The PC is supported by a Project Manager (PM), as well as a project management team from NTUA. In parallel, the Quality Manager (QM) is overviewing the process and monitors the project progress. Each Work Package (WP) is coordinated by a WP Leader (WPL), responsible for the implementation of the respective WP, in line with the work description. The WPL is responsible for reviewing and evaluating intermediate and final WP outputs in conjunction with other WP partners. The Task Leaders (TLs) are responsible to lead the execution of activities under the respective task and guide the rest of the partners in fulfilling their activities in a timely manner.

The PC is also responsible for the preparation of template documents for the various project outputs and management reports; the establishment of a document management system; and the assurance of compliance with the document naming conventions, in the aim of securing the high quality of project implementation.

Effective channels of internal communication have been established since Month 1, enabling smooth exchange of all necessary information among project partners. The means for conveying information range from physical meetings and teleconferencing facilities to an internal solid workspace for document management and weekly structured e-mail communication, allowing partners to have full overview of the project progress and requirements.

Emphasis is laid on quality assurance of deliverables, which is planned to be achieved with the coordinated mobilisation of the project partners, each of whom undertake clear roles in the review process. A thorough quality procedure shall be followed; each project deliverable will be quality-reviewed by two internal reviewers (members of the consortium partners), as well as by the PC and the PM, before being finally reviewed and edited by an additional member of the management team from NTUA, securing that the submitted deliverable adequately satisfy the quality criteria of clarity, completeness, accuracy, relevance, and technical compliance.

Specific performance indicators have been set since the proposal phase and monitoring data will be collected regularly, aimed at fully informed reporting and at allowing for proper self-assessment of results.

Finally, a risk management plan is put into place, consisting of the identification of the technical (research-oriented) and management (project implementation-related) risks; the assessment of their degree of occurrence, and of their potential impact; and of reducing the possibility of materialisation for each one of the risks already foreseen in the design of the project by planning the necessary mitigation measures to be taken during implementation.

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1 Introduction

1.1 Purpose and Scope

The purpose of the Quality Management Plan (QMP) is to establish the roles, procedures, metrics, and tools necessary to ensure that the PARIS REINFORCE project is implemented smoothly and that all project deliverables are of high quality and scientific added value and submitted to the EC services on time.

In this context, the objectives of this deliverable (D1.1) are to:

- define clear project management roles and responsibilities of all partners within the consortium;
- establish the processes for ensuring the quality of the project deliverables and the project management activities;
- present the coordination and communication channels and processes among partners, during the project lifetime, which will secure smooth information flow;
- analyse the potential risks of the project and evaluate their impact and exposure; and
- proactively define risk mitigation measures to guarantee seamless and proper execution of the project's tasks.

Moreover, in order to ensure its relevance throughout the lifetime of the project, the QMP will be revisited regularly and updated when deemed necessary.

All PARIS REINFORCE partners, European and international, are obliged to comply with the requirements set out in this document.

1.2 Structure of the Document

The structure of this document is as follows:

- Section 2 provides an overview of the project governance, management structure and responsibilities, including the responsibilities for quality assurance. Moreover, this section presents the processes for internal communication, reporting and quality assurance of the deliverables and other materials/outputs, as well as the tools for effective document management.
- Section 3 presents the quality assessment framework, including the performance indicators aimed at continuous improvement throughout the project lifetime.
- Section 4 analyses the risks that may jeopardise quality, as well as discusses the planned mitigation measures.
- Annex I: Internal Review Form template
- Annex II: Allocation of reviewers to deliverables (due by December 31st, 2019)
- Annex III: Impact indicators
- Annex IV: Communication and Dissemination indicators
- Annex V: Quality indicators

2 Project Management ensuring quality

The PARIS REINFORCE governance and management structure guarantees smooth decision-making, prompt management of risks and unforeseen events, suitable interaction with relevant stakeholders, and direct participation of all partners in the operations of the project.

2.1 Project Governance

The **Management Board (MB)** is the body that ensures effective decision-making, at both strategic and operational level, and that oversees the regular project management activities on a daily basis. The MB consists of one representative from each beneficiary (i.e. from each one of the European partners) and the Project Coordinator (PC) from NTUA. The PC chairs all meetings of the MB, unless decided otherwise by the MB.

The activities of the MB include, among others: (a) management and monitoring of project development according to the work plan; (b) guidance of the project with respect to external development and potential collaborations; (c) review of the general scientific and technical program and of the project outcomes; (d) monitoring of the quality management plan as well as review and approval of the risk assessment; (e) conflict resolution management; and (f) review and approval of financial issues.

The operational procedures for and the decisions to be made by the MB are fully described in Section 6.3 of the PARIS REINFORCE Consortium Agreement.

2.2 Project management actors, roles, and responsibilities

The PARIS REINFORCE **Project Coordinator (PC)**, Prof. Haris Doukas (NTUA), oversees the scientific and technical direction of the project and the project deliverables, manages financial planning and control, and communicates with the EC's Project Officer (PO).

The PC is responsible for:

- monitoring all partners' compliance with their obligations;
- keeping the address list of members of all PARIS REINFORCE partners and other contact persons updated and available;
- collecting, reviewing to verify consistency, and submitting reports, other deliverables (including financial statements and related certification) and specific requested documents to the Funding Authority;
- preparing the meetings, proposing decisions and preparing the agenda of the MB meetings, chairing the meetings (unless otherwise decided by the MB, in which case a different chairperson is selected), preparing the minutes of the meetings and monitoring the implementation of decisions made at meetings;
- promptly transmitting documents and information connected with the project to any Party concerned;
- administering the financial contribution of the Funding Authority and fulfilling the financial tasks described in Section 7.3 of the PARIS REINFORCE Consortium Agreement.

An exhaustive list of all responsibilities of the PC are presented in detail in the PARIS REINFORCE Consortium Agreement, to which all beneficiaries have agreed and will adhere.

Linked with the present deliverable, the PC has the responsibility of ensuring that the quality management procedures (described in the following Sections) are respected by all PARIS REINFORCE partners.

The PC is supported by a **Project Manager (PM)**, namely Dr. Alexandros Nikas, as well as a project management team (led by Dr. Alecos Kelemenis and Mr. Kostas Eleftheriadis) from NTUA. They will focus on the day-to-day administration of the project. They will work closely with the PC, providing support with the financial and overall management and communication with all partners. The PM will also be involved in setting up and overseeing the

internal communication system, in cooperation with HOLISTIC (Task 1.2 in the Grant Agreement). Finally, the PM will have the responsibility for the scientific/research progress and will be referring to the PC in this respect.

The **Quality Manager (QM)**, Dr. Glen Peters from CICERO, will be overviewing the process for the monitoring of the project progress. If there emerge deviations from the project plan, the QM, along with the PC and the responsible partners, will discuss how the progress can be realigned with the plan. It is noted that the day-to-day monitoring against the quality standards, as described in the present document, will be performed by the management team from NTUA.

Each WP is coordinated by a **WP Leader (WPL)**, responsible for the implementation of the respective WP in line with the work description. The WPL is responsible for reviewing and evaluating intermediate and final WP outputs in conjunction with other WP partners; and for cooperating with other WPLs and the Stakeholder Council. In particular, the WPLs are responsible for:

- coordinating the WP tasks including technical and management activities;
- ensuring that the WP fulfils the objectives listed as milestones and deliverables;
- monitoring progress against time, budget allocations and the expected outcomes;
- implementing corrective actions if needed;
- delivering required information for the preparation of all plans and reports;
- preparing the consolidated WP reports on a bi-annual basis or more frequently if required;
- stimulating interaction and proactive sharing of information with other WPs;
- assigning internal reviews of draft deliverables, in terms of content/editing, prior to finalisation and submission.

The WPLs have the responsibility for the high quality of the respective technical deliverables and other materials related to their WPs.

The WPLs are presented in Table 1.

Table 1: Work Package Leaders in PARIS REINFORCE

WP No	Name	Organisation
WP1	Haris Doukas and Alexandros Nikas	NTUA
WP2	Alevgul Sorman	BC3
WP3	Georg Zachmann	Bruegel
WP4	Chara Karakosta	NTUA
WP5	Baptiste Boitier	SEURECO
WP6	Ajay Gambhir	Grantham
WP7	Annela Anger-Kraavi	Cambridge
WP8	Zsolt Lengyel	IEECP
WP9	Christos Ntanos (EM) and Alecos Kelemenis	NTUA

The **Task Leaders (TLs)** are responsible to lead the execution of activities under the respective task and guide the rest of the partners in fulfilling their activities in a timely manner. More specifically, the TLs are responsible for:

- planning and monitoring activities outlined in each task;
- developing the respective templates, where needed, with the contribution of the WPL;
- ensuring timely submission of related deliverables;
- communicating regularly with the WPL in order to discuss progress;
- communicating potential problems identified during the implementation of the activities;
- compiling partners' input in one integrated deliverable;
- sending the draft deliverable in time to the WPL for comments;
- integrating partners' comments in the deliverable to produce the final version.

The **consortium partners/contributors to tasks** are responsible for:

- responding to requests by the TLs, WPLs, and the PC in a timely manner, in line with the set deadlines;
- reporting any difficulties encountered during the implementation of their activities to the TL—when these difficulties affect the timely submission of their contribution or the quality or impact of their work, then mitigation actions should be suggested and decided with the WPL and the PC;
- communicating new risks identified for mitigation measures to be taken to the corresponding TLs, and WPLs as well as the PC; and
- developing deliverables and ensuring that these are of high quality and can be published/submitted to the EC services.

An **Ethics Mentor (EM)**, Dr. Christos Ntanos from NTUA (see Deliverable D9.3), is appointed in order to monitor the compliance of the project with the ethics requirements set in the Grant Agreement and reflected in the respective ethics deliverables. These refer to the protection of personal data (POPD) to be collected and processed by the PARIS REINFORCE partners. Thus, the EM will perform the role of the **Data Protection Officer (DPO)** with the objective to secure that PARIS REINFORCE is implemented in line with EU General Data Protection Regulation (GDPR). The EM will provide advice to the consortium through regular communication with the Ethics Liaison Officer who will be the Ethics focal point for all PARIS REINFORCE partners.

2.3 Project management structure

The PARIS REINFORCE management structure is shown in Figure 1.
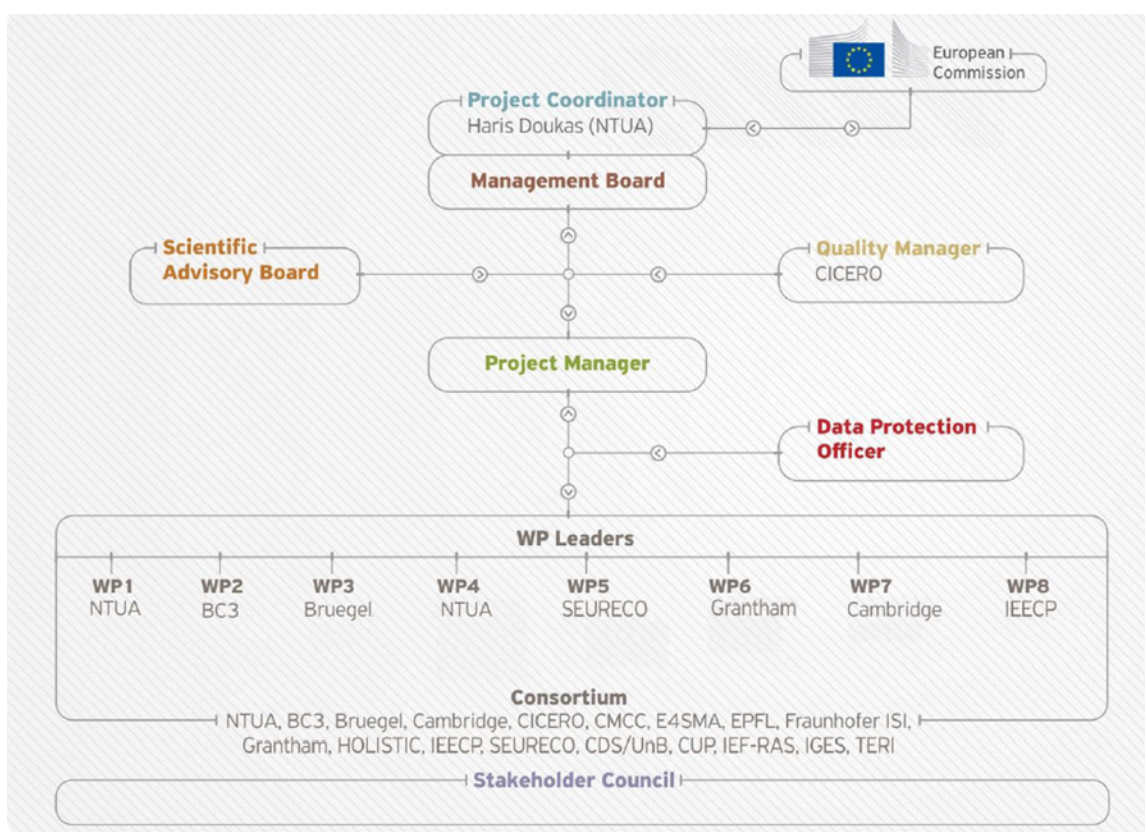
Figure 1: The PARIS REINFORCE management structure

The Scientific Advisory Board and the Stakeholder Council do not have management mandates as such, but they will be interacting with the management bodies of the project.

The **Scientific Advisory Board (SAB)** is composed of external international experts recognised in the climate and

The PARIS REINFORCE project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 820846.

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energy area. Their role is to provide independent opinion, acting as advisors of the project's overarching progress and key outputs.

The **Stakeholder Council** will be coordinated by the PC and managed by WP3 Leader (Bruegel), in close cooperation with WP8 Leader (IEECP), to liaise stakeholder engagement with communication and dissemination. This will ensure that the communication process is consistent and transparent inside and outside the consortium. The WP3 Leader will carefully manage the relationship with stakeholders/wider community and ensure diverse representation and accuracy of stakeholder inputs across all work packages. It will also secure the 'co-design and co-creation' nature of PARIS REINFORCE, as well as that outputs result in tangible tools relevant to the policymaking and implementation processes.

2.4 Project management processes

2.4.1 Document management

2.4.1.1 Documentation requirements

Document management refers to the preparation of template documents for the various project outputs and management reports; the establishment of a document management system; and the assurance of compliance with the document naming conventions. The above-mentioned tasks are under the responsibility of the PC.

During PARIS REINFORCE, sixty-two (62) deliverables and a number of other documents will be produced, as shown in Table 2.

Table 2: Documents to be produced in PARIS REINFORCE

Type	Responsible	Type	Template
Deliverable submitted to the EC	As per Annex I (Part A) of the Grant Agreement	External-output	Deliverable Document Template (i.e. the template used for the present Deliverable)
Internal Project Presentation	All partners	External-promotion	Project Presentation Template
Meeting/Event Agenda	Partner hosting the Meeting/Event	External-management	Meeting/Event Agenda Template
Meeting Minutes	Partner hosting the Meeting	External-management	Meeting Minutes Template
Deliverable Internal Review Form	All partners	Internal-monitoring	Annex I: Internal Review Form Template
Internal Effort and Cost Reporting	All partners	Internal-monitoring	Internal Effort and Cost Reporting Template
Periodic Report PART B	Project Coordinator	External-management	As per Grant Agreement and Commission guidelines
Commentaries/Working documents/Policy briefs	All Partners	External-scientific and policy level	Commentaries Template/Working document Template/Policy brief Template

These documents should (and will) comply with the following standards:

- Word Processor: Microsoft Word 2007 and higher,
- Spreadsheet: Microsoft Excel 2007 and higher,

- Presentations: Microsoft PowerPoint 2007 and higher.

2.4.1.2   Naming conventions and versioning

Document configuration management will be ensured by tracking the versions the history of changes within the following project documents:

- Deliverables
- Project/WP Meetings agendas and minutes
- Project events agendas
- Official reports to the EC
- Documents, such as mailing lists and internal effort reporting, which are regularly updated
- Documents used for internal project management and monitoring purposes
- Materials/Publications produced by the project, such as commentaries, policy briefs, working documents, presentations, newsletters

Document history will be tracked in each deliverable in a separate table within it, describing the different versions of the document and the reasons of change/updates to it. Tables 3 and 4 show the naming conventions for the draft deliverable ready for internal review, and the revised deliverable after the internal review.

Table 3: Naming convention for the PARIS REINFORCE Deliverables

Name	PARIS REINFORCE DX.Y [Deliverable title]-vA.BB
where	X: Work Package number
	Y: Deliverable number
	A: Major version of the deliverable
	BB: Minor version of the deliverable for updates during the preparation phase
Examples	PARIS REINFORCE D1.1 Quality Management Plan-v0.10
	PARIS REINFORCE D1.2 Report on Project and Advisory Board Meetings-v1.00 (the version 1.00 will be always the version to be initially submitted to the EC)
Notes	If the Deliverable title is longer than 50 characters (with spaces) then the title should be shortened accordingly by the Deliverable leader.

Table 4: Naming convention for the PARIS REINFORCE reviewed Deliverables

Name	PARIS REINFORCE DX.Y [Deliverable title]-vA.BB_IN
where	X: Work Package number
	Y: Deliverable number
	A: Major version of the deliverable
	BB: Minor version of the deliverable for updates during the preparation phase IN: Initials of the reviewer's name
Examples	PARIS REINFORCE D1.1 Quality Management Plan-v0.10_HD
	PARIS REINFORCE D1.1 Quality Management Plan-v0.60_AN

For example, the people involved in D8.1 PARIS REINFORCE visual identity are: VM, author responsible; VP, contributing partner; MG, Reviewer 1; JM, Reviewer 2; AN, Reviewer 3; HD, Reviewer 4; GP, Quality Manager; and AK, editor (for the roles in the internal review process, see the "Roles and responsibilities" section) .

The various names and versions of the deliverable may be:

- PARIS REINFORCE D8.1 PARIS REINFORCE visual identity-v0.10 (this version is typically the one to include only the Table of Contents, to be further edited by the contributing partners)
- PARIS REINFORCE D8.1 PARIS REINFORCE visual identity-v0.32 (first draft of the deliverable submitted to

the PM for internal review)

- PARIS REINFORCE D8.1 PARIS REINFORCE visual identity-v0.32_HD (first draft document reviewed by HD and communicated, via the PM, to the Deliverable leader, featuring comments and tracked changes)
- PARIS REINFORCE D8.1 PARIS REINFORCE visual identity-v0.40 (revised deliverable by the Deliverable Leader, having integrated the comments of all reviewers on version 0.32, submitted for further review)
- PARIS REINFORCE D8.1 PARIS REINFORCE visual identity-v0.40_AN (second draft document reviewed by AN and communicated, via the PM, to the Deliverable leader, featuring comments and tracked changes)
- PARIS REINFORCE D8.1 PARIS REINFORCE visual identity-v0.44 (revised deliverable by the Deliverable Leader, having from their side integrated comments of all reviewers on version 0.40)
- PARIS REINFORCE D8.1 PARIS REINFORCE visual identity-v0.44_VP (document modified by contributor VP, based on comments addressed from their side)
- PARIS REINFORCE D8.1 PARIS REINFORCE visual identity-v0.50 (final version submitted by the Deliverable Leader, submitted to the PM for final review)
- PARIS REINFORCE D8.1 PARIS REINFORCE visual identity-v1.00 (final version, checked by AK and submitted to the EC)

Table 5 shows the naming conventions for the various documents related to meetings and events.

Table 5: Naming convention for documents related to PARIS REINFORCE meetings and events

Name	PARIS REINFORCE DX.Y [Deliverable title]-vA.BB_IN
where	A: Major version of the meeting/event related document
	BB: Minor version of the meeting/event related document for updates during the preparation phase
Examples	PARIS REINFORCE KOM Logistics-v0.10
	PARIS REINFORCE KOM List of participants-v0.10
	PARIS REINFORCE KOM Minutes-v0.10
	PARIS REINFORCE Consortium meeting 2nd July 2019 Minutes-v1.00
	PARIS REINFORCE MB meeting 23rd July 2019 Minutes-v1.00
	PARIS REINFORCE WP4 meeting 10th July 2019 Minutes-v1.00
	PARIS REINFORCE 1st Regional EU Workshop Agenda-v0.10

Table 6 shows the naming conventions for the official reports to the EC services.

Table 6: Naming convention for the PARIS REINFORCE official management reports

Name	PARIS REINFORCE DX.Y [Deliverable title]-vA.BB_IN
where	A: Major version of the report
	BB: Minor version of the report for updates during the preparation phase
Examples	PARIS REINFORCE 1st Periodic Technical Report-v0.10
	PARIS REINFORCE 1st Periodic Financial Report-v0.10
	PARIS REINFORCE Final Technical Report-v0.10

Table 7 shows the naming conventions for internal documents, such as mailing lists and internal effort reporting, which are regularly updated.

Table 7: Naming conventions for internal documents which are regularly updated

Name	PARIS REINFORCE [Document description]_ddmmyy or PARIS REINFORCE [Document description] [Partner name]_ddmmyy
where	dd: date; mm: month; yy: year
	PARIS REINFORCE Mailing List_200619
Examples	PARIS REINFORCE Effort and Cost Reporting NTUA_200619

Finally, Table 8 presents the naming conventions for materials/publications of the project.

Table 8: Naming convention for PARIS REINFORCE materials/publications

Name	PARIS REINFORCE [Material/Publication]-vA.BB or PARIS REINFORCE [Material/Publication] [Short title]-vA.BB
where	A: Major version of the material/publication
	BB: Minor version of the material/publication for updates during the preparation phase
Examples	PARIS REINFORCE Policy Brief Issue 1: Paris Agreement and Agenda 2030-v0.10
Notes	PARIS REINFORCE Newsletter No1-v0.10

2.4.2 Document management system

The Alfresco Community Enterprise Content Management (ECM) is an open-source, innovative platform, which serves the document management needs of PARIS REINFORCE. In particular, the "Document Library" feature of the platform will host all documents related to the WP deliverables, the scientific content, and the administrative documents that should be shared among the consortium partners.

The documents are classified as illustrated in Figure 2.
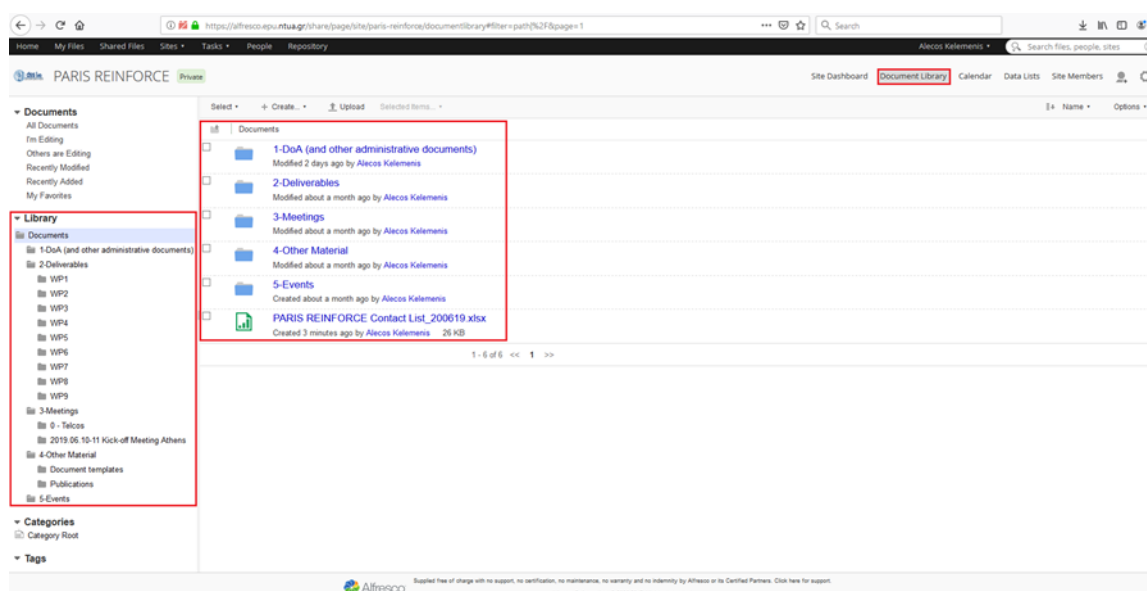
Figure 2: Screenshot from the "Document Library" tab in the PARIS REINFORCE Alfresco site

The structure is simple, yet comprehensive, allowing the user to identify/locate easily all documents related to the project.

Alfresco offers various functionalities that secure proper document management, as reflected in Table 9:

Table 9: Alfresco functionalities securing proper document management

Functionality	Description
Secure sharing of a document	To share a document uploaded onto the library, Alfresco creates a link that the user (creator of the document) can copy and send it to selected recipient(s). For someone to access the document, they will need to be a registered PARIS REINFORCE Alfresco user.
Replacing an existing document	Alfresco offers the user the capacity to upload new versions of an existing document. The user can indicate whether the respective file has minor or major changes and add a brief comment to describe changes. In this respect, Alfresco keeps all versions of a document

Functionality	Description
	(versioning), which is indispensable for reviewing purposes, such as for the deliverables' review process.
Locking a document	Alfresco offers the user the capacity to lock a document while they are editing it. Locking a document stops other users from modifying it in any way, until the editing process is over.
Use of templates	Document templates, such as the deliverables template, can be built into Alfresco, allowing the user to create a new document based on these templates. In PARIS REINFORCE, this functionality will secure uniformity and consistency across the same type of documents, mainly across deliverables.
Assignment of tasks	Alfresco can be used to assign tasks to consortium partners. There are several different ways this feature can be used, with the two most common tasks being 1) asking partners to review or approve a document, and b) asking a partner to make additions and/or amendments to a document.

Overall, Alfresco provides a central point, where PARIS REINFORCE partners can access project documents and collaborate on their development. Advantages of the system include:

- Documents in a single place. PARIS REINFORCE partners know that all project documents can be found on Alfresco.
- Document tracking. Alfresco allows the development of a document to be tracked: document versions are numbered, collaboration is structured, and old versions of documents are stored rather than overwritten.
- Ownership recorded. When a document is uploaded onto Alfresco, information regarding the date, time and author is all recorded.
- Risk reduction. Using Alfresco reduces reliance on WP and task leaders to manage document collaboration via other routes, such as email, Dropbox, etc. Alfresco also allows document changes to be 'rolled back', reducing the risk of work being lost due to files being accidentally overwritten or deleted.
- Document availability. Alfresco is a web-based system that is accessible via computers, smartphones and tablets. One can access documents wherever they are.

The management team from NTUA will be responsible for securing that Alfresco, and no other tool, is used for document management. In particular, the PC will ensure that:

- all documents related to the work carried out in PARIS REINFORCE are uploaded onto Alfresco;
- all partners use Alfresco to collaborate on documents produced with PARIS REINFORCE partners, rather than other tools, such as e-mail, Dropbox, or Google Drive;
- all consortium partners have access to all relevant documents; and
- document collaboration is not delayed by consortium partners, in particular WPLs, being on missions, on holidays or working on other assignments outside PARIS REINFORCE.

2.5 Internal communication

Effective channels, processes, and tasks for internal communication have already been established since Month 1, in order to allow for effective coordination, smooth cooperation and efficient exchange of all necessary information for the project implementation.

2.5.1 Physical meetings

Regular physical meetings will be held on a six-month basis in order to ensure that all procedures are understood and implemented as planned. The management team from NTUA is responsible for the organisation of the agenda of the meetings. In case of an emergency or in need of a conflict resolution, ad-hoc meetings may be organised upon decision of the MB. A tentative schedule of project meetings is available in Table 10.

Table 10: Tentative schedule of PARIS REINFORCE physical project meetings

Meeting identifier	Time	Place
Kick-off Meeting	June 2019 (M1)	Athens
1st Project Meeting	November 2019 (M6)	Brussels
2nd Project Meeting	May 2020 (M12)	Paris
3rd Project Meeting	November 2020 (M18)	Brussels
4th Project Meeting	May 2021 (M24)	London
5th Project Meeting	November 2021 (M30)	Bilbao
6th Project Meeting	May 2022 (M36)	Brussels

Proposed dates of every meeting will be discussed during remote meetings and decided over doodle polls organised by the management team from NTUA, at an early stage, i.e. at least four (4) months before a physical meeting.

2.5.2 Remote meetings

Remote meetings (through GoToMeeting) will be employed for the effective communication among project partners during the project lifecycle. Monthly **consortium calls** on all WP updates (with reviews and appropriate revisions of the work) will enable following a realistic time schedule and introducing corrective actions in a timely fashion. Monthly **MB meetings** will also ensure than the project is on track towards achieving its objectives and vision. The management team from NTUA is responsible for the organisation of the agenda and for the coordination of these meetings. The meetings' details (day, time, GoToMeeting link, agenda) will be communicated by the management team from NTUA at least 1 week before the date of each meeting, in order to allow time to the participants for scheduling and preparing all necessary information for each meeting. An indicative plan for the remote meetings during the first year of the project (June 2019-May 2020) is shown in Figure 3.

Figure 3: Tentative plan for the remote project meetings (MB meetings and Consortium Calls)

The minutes of each project meeting (physical and remote) will be drafted right after each meeting. The minutes will be compiled into one document forming part of deliverable D1.2, 'Report on Project and Advisory Board Meetings', due in Month 6 and with updates in Months 18 and 30.

In addition, remote WP meetings will be held on an ad-hoc basis, initiated by the respective WPL, in coordination with the PC, who will be present in these meetings. WP meetings will also serve for conflict resolution.

Generally, technical issues or conflicts within the contractual commitments that do not involve any contract,

budget, resource allocation or overall project focus changes will be discussed at WP level first. If the decisions reached at WP level are unacceptable by any single consortium partner, the conflict will be resolved according to a conflict resolution procedure that can be summarised in the next steps:

1. The consortium members involved in the implementation of the WP inform the WPL for the emerging conflict.
2. The WPL decides whether the issue needs to be discussed in a bilateral teleconference or a dedicated WP meeting. The WPL then informs the PC for the planned actions.
3. The result of the bilateral teleconference or the meeting is communicated to the PC.
4. If no consensus has been reached thus far, the PC contacts the responsible persons and tries to resolve the conflict.
5. If the disagreement remains, the issue is escalated to the MB. The decision that will be made at that level will be considered as the final resolution of the issue.

Minutes of WP meetings will be drafted by the WPL following the respective template and will be shared with the consortium.

2.5.3 Weekly updates

The PC will be sending weekly updates (e.g. every Wednesday) in the form of an e-mail to inform PARIS REINFORCE partners about the latest updates regarding the implementation of the project. The update may include but not be limited to reminders about upcoming deliverables and project meetings, information about international events and involvement of the consortium, useful documentation and produced material and deliverables, requests for action by partners, etc. Thus, all partners can always have an updated overview of the project implementation, effectively communicated.

2.5.4 Communication tools on Alfresco

Four features of Alfresco will be regularly used in PARIS REINFORCE for communication purposes.

The "Discussions" section acts as an internal forum, where all PARIS REINFORCE partners can start discussions or view existing discussions that are related to their topics of interest. The use of tags for each topic allows members to narrow their search each time, while there is the opportunity to include the discussions in an RSS Feed.

The "People" section includes the profiles of the project members, where each member/user can view individual profiles with contact details and information about others. The profiles include at the minimum the name, the email address and a photo of each member.

The "Data Lists" section includes several mailing lists, which include the PARIS REINFORCE e-mail contact list and lists for the MB, and the members involved in the various WPs. Apart from the e-mails, there are Skype usernames and telephone numbers for each member. This information is also included in separate documents within the Alfresco Document Library.

The "**Calendar**" includes a detailed month view calendar, where all PARIS REINFORCE events, deadlines and teleconferences are scheduled. There are tags in each event, so that the users can view each time only the events of their interest.

Figure 4 offers an overview of the PARIS REINFORCE Calendar on Alfresco.
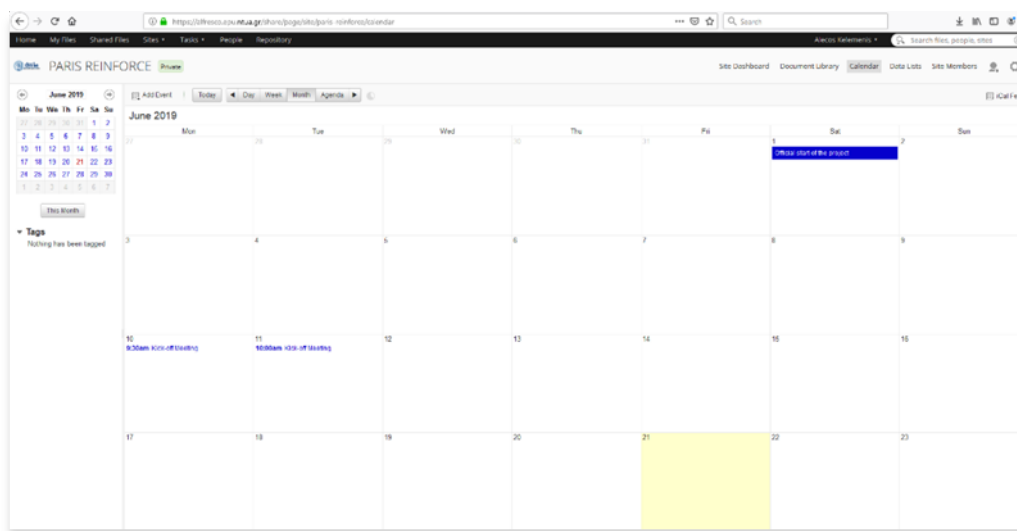
Figure 4: The Calendar feature in the PARIS REINFORCE Alfresco site

2.6 Internal reporting

For internal project management and monitoring purposes, the consortium partners will be submitting every 6 months their actual use of human resources to the PC.

Moreover, the consortium partners will be submitting the sub-contracting, travel, and other direct costs spent in the framework of the project to the PC for each of the reporting periods (Month 1 to 18 and Month 19 to 36, see below).

As far as internal reporting of human effort and other costs is concerned, a dedicated template has been created and will be used by all beneficiaries.

Finally, as per Article 18.1.2 of the Grant Agreement, the consortium partners will be keeping time records for the number of hours declared. These records will be in writing and approved by the persons working on the action and their supervisors, at least monthly.

Each partner will be responsible for keeping their time records, but there will be no obligation to submit them to the PC.

2.7 Official reporting

According to Article 20.2 of the Grant Agreement, the project is divided into the following 'reporting periods' (RPs):

- RP1: from Month 1 to Month 18 (i.e. June 1, 2019 – November 30, 2020)
- RP2: from Month 19 to Month 36 (i.e. December 1, 2020 – May 31, 2022)

Articles 20.3 and 20.4 of the Grant Agreement describe in detail the content of the periodic report covering RP1 and the final report covering RP2.

The periodic technical report consists of two parts:

- Part A, generated by the electronic exchange system in the Participant Portal, which requires that the beneficiaries answer to a questionnaire covering issues related to project implementation and the economic and social impact, notably in the context of the Horizon 2020 key performance indicators and the Horizon 2020 monitoring requirements; and

- Part B, the narrative part that includes explanations of the work carried out by the beneficiaries during the reporting period.

The information will be regularly inserted into the template, in order to allow timely submission of the report, ensuring that all necessary information is provided to the EC. Part A will be also fed into on a regular basis.

The process to ensure high quality in the delivery of the official reports consists of the following steps (Table 11):

Table 11: Process for the delivery of the official progress reports

When	Who	What	Recipient
1 month before the end of the reporting period	PC	Asks the consortium partners to insert information in the periodic report template within three weeks	All consortium partners
1 week before the end of the reporting period	All consortium partners	Provide their technical inputs, filling in the template	PC
1 week after the end of the reporting period	All consortium partners	Provide their final resources consumption (submit their own financial statement on the Participant Portal)	EC
2 weeks after the end of the reporting period	PC	Synthesises and shares the draft periodic report (Parts A and B in Word templates) for internal review	QM, PM, EM
3 weeks after the end of the reporting period	QM	Provides feedback on the draft periodic report	PC
3 weeks after the end of the reporting period	PC	Shares PM's, EM's, PC's and QM's feedback/comments with partners and asks that concerns be addressed within one week.	All consortium partners
1 month after the end of the reporting period	All consortium partners	Provide their final inputs/ modifications, if any, in respect to comments raised affecting them, if any	PC
5 weeks after the end of the reporting period	PC	Puts together final report and submits to the EC	EC

The above time schedule provides the PC with three extra weeks to address, if necessary, any remaining issues before eventually submitting the report to the EC, as per Article 20 of the GA.

2.8 Quality Assurance of Deliverables

In this section, the necessary activities to assess, analyse, and improve the quality of project outputs are described.

2.8.1 Review roles and responsibilities

The following actors will be engaged in the process for the review of deliverables.

Quality Manager (QM): The QM, whose role can be framed like that of an Editor of a peer-reviewed scientific journal, will be supervising the quality assurance process, in close contact with the NTUA management team. For certain cases of critical deliverables (e.g. research works), the QM will review their quality and provide feedback during the 2nd round of the review process. The QM will have the authority to closely follow the progress in any deliverable on an ad hoc basis.

Internal reviewers: They are responsible to thoroughly read the draft deliverable, assess its quality against pre-

defined criteria and provide clear comments for improvement. The internal reviewers will be involved in the first review round, following the original submission of the draft version of a deliverable. In case, during the second review round performed by the PM and the PC (see below), the quality of the deliverable is still not deemed to be in line with the standards set nor adequate for submission to the EC services, the two internal reviewers may be invited for one or more revision iterations, until the deliverable is ready for final submission to the EC services.

Deliverable Leaders: They allocate tasks to and coordinate the work of the contributors, and are responsible to consolidate the inputs of all contributors into the draft deliverable to be submitted for review and publication. They must address the comments made by the internal reviewers in order to improve the quality of the deliverable. They prepare the Table of Contents of the deliverable.

Deliverable contributors: They are responsible to draft part of the deliverable, as per the allocation of tasks performed by and deliver their inputs timely to the Deliverable Leader.

Project Coordinator (PC): The PC will be involved in the entire review process, meaning that the PC must review both the draft version submitted for review by the respective Deliverable Leader and the revised version submitted after addressing the comments raised by the internal reviewers. The PC will be reviewing all deliverables.

Project Manager (PM): The PM will be involved in the entire review process, meaning that the PM must review both the draft version submitted for review by the respective Deliverable Leader and the revised version submitted after addressing the comments raised by the internal reviewers. The PM will be reviewing all deliverables.

Member of the management team from NTUA: One member of the management team from NTUA will be in charge of the final editing of the deliverable before the official submission to the Participant Portal. This is a final technical check that the deliverable complies with the template and that the deliverable is ready to be uploaded, ensuring that the text is free of spelling/grammar/syntactic/semantic errors, as well as of comments, and highlighted text. Other aspects (page numbering and table of contents, figures, tables, etc.) will be also checked.

2.8.2   Review process

Each project deliverable will be quality-reviewed by two internal reviewers (members of the consortium partners), by the PC, the PM, and an additional member of the management team from NTUA.

2.8.2.1   Assignment of reviewers

The PC invites, through the weekly update, all consortium partners to declare their interest in reviewing the upcoming deliverables for the next semester (six months). Each partner declares interest and the PC then allocates reviewers based on the respective partner's technical expertise and overall availability. The number of deliverables to be reviewed by each consortium partners is subject to the budget and effort share in the project. A tentative allocation or reviewers for the deliverables due by December 31st, 2019, is illustrated in Annex II.

2.8.2.2   Review steps

For each deliverable of the upcoming semester, once the reviewers are assigned, the following steps take place to secure timely submission of the deliverable (Table 12).

Table 12: Deliverable Review process

(By) When	Initiator	What	Recipient
5 weeks before the official submission deadline	PM	verifies interest and informs of the review period/deadlines	The assigned internal reviewers

(By) When	Initiator	What	Recipient
4 weeks before the official submission deadline	Deliverable Leader	submits the first draft deliverable to Alfresco and informs by e-mail the PM	PM
4 weeks before the official submission deadline	PM	assigns reviewers in Alfresco by using the respective feature	The assigned internal reviewers
3 weeks before the official submission deadline	Assigned internal reviewers; PC	Submit the reviewed deliverable with their comments (activating track changes in the Word document) and the Internal Review Form (Annex I) to Alfresco and inform the PM by e-mail	PM
3 weeks before the official submission deadline	PM	informs the deliverable Leader and invites them to address the comments of the reviewers	The deliverable Leader
10 days before the official submission deadline	Deliverable Leader	Submits the revised (second draft) deliverable to Alfresco and informs the PM by e-mail	PM
5 days before the official submission deadline	PC; PM	review the revised deliverable; and submit it to Alfresco for final editing	PM
2 days before the official submission deadline	Assigned member of the management team from NUTA	Edits the deliverable and informs the PM	PM
2 days before the official submission deadline	PM	Submits the deliverable to the Participant's Portal, if of high quality; otherwise, informs of a two-week delay	PO in EASME
2 days before the official submission deadline	PM	Informs about the submission of the deliverable, if of high quality; otherwise, initiates one further review round	All consortium partners; and/or Deliverable Leader

The quality of the deliverables will be assessed against specific quality criteria in order to ensure uniformity and consistency in the review process of all deliverables and to ensure the reviewers' clear understanding of and compliance with the process. The criteria, along with the aspects to be investigated, are outlined in Table 13:

Table 13: Quality criteria for deliverables

Quality Criteria	Description
Clarity	The language of the text is clear (proper sentence structure is used); The text is in English (UK); The text is unambiguous; The terminology, including acronyms, is explained; There are no spelling errors; Any potentially sensitive information is appropriately worded
Completeness	All aspects of the deliverable, as described in Annex I (Part A) of the GA, are fully addressed
Accuracy	All factual information used in the deliverable is supported by the respective references
Added value	Each aspect of the deliverable is analysed in adequate detail;

Quality Criteria	Description
	The deliverable has scientific and/or policy value, as envisaged by the project; The language of the text is useful to the targeted audience (e.g. scientists, policymakers, etc.)
Relevance	The content is relevant to the scope of the deliverable; The deliverable is relevant to the targeted readers/audience
Compliance	The text is written in line with the deliverable template

Clear instructions will be given to all reviewers by the PC and the QM so that they assess the deliverables against all the above-mentioned criteria when they perform the review.

2.9 Quality Assurance of other material

The other scientific and policy-related outputs of the project, i.e. the project commentaries, briefs and working documents, will also be reviewed before they are published, mainly for compliance with the respective templates. As there are no deadlines and no formal submission for these materials, the process only includes one step, delivery of the draft document by the dissemination leader, based on the inputs of the authors, and a technical check by the management team from NTUA.

Templates are also developed for other, communication-related, project material (e.g.. newsletters and press releases). For this type of resources, the management team from NTUA will be reviewing the content of every produced resource for completeness and its format for compliance with the respective template.

3 Quality assessment

3.1 Evaluation framework

The consortium has defined two levels of self-evaluation of the PARIS REINFORCE project.

The first one is related to the assessment against the performance indicators set under the expected policy, societal, and research/scientific impacts reflected in Annex I (Part B) of the Grant Agreement. The second one is associated with the internal processes and the quality of operations of the project. The performance indicators are meant to measure the performance of the consortium against the principles and processes presented in the current QMP.

The responsible for the quality assessment tasks, such as the data collection, data analysis and synthesis and reporting, is the project management team from NTUA, supervised by the PC and coordinated by the PM. NTUA will be collecting data regularly, closely working with all partners, and will be updating the values of the indicators on a six-month basis, which will allow the consortium to take corrective measures if needed, in a timely manner.

3.2 Performance indicators

The tables in Annex III and Annex IV summarise a) the indicators per impact and b) the communication and dissemination indicators respectively. For each indicator, the target values are extracted from Annex I (Part A) of the Grant Agreement and the column for the current value will be updated on a six-month basis (the current value at the beginning of the project is zero).

Annex V refers to the indicators for the assessment of the quality of operations and processes of implementation.

4 Risk management plan

The Risk Management Plan consists of the identification of the technical (research-oriented) and management (project implementation-related) risks; the assessment of their degree of occurrence, and of their potential impact; and of reducing the possibility of materialisation for each one of the risks already foreseen in the design of the project by planning the necessary mitigation measures to be taken during implementation.

4.1 Risk analysis and mitigation measures

The risk probability and impact are reflected in the following linguistic values (Table 14).

Table 14: Linguistic values for risk impact and risk probability occurrence

Risk impact	Risk Probability of Occurrence
Insignificant	Very Low
Low	Low
Moderate	Moderate
Major	High
Catastrophic	Very High

Table 15 presents the risks that have been identified already since the proposal phase and the proposed mitigation measures.

Table 15: Identified risks in PARIS REINFORCE and the proposed mitigation measures

Risk ID	Description of Risk	WPs Involved	Risk Impact	Risk Probability	Proposed Risk Mitigation Measures
1	Partner(s) unable to contribute	All	Major	Low	Project management (WP1) oversight will be continuous. Failure of individual participants will lead to immediate assessment of current partner capabilities and reassignment of tasks. Consortium partners have an adequate range of capabilities (academic, technical, dissemination, etc.) and can take over tasks if necessary.
2	Partners' contribution to outputs are not delivered on time	All	Moderate	Moderate	The design/development process and the main specifications and assumptions start immediately in the project, giving early enough appropriate directions to partners to timely prepare their outputs. Monthly consortium calls on all WP updates (with reviews and appropriate revisions of the work plans) allow a more realistic time schedule to be followed and corrective actions to be introduced in a timely fashion. More than ten deliverables across all WPs are expected as early as during the first semester, thereby indicating potential issues in the respective procedures. Strategic milestones set facilitate tracking progress of work in the project.
3	Low scientific and technical quality of deliverables	All	Major	Low	A rigorous quality management procedure will be designed and implemented, coordinated by the assigned QM, in cooperation with the PC and the project management team from NTUA. First drafts of the deliverables will be circulated 1 month prior to the submission date, allowing for a thorough internal review process, in which detailed feedback is provided by the PC, the PM, the QM and at least two internal reviewers of the consortium that are both interested in and relevant to the content of each deliverable. The PM will keep track of all internal reviewers. Consortium Partners have a good track record for quality in both the academic and technical field.
4	Low engagement of stakeholders and limited international cooperation	WP3	Major	Moderate	The consortium partners have a significant network of contacts, are very experienced in the engagement of key stakeholders as well as in the formation and maintenance of dissemination and communication nodes. Even at the proposal stage, more than thirty key organisations (including Ministries and other policymakers, the World Bank, IPCC key personnel, NGOs, research/academic institutes, networks and associations, etc.) have formally communicated their

Risk ID	Description of Risk	WPs Involved	Risk Impact	Risk Probability	Proposed Risk Mitigation Measures
					intent to be part of the Stakeholder Council and interest in helping the consortium deliver envisaged results.
5	Lack of coordination with Stakeholders and wrong expectations	WP1, WP2, WP3, WP4, WP5, WP6, WP7, WP8	Moderate	Moderate	Acknowledging challenges associated with the scientific paradigm to date and the requirement of inclusiveness in the climate dialogue, the project is oriented on demand, i.e. strong dialogue and consultation with stakeholders. In this respect, at least 18 Talanoa-style workshops, surveys and e-meetings will secure co-design of process and co-creation of knowledge. Based on respective decision support tools (WP4), consensus will be monitored for major outputs (in terms of assumptions, and policy/pathway development). Intensive coordination between WP3 and the MB.
6	Limited participation of external experts, beyond the Stakeholder Council	WP3, WP8	Moderate	Moderate	A robust and rigorous CDE plan will be elaborated in Task 8.1, promoting therefore with all possible means the PARIS REINFORCE objectives. To maximise participation, the project team will make use of existing know-how/past experience and lessons learned in establishing an effective communication platform.
7	Consortium's difficulty in organising and attending all stakeholder workshops within the project lifetime	WP3	Major	Low	Organisation responsibility for the workshop in each country will be undertaken by the respective partner. The two series (in line with the two modelling iterations) of national and regional workshops correspond to different hosting countries. For the 1st round (demand orientation, Task 3.2), workshops in selected countries will complement the stakeholder dialogue via the Stakeholder Council. For the 2nd round (co-creation of knowledge, Task 3.3), other countries will be selected to host workshops, which will complement the stakeholder dialogue via the Council.
8	Limited transparency of the modelling processes	WP2	Major	High	Protocols for modelling, scenario development and stakeholder engagement will be developed from the beginning of the project (finished by month 6). In addition, the specifications of the open access I2AM PARIS platform are strictly defined by stakeholders and policymakers, who will also drive all modelling processes, by codeveloping the modelling needs, assumptions,

Risk ID	Description of Risk	WPs Involved	Risk Impact	Risk Probability	Proposed Risk Mitigation Measures
					parameters and scenarios. Finally, all datasets used will be stored and published in an open data repository.
9	Vulnerability of modelling outcomes to different types of uncertainty	WP4	Major	Moderate	Enhancing the robustness of the outcomes against different types of uncertainty constitutes one of the three project pillars. Modelling activities will be coupled with a number of robustness analysis, including portfolio analysis for assessing both stochastic and deterministic uncertainty, index decomposition analysis and IAM benchmarking with sectoral models. In integrative approaches with formalised modelling frameworks and methodologies, the focus will include explicit standardisation of processes and development of robustness and stability indices.
10	Limited legitimacy of models, methods and tools	WP2, WP5, WP6, WP7	Major	Moderate	Reports, typologies and best practices regarding the capacity of our models (relevant research/policy questions, key modelling features, etc.) will be produced and effectively disseminated. All modelling activities will be carried out in the open access I2AM PARIS platform, the specifications of which are strictly defined by stakeholders and policymakers, who will also drive all modelling processes, by co-developing the modelling needs, assumptions, parameters and scenarios, through numerous dedicated workshops in the EU and all other countries/regions of focus.
11	"Lock-in" on the design of future pathways, oriented too much along current trends, leading to limited ambition levels	WP5, WP6, WP7	Major	Moderate	Tasks 5.3 & 6.2 are devoted to identifying transformative innovations (not only technological, but fundamental re-organisations or shifts that require managerial, institutional and social innovations), or "game changers", and test their effects on decarbonisation pathways and overall climate goals, in light of the need to increase ambition, drawing heavily from the analysis of such innovation dynamics (WP4).
12	Limited contribution to major international scientific assessments	WP7	Moderate	Moderate	Numerous researchers from the consortium partners have AR6 lead authors, while special efforts will be put towards model inter-comparisons. Moreover, the SAB, with increased knowledge and capacity to steer our efforts towards the efficient support of the international scientific dialogue and assessment reports, already includes key experts in this respect, such as the Head of Science

Risk ID	Description of Risk	WPs Involved	Risk Impact	Risk Probability	Proposed Risk Mitigation Measures
	such as the IPCC reports				TSU of IPCC WGIII and scientists with a remarkable track record in IPCC reports, as well as important international associations (e.g. the World Bank, IETA, and WWF International).
13	Possibility that international partners do not secure funding	WP1, WP2, WP3, WP6, WP8	Low	Moderate	Non-participation of an international partner can potentially have a minor shortcoming in two dimensions: (i) modelling analysis and (ii) stakeholder engagement, addressed as follows: i. The five international partners have the capacity to analyse their respective country's climate action pledges to a finer detail with their national models (with regard to the Brazilian LULUCF sector with SISGEMA; the Chinese energy system with MAPLE-China; Russia's industry with CONTO; Japan's cross-sectoral NDC analysis with their nationally detailed variant of the GCAM model; and India's energy sector with MARKAL-India). However, the modelling ensemble available by the thirteen European beneficiaries can adequately and fully cover all five respective countries (Brazil; China; Russia; Japan; and India, respectively), with or without the participation of the corresponding international partners, but not to the same level of detail for the aforementioned sectors. ii. Although travel costs for European partners' participation in workshops held in the countries of the five international partners have already been foreseen in the project's funding, costs for the organisation of stakeholder workshops in these five countries is expected to be covered by the five international partners. In case any of these partners do not receive adequate funding to cover these, costs for possible workshops in the corresponding countries will be covered by the coordinator, NTUA. Furthermore, contacts for stakeholder engagement and input will be provided by the five international partners, whether they secure funding for their participation in the project or not, as well as via existing ties of partners of the consortium with stakeholders from these countries.

ANNEXES

Annex I: Internal Review Form template

Work Package	5
Deliverable Number	1
Deliverable Name	Documentation of national/regional models for Europe
Deliverable Leader	SEURECO
Reviewer 1	NAME
Reviewer 2	NAME
Reviewer 3	NAME
Reviewer 4	NAME

Quality assessment			
Review round	**Reviewer**	**Assessment**	**Recommendations**
1	NAME	Reject	Recommendations
	NAME	Major revision	Recommendations
	NAME	Minor revision	Recommendations
	NAME	Accept	Recommendations

Annex II: Allocation of reviewers to deliverables (due by December 2019)

Work Package	Deliverable Number	Deliverable Name	Due Date	Deliverable Leader	Reviewer 1	Reviewer 2
1	1	Quality Management Plan	31/7/2019	NTUA	CICERO	
9	3	GEN - Requirement No. 4	31/7/2019	NTUA	Ethics Mentor	
8	1	PARIS REINFORCE visual identity	31/8/2019	HOLISTIC	IEECP	Grantham
3	1	Stakeholder engagement plan	30/9/2019	Bruegel	E4SMA	BC3
5	1	Documentation of national/regional models for Europe	30/9/2019	SEURECO	Grantham	Bruegel
6	1	Documentation of national/regional models for countries outside Europe	30/9/2019	Grantham	EPFL	CMCC
7	1	Documentation of global IAMs	30/9/2019	Cambridge	IEECP	SEURECO
8	2	Project communication, dissemination & exploitation plan	30/9/2019	IEECP	Bruegel	HOLISTIC
8	14	Plan for coordination and synergies	30/9/2019	NTUA	Cambridge	CICERO
9	1	H - POPD - Requirement No. 1	30/9/2019	NTUA	Ethics Mentor	
2	1	Report of models, tools and stakeholder knowledge	31/10/2019	BC3	Grantham	E4SMA
1	2	Report on Project and Advisory Board Meetings	30/11/2019	NTUA	E4SMA	Cambridge
3	2	Policy Briefing on "What can 'our models' deliver	30/11/2019	Bruegel	Grantham	BC3
8	5	Creation of the website	30/11/2019	HOLISTIC	NTUA	IEECP
8	6	Data management plan	30/11/2019	IEECP	E4SMA	BC3
9	2	POPD - Requirement No. 3	30/11/2019	NTUA	Ethics Mentor	
2	2	Protocol for model use, scenarios and stakeholder engagement	31/12/2019	BC3	Fraunhofer ISI	CICERO

Annex III: Impact indicators

Impact		Performance Indicator	Targets
Policy Impacts	1. Support EU policymakers in the process of developing EU's next NDC (EC1)	No of policy reports on future action pledges and long-term decarbonisation pathways of the EU	2 (D5.3 and D5.5)
		No of downloads of the two policy reports on future action pledges and long-term decarbonisation pathways of the EU (D5.3 and D5.5)	At least 150 (unique downloads)
		No of EU regional policy events	3 (2 workshops and 1 conference)
		No of stakeholders attending the EU regional policy events	40
		Level (%) of stakeholders' satisfaction from the EU regional policy events	80% with positive evaluation
		Level (%) of stakeholders' satisfaction from the degree to which the process has provided information on low-carbon pathways options and trade-offs	At least 50% of (the 30) policymakers (to participate in a survey) with positive evaluation
		No of EU policymakers in the Stakeholder Council and policy events	At least 20
		Level (%) of EU policymakers' satisfaction on the NDC relevance of the project, in particular the Stakeholder Council and the policy events	At least 80% with positive evaluation
	2. Support European national policymakers to plan and implement National Energy and Climate Plans, in accordance with EU's NDC and overall community objectives (EC1)	No of policy reports on European and national decarbonisation pathways	2 (D5.3 and D5.5)
		No of European countries where series of national workshops were implemented	At least 10
		Level (%) of stakeholders' satisfaction from the national workshops	At 50% with positive evaluation
		No of national policymakers in the Stakeholder Council	At least 2 national policymakers responsible for the vast majority of GHG emissions from at least 12 European countries
	3. Support EU policymakers in developing sectoral decarbonisation pathways, for the development of a detailed 2050 energy roadmap (EC1)	No of policy reports on sectoral decarbonisation pathways for Europe	2 (D5.3 and D5.5)
		No of downloads of the two policy reports on sectoral decarbonisation pathways for Europe	At least 100 (unique downloads)

Impact		Performance Indicator	Targets
	4. Provide an improved and enhanced understanding of EU policy interactions (EC1)	No of policy briefs on co-impacts and trade-offs in the broader EU policy framework	1 (D8.9/D8.10)
		No of downloads of the policy briefs on co-impacts and trade-offs in the broader EU policy framework	At least 50 (unique downloads)
		EC citing evidence from PARIS REINFORCE outputs on the synergistic/conflicting implications, co-impacts and trade-offs of the broader EU policy framework	EC citing evidence from PARIS REINFORCE outputs on the synergistic/conflicting implications, co-impacts and trade-offs of the broader EU policy framework
	5. Provide an improved and enhanced understanding of interactions between EU climate policy agenda and the SDGs of the 2030 Agenda for Sustainable Development (EC1)	No of policy reports on the interactions between EU climate policy agenda and the 2030 Agenda for SD	2 (D5.4 for Europe and D6.4 for non-European countries)
		No of downloads of the policy reports on the interactions between EU climate policy agenda and the 2030 Agenda for SD	At least 150 (unique downloads)
		EC citing evidence from PARIS REINFORCE outputs on the interactions between EU climate action and the SDGs	EC citing evidence from PARIS REINFORCE outputs on the interactions between EU climate action and the SDGs
	6. Provide a forum for discussing game-changing topics (EC1)	No of workshop sessions embedded in the regional and national stakeholder workshops	At least 7
		No of stakeholders present at each national stakeholder workshop	At least 20 at each
		Percentage of stakeholders evaluating the workshops' goals and presented solutions being in line with their view on "where we want to go?" Talanoa question	80%
	7. Support policymakers from major emitting (non-EU) countries in producing detailed future NDCs and	No of policy reports on nine major emitting countries on decarbonisation pathways at the national level	2 (D6.3 and D6.6)
		No of stakeholder workshops in major emitting countries (i.e. national policy events)	6 (workshops, one in each country)
		No of stakeholders present at each national (non-EU) policy event	At least 30

Impact		Performance Indicator	Targets
	long-term decarbonisation strategies (EC2)	Level of stakeholders' satisfaction from the national (non-EU) policy events	At least 80% with positive evaluation
		Explicit linking of published NDCs to evidence co-developed between stakeholders and the PARIS REINFORCE project team, in at least three major emitters	Explicit linking of published NDCs to evidence co-developed between stakeholders and the PARIS REINFORCE project team, in at least three major emitters
		No of national (non-EU) policymakers in the Stakeholder Council	At least 2 national policymakers from each of the nine (9) major emitting countries
	8. Support policymakers from other less developed and/or less emitting countries in producing detailed future NDCs and long-term decarbonization and/or adaptation strategies (EC2)	No of policy reports on less developed and/or less emitting countries on decarbonisation and/or adaptation pathways at the national level	2 (D6.3 and D6.6)
		No of stakeholder workshops in less developed and/or less emitting countries (i.e. national policy events)	2 (workshops, one in KE and one in UA)
		No of stakeholders present at the stakeholder workshops in KE and UA	At least 20
		Level of stakeholders' satisfaction from the stakeholder workshops in KE and UA	At least 50% with positive evaluation
		Explicit linking of published NDCs to evidence co-developed between stakeholders and the PARIS REINFORCE project team, in at least three other less emitting countries	Explicit linking of published NDCs to evidence co-developed between stakeholders and the PARIS REINFORCE project team, in at least three other less emitting countries
		No of national policymakers from less developed and/or less emitting countries in the Stakeholder Council	At least 2 national policymakers from KE and at least 2 national policymakers from UA
	9. Support the implementation of the Paris Work Programme	Level of policymakers' and other stakeholders' satisfaction from the utility of the data platform	At least 80% rate the platform positively
			At least 50% stating that they will use it for developing/improving their NDCs

Impact		Performance Indicator	Targets
	and enhance the effectiveness of the 2023 GST (EC1)		
Societal Impacts	1. Enhanced stakeholder engagement at all levels (national, regional, global), to ensure that stakeholder knowledge, expertise, interests, strategies and motives are taken into account and reflected in real-world and meaningful simulations and all respective scientific processes (EC3)	Stakeholder attendance at the national stakeholder workshops (within and outside Europe)	At least 20 at each one of the 18 national workshops (360 participants in total)
		Stakeholder attendance at the EU regional stakeholder workshops	At least 40 at each one of the 2 workshops
		Level of stakeholders' satisfaction from the policy events (national and regional workshops)	80% with positive evaluation
		Stakeholder attendance at the final policy conference	At least 60
		Level of stakeholders' satisfaction from the final policy conference	At least 50% with positive evaluation
		No of project reports on the proceedings for all workshops	4 (D3.3, D3.5, D3.6, D3.7)
	2. Improved understanding of models by policymakers and other stakeholder groups (EC3)	No of policy briefs on the PARIS REINFORCE models (8 IAMs, 8 energy system models, 4 sectoral models)	1 (D3.2)
		No of unique users to the I2AM PARIS web platform	300 (users) [100 per year]
		No of infographics on how selected models of the PARIS REINFORCE modelling armoury work	3 (D8.9/D8.10)
	3. Collaboration between policymakers, businesses, NGOs, researchers, civil society and all other stakeholder groups (EC3)	No of stakeholders in the Stakeholder Council	At least 30 stakeholders (from policymakers, businesses, NGOs, researchers, CS, and other) from the EC, and each one of the European countries, major emitters, and less developed and/or less emitting countries
	4. Widespread dissemination of results to policymakers, all key stakeholders and the public (EC3)	No of newsletters	18 (bi-monthly)
		No of infographics	3
		No of videos	3
		No of press releases	At least 6

Impact		Performance Indicator	Targets
Research Impacts	1. An open access, multi-modelling, data exchange platform (EC4)	No of modellers using the platform	50 modellers 15 research institutes
		Level of modellers' satisfaction from the use of the platform	80% with positive feedback
	2. A new scientific paradigm in support of climate policy (EC4)	No of academic publications detailing innovative methodologies employed by PARIS REINFORCE	At least 2
		No of academic publications discussing project results	At least 15
		No of presentations in academic conferences	At least 30 in at least 10 European and non-European countries
		No of reports on the socio-technical background and post-modelling policy guardrails	2 (D4.1 and D4.7)
		No of countries for which reports on the socio-technical background and post-modelling policy guardrails are produced	At least 3 European 2 non-European
		No of reports on the index decomposition and benchmarking of IAMs with sectoral modelling outputs	At least 1 (D4.5)
		No of countries for which reports on the index decomposition and benchmarking of IAMs with sectoral modelling outputs were produced	27 EU member states
		No of reports on uncertainty analysis of all IAM, energy system and sectoral modelling results	2 (D4.2 and D4.6)
	3. Input into the upcoming IPCC report and other major scientific assessments on climate change and action (EC5)	No of reports on model inter-comparisons	2 (D7.4 and D7.7)
		No of academic publications discussing global modelling analyses and model inter-comparisons produced by the project	At least 2
		Reference to PARIS REINFORCE results in IPCC AR6	Reference to PARIS REINFORCE results in IPCC AR6
		Reference to PARIS REINFORCE results in UNEP's Emissions Gap reports	Reference to PARIS REINFORCE results in UNEP's Emissions Gap reports

Impact		Performance Indicator	Targets
		No of policy briefs on decarbonising the international aviation and shipping sectors	1
		Interchange of researchers with the US Dept of Energy Pacific Northwest National Laboratory (PNNL)	Interchange of researchers with the US Dept of Energy Pacific Northwest National Laboratory (PNNL)

Annex IV: Communication and Dissemination indicators

Performance Indicator	Targets
No of unique visitors to I2AM PARIS platform	2000 per year
Percentage of return visitors to I2AM PARIS platform	40%
% bounce rate (I2AM PARIS platform)	<50%
No of unique visitors to the project website	3000 per year
Percentage of return visitors to the project website	40%
% bounce rate (project website)	<50%
No of recipients of the newsletters	5000 (in total, not unique)
% opening rate of the newsletters	30%
No of times **#parisreinforce** used on social media	3000
No of commentaries produced	At least 5
No of commentaries distributed in project events	300 (shared material)
No of unique downloads of commentaries	200
No of working documents distributed in project events	300 (shared material)
No of unique downloads of working documents	200
No of views of videos	500
No of downloads of infographics	200 per year
No of articles (blog posts, press releases, articles)	15
No of websites and EU project meetings/conferences which PARIS RIENFORCE was referred to	50
No of participants in the regional EU policy events/workshops	At least 40 in each
No of participants in the regional and national policy events/workshops	At least 20 in each
No of participants in the final EU conference	At least 70

Annex V: Quality indicators

Performance Indicator	Targets
% of comments of reviewers addressed by the Deliverable Leaders/authors	>90%
Average Delay (in days) in the submission of draft deliverables for internal review	<7
Average Delay (in days) in the submission of the final deliverables to the Participants Portal	0
Average number of inconsistencies according to the deliverable template (format, layout, spelling, etc.) in the versions ready for the final editing before submission	<3
% of internal effort reports delivered on time	>80%
Delay (in days) in the submission of the periodic report	0
Delay (in days) in the submission of the final report	0