



Project risk and quality assurance management plan

Deliverable 5.1

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About 4C

Climate-Carbon Interactions in the Coming Century (4C) is an EU-funded H2020 project that addresses the crucial knowledge gap in the climate sensitivity to carbon dioxide emissions, by reducing the uncertainty in our quantitative understanding of carbon-climate interactions and feedbacks. This will be achieved through innovative integration of models and observations, providing new constraints on modelled carbon-climate interactions and climate projections, and supporting Intergovernmental Panel on Climate Change (IPCC) assessments and policy objectives.

Executive Summary

The Project risk and quality assurance management plan sets out the roles and responsibilities within the project and outlines the procedures for managing risk and quality assurance.

Keywords

Project management, Project risk, Project quality assurance

1. Project schedule, deliverables and milestones

The project runs for 48 months from 1st June 2019 to 31st May 2023. WPs and tasks as well as major deliverables and milestones are shown in the Gantt charts below:

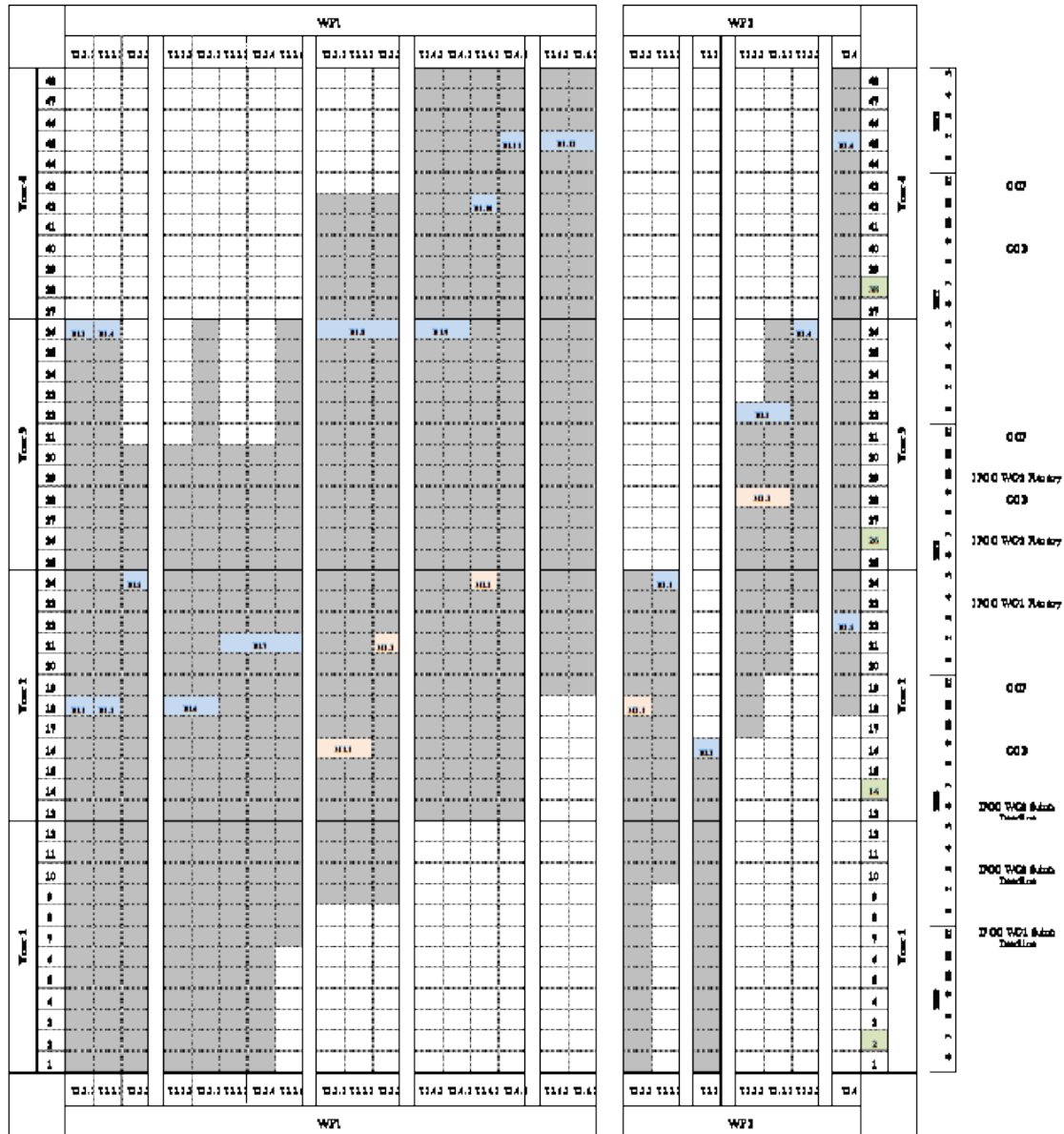


Figure 1 WP1-2 4C project Gantt chart with WP tasks and subtasks length (grey cells), timing of deliverables and milestones (blue and orange cells), and tentative timing of annual meetings (green cells). Timing of key stakeholders activities is also given at the bottom.

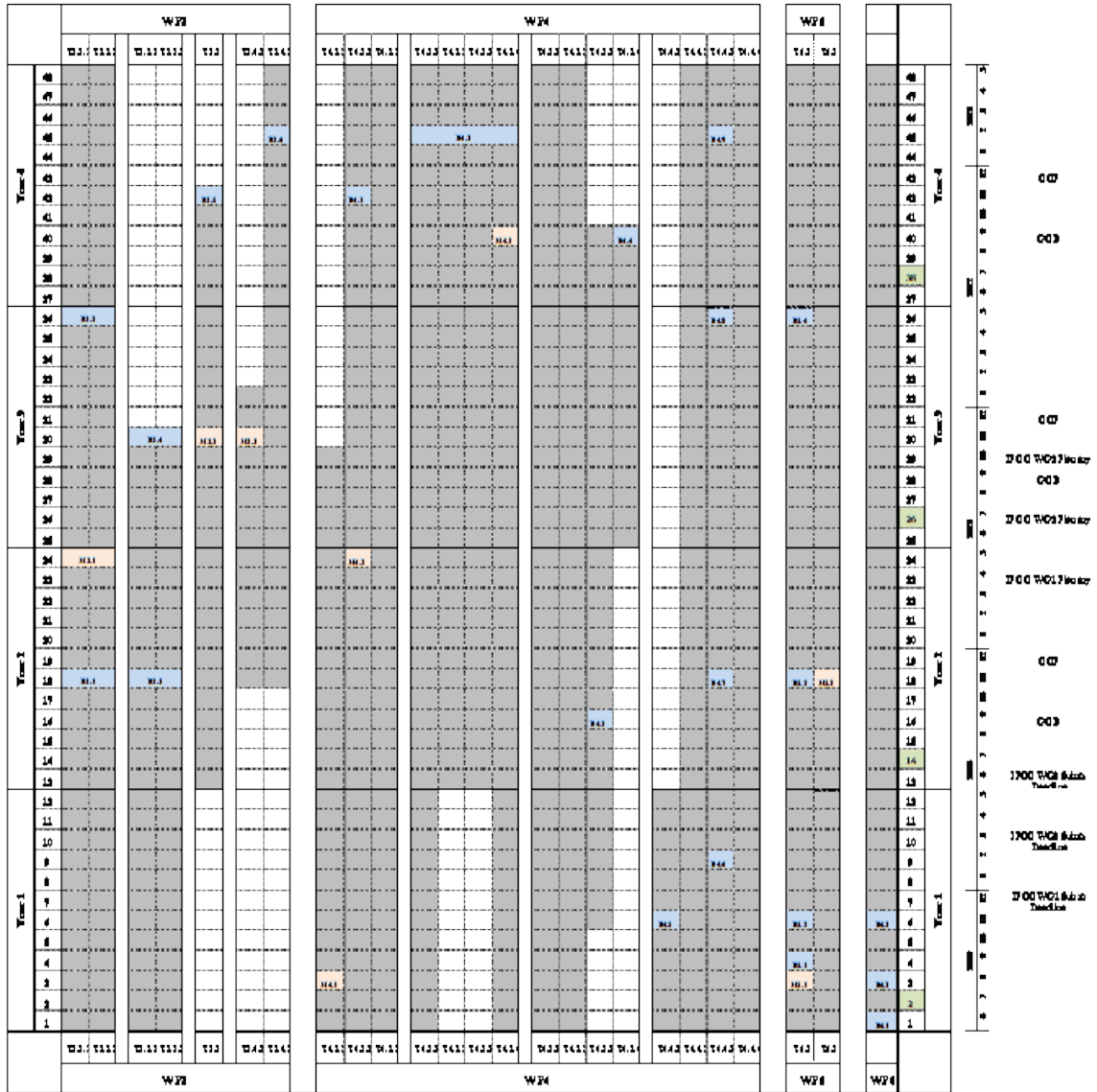


Figure 2 WP3-6 4C project Gantt chart with WP tasks and subtasks length (grey cells), timing of deliverables and milestones (blue and orange cells), and tentative timing of annual meetings (green cells). Timing of key stakeholders activities is also given at the bottom.

2. Project Governance

2.1 Overall management structure

The main components of the management structure of 4C are:

- The **Coordinator**, who will lead the project and be the intermediary between the consortium and the European Commission and be supported by a **Management Support Team (MST)** to ensure the overall day-to-day project management and administration, in close collaboration with the Work Package Leaders.
- The **General Assembly (GA)**, the overarching decision-making body which is responsible for the project's major strategic, scientific and technological policies.
- The **Executive Board (EB)** implements the decisions taken by the GA and monitors and ensures the project's overall progress, and consists of the Coordinator and the WP Leaders.
- The **Work Package (WP) Leaders** ensure the day-to-day project management and administration of each Work Package.
- The **External Advisory Board (EAB)**. Each EAB member will adhere to and sign specific terms of reference at the start of the project, including confidentiality clauses when relevant.

2.1.1 The coordinator and management support team (MST)

The Project Coordinator is UNEXE, represented by Prof Pierre Friedlingstein as Project Lead. The Coordinator's primary role is to represent the Consortium to the European Commission (EC) and to take overall responsibility for ensuring that the project meets its objectives. The Project Coordinator is responsible for project coordination including the scientific and technical quality-control of deliverables, as well as the planning, administrative and strict financial follow-up of the project.

The Project Coordinator will be responsible for:

- organising and chairing the GA and EB and ensuring that any relevant issues are brought to the attention of these governing bodies;
- ensuring smooth operation of the project: work plan maintenance, project progress monitoring, analysis of the results, identification of problems and consequences for future research;
- overseeing the preparation and quality of the project's progress reports and deliverables;
- submitting all required progress reports, deliverables and financial statements to the EC;
- communicating all relevant project information to the EC and acting as intermediary between the EC and the project partners;
- handling payments to the partners and transferring sums in a timely manner, in line with the provisions of the Consortium Agreement and the decisions of the GA;
- organising meetings of the External Advisory Board;
- management of risk and challenges during the course of 4C;
- promotion of the Consortium's activities for the potential cooperation with similar initiatives/projects.

The Management Support Team is composed of Prof Pierre Friedlingstein (UNEXE) and the Project Manager, Leo de Sousa-Webb (UNEXE). Support from UNEXE professional services teams including a dedicated EU team consisting of experienced specialists in the management and financial delivery of EU projects, Legal and IP specialists will be available to the MST.

The MST will be in charge of day-to-day project management, administration, and logistics across the project, including:

- Communication of all information in connection with the project to the Commission;
- Preparation of the project deliverables and delivery to the Commission, after validation by the EB;
- Day to day co-ordination of the project; monitoring project planning and progress;
- Communication within the project, to partners, governing bodies, users, and the general public;
- Organisation of meetings and internal reviews;
- Preparation of the quality control, data management and documentation plan;
- Co-ordination and collaboration with other EU-funded or other international projects;
- Overall administrative and financial management;
- Management of consortium-level legal and ethical issues;
- Liaising with the EAB and preparing their meetings.

The Project Manager will assist the Project Coordinator in the day-to-day monitoring of the project, supporting communication with project partners and the project governing bodies, keeping track of project deadlines, issuing reminders to project partners, checking on follow-up of planning schedule, etc. Mr de Sousa-Webb will maintain the internal project communication instruments, providing mailing lists, online resources for files sharing, and setting up teleconferences and webex meetings as needed. He will assist the Project Coordinator in the preparation of the deliverables, milestones and periodic reporting to be submitted to the Commission. The Project Manager will also assist the Project Coordinator with finance reporting and in any financial actions between the Commission and the project partners.

2.1.2 The general assembly (GA)

The GA is the overall decision-making body of the consortium and includes one representative from each partner (see Table 1). The GA will be chaired by the project coordinator and supported by the Management Support Team. The GA will be responsible for validating the major decisions concerning the project. It is the decision-making body for any issue concerning the proper operation of the consortium and will resolve any project disputes arising between partners that cannot be resolved at a lower level. Any partner may request discussion and vote by the PGB on any decision taken previously by the EB or the MST, which could be contrary to its interests.

The matters to be acted upon by the General Assembly include:

- Strategic orientation of the project;
- The Consortium work plan and plans for using and disseminating knowledge;
- The Consortium budget and financial allocation of the EU's contribution between research and dissemination activities on the one hand, and between the beneficiaries on the other;
- Changes in the Consortium membership;
- Determination of a defaulting partner;
- Any major reallocation of budget between partners;
- Any alterations to the Consortium Agreement;
- The acceptance of new beneficiaries as well as any exclusion of beneficiaries;
- Any premature completion or termination of the project;
- Adherence of the Consortium to Open Access requirements and appropriate data management.

Decision-making: The GA's decisions will require 2/3 of the members to be present to be quorate and require a 2/3 majority vote. The decision and problem resolving process will be defined in detail in a Consortium Agreement, which will be signed by all beneficiaries prior to the start of the project.

Frequency of Meetings: In addition to an initial kick-off meeting, the GA will be held once a year, unless intermediate meetings are in the interests of the project. In such a case, the GA will be convened by the Coordinator or when requested by at least 50% of the assembly's members. The MST will operate the GA's secretariat. If a GA Member is unable to attend a meeting then the GA Member can nominate a representative from their institution.

Table 1 List of GA Members

Partner	Member of GA
UNEXE	Pierre Friedlingstein
UEA	Corinne Le Quéré
ENS	Laurent Bopp
MPG	Victor Brovkin
ETH Zurich	Sonia Seneviratne
BSC	Raffaele Bernardello
DLR	Veronika Eyring
UBREMEN	Michael Buchwitz
UBERN	Thomas Frölicher
CICERO	Glen Peters
UOXF	Myles Allen
CEA	Philippe Ciais

2.1.3 The Executive Board (EB)

The Executive Board (EB) is in charge of the day-to-day management of 4C scientific progress of the project, ensuring it stays in line with its scientific objectives and providing early warning of potential scientific or technical issues, allowing implementation of appropriate measures to reduce the risk of delay or delivery of the project objectives. The EB will be the body where discussions will take place and decisions will be made with respect to the work undertaken within and between work packages. The EB is chaired by the Coordinator and comprises all the WP leaders and deputies (see Table 2). Major decisions or recommendations made by the EB which change either the scientific or financial direction of the project must be agreed upon by the GA.

The EB responsibilities include:

- Report on progress of their WPs at four-monthly meetings and through short written reports;
- Providing progress reports on the delivery of the project to the GA;
- Review the project deliverables prior to their submission;
- Consider recommendations from the External Advisory Board (EAB);

- Propose any necessary or beneficial changes of the project budget/membership to the GA;
- Propose and implement the competitive selection procedure for new contractors;
- Make proposals to the GA for any change in consortium membership;
- Lead the proper conduct of the project to maximise outputs and impacts.

The MST will provide support to the EB for these tasks and to write technical and financial reports.

Decision-making: The EB’s decisions require 2/3 of the members to be present to be quorate and require a 2/3 majority vote. Each member represented on the EB will have one vote. In case both the WP leader and its deputy are present, only the vote of the WP leader will count.

Frequency of Meetings: the EB will meet every 4 months (unless intermediate meetings are in the interest of the project) either physically or by phone/video conference in order to review project progress, consider any risks related to the WPs and, as required, identify solutions and/or alternative options. The EB will work interactively using a dedicated project intranet and audio-visual tools maintained and provided by the Management Support Team. At least one meeting per year will be face-to-face, organised at the same time as the annual General Assembly.

Table 2 List of EB Members. The EB comprises all the WP leaders and deputies.

WP	Member of EB	Partner
WP1 lead	Corinne LeQuéré	UEA
<i>WP1 deputy lead</i>	Stephen Sitch	UNEXE
WP2 lead	Tatiana Ilyina	MPG
<i>WP2 deputy lead</i>	Raffaele Bernardello	BSC
WP3 lead	Thomas Frölicher	UBERN
<i>WP3 deputy lead</i>	Veronika Eyring	DLR
WP4 lead	Isadora Jimenez	BSC
<i>WP4 deputy lead</i>	Glen Peters	CICERO
WP5 and 6 lead	Pierre Friedlingstein	UNEXE

2.1.4 Work Package Leaders and their Teams

The WP teams are composed of one WP leader, a deputy leader and several other partners (Table 2). The activities of each WP are subdivided into Tasks that will be conducted by one or more of the Partners. The overall organisation of the Tasks will be supervised by the individual WP leader and deputy WP leader who will be responsible for the following activities:

- Organising regular internal communication between the WP Participants for Task-related information, documents, planning and deliverables;

- Sending scientific and technical reports, (including the Progress and Final Reports) to the Project Coordinator;
- Over-seeing the production of the WP-related deliverables and their submission to the Project Coordinator according to schedule;
- Conducting the initial evaluation of the scientific and technical content of the deliverables;
- Identifying, in a timely fashion, any potential risk or conflict, any delay or difficulty that might alter the quality and/or the achievement of deliverables, and inform the Project Coordinator and Project Manager;
- Resolving as far as possible any conflict within the Work Package.

The WP team members will be responsible for the following activities:

- Participating in regular internal communication with the WP Leader;
- Delivering the sub-task results to the WP Leader on schedule;
- Providing the content for the Progress and Final Reports;
- Informing their WP leader of any potential risk or conflict or any delay or difficulty that might alter the quality and/or the achievement of deliverables.

2.1.5 The External Advisory Board (EAB)

The EAB is composed of 7 experts in the field, covering a wide range of expertise on climate and carbon cycle science, oceanic and land expertise, modelling and observation, science and dissemination (Table 3). The central role of the EAB is to provide an external, independent critical evaluation of the work done in 4C. The EAB will:

- Advise on the project scientific work plan and outcomes
- Advise on the project dissemination and interface with users
- Provide a perspective and advice on potential links with on-going international activities relevant to 4C
- Suggest potential new developments and actions to further increase 4C scientific outputs and dissemination.

The EAB will be invited to attend the 4C Annual General Assembly, and will be asked to provide feedback and advice during the follow-up EAB meeting. The EAB will submit a written report to the MST within the following 2 weeks. The MST will distribute the EAB report to the project consortium and will propose responsive actions if necessary.

Frequency of Meetings: The EAB will meet annually, physically (preferred option) or remotely. The project's budget includes a line to cover the travel and subsistence costs of EAB members invited to attend project meetings and events. Each EAB member has signed a confidentiality agreement. The Coordinator shall write the minutes of the EAB meetings and prepare the implementation of the EAB's suggestions. The EAB members shall be allowed to participate in General Assembly meetings upon invitation but have not any voting rights. Feedback from the EAB will be shared with the EC EASME Project Officer & reviewers, either in the minutes of meetings and/or via the periodic reports.

Table 3 Members of the EAB

Member of EAB	Institute	Expertise
Claudia Tebaldi	NCAR, Boulder USA	Climate modelling, scenarios
Pep Canadell	GCP, Canberra, Australia	Global carbon cycle, IPCC
Mat Williams	University of Edinburgh, UK	Land carbon cycle, observations
Martin Heimann	Univ. Helsinki, Finland	Global carbon cycle
Leo Hickman	CarbonBrief, London, UK	Communication & outreach
Michio Kawamiya	Jamstec, Yokohama, Japan	Ocean carbon cycle, ESM
Kirsten Zickfeld	Simon Fraser Univ. Canada	Climate modelling, TCRE

2. Communication within the consortium

The coordinator will liaise with the EC EASME Project Officer and communicate regularly with consortium members. UNEXE will coordinate annual project meetings, quarterly tele-conferences and email reminders to ensure deliverables are submitted on time.

2.1 Annual project meetings

UNEXE organizes the annual project meetings including setting the date, drafting the agenda and booking a location (see Table 4 for meetings so far). Locations are chosen considering the travelling time for consortium members to the location and the impact of the travel on the environment.

Table 4 Annual Project Meetings and Timings

Meeting	Timing
Kick Off Meeting - Brussels	11-13 th June 2019
Year 2 - Paris	23-25 th June 2020
Year 3	Approx. June 2021
Year 4	Approx. June 2022

The Kick-Off meeting took place in Brussels from the 11-13th June 2019.

2.2 Workshops

A 4C workshop for fast-track support to IPCC AR6 was held during the Kick-Off meeting in Brussels. The workshop was organised with 4C's IPCC lead authors to facilitate consultation with 4C researchers on how to address the issues raised on the ongoing IPCC draft, how to contribute to the current assessment and identify key issues for Post-AR6 assessments.

2.3 Quarterly tele-conferences

The Coordinator organises quarterly tele-conferences for the Executive Board. The first tele-conference was on the 6th November 2019. The agenda includes:

- update from WP leaders on task progress
- upcoming deliverables and milestones
- upcoming project events (workshops, expert talks, webinars, conferences, participation in external events)
- periodic reporting and administrative issues

Shortly after each EB meeting, the Coordinator (Prof Friedlingstein) will have a teleconference with the EC EASME Project Officer to discuss the project's progress and main planned events. The Coordinator will organise these meetings and will provide the minutes in advance of the tele-conference.

2.4 Reminders on deliverables and milestones

The Project Manager at UNEXE, Mr Leo de Sousa-Webb, will send out email reminders for upcoming deliverables and milestones to the responsible partner 3 months and 1 month prior to the deadline.

2.5 Mailing lists

To facilitate communication the project has set up its own email address 4C@exeter.ac.uk. In addition, project mailing lists have been compiled (see Table 5); additional mailing lists can be set up on request.

Table 5 4C Mailing Lists

Distribution list address	Distribution list
4C-EAB	All External Advisory Board (EAB) members
4C-EB	All Executive Board (EB) members
4C-PI	Principal Investigators (PIs) and other key partner representatives
4C-WP1	All partners attached to Work Package 1
4C-WP2	All partners attached to Work Package 2
4C-WP3	All partners attached to Work Package 3
4C-WP4	All partners attached to Work Package 4
4C-all	All consortia researchers
4C-admin@exeter.ac.uk	All administrative representatives of partners
4C-finance@exeter.ac.uk	All financial representatives of partners

2.6 Document sharing

Documents will be stored on a 4C University of Exeter Microsoft SharePoint account. Documents will be shared through SharePoint and One Drive for Business, which are GDPR compliant and has password protected access. Documents with sensitive personal data (such as access requirements for an event) will only be shared with partners if absolutely necessary (e.g. the partner is helping to organise the event). Scientific documents not containing any personal data but requiring collaborative work via inputs from many project partners might be shared via google drive.

3. External Dissemination

3.1 Project website

As part of WP4, a project specific website will be created. It will be live from month 10. The website will provide information on the project and be a place that the public can download non-confidential reports and deliverables. It will also include a variety of news which can be subscribed to. The 4C email address will also be highlighted so that the public can contact the project if they desire.

3.2 ScienceBrief platform

This platform will be used to disseminate scientific outputs from 4C -and other scientific activities- for incorporation into international scientific assessments.

3.3 Fact sheets

We will present the main concepts to create a knowledge base to better understand the outcomes of 4C science.

3.4 Executive summaries

We will ensure key project results are communicated in a format appropriate for decision and policymakers by preparing science summaries from relevant deliverables.

3.5 Carbon Outlooks

These outlooks will be released annually in partnership with the GCP Global Carbon Budget with focus on the forecasts of the full year carbon budget and an assessment of previous year's forecasts.

3.6 Side-events for policymakers

Events will be organised in parallel to major policy gatherings, such as international climate negotiations (e.g., UNFCCC COP and SBSTA side-events).

3.7 EU policymakers' workshop

This event will be organised in Brussels to promote the interaction between scientist and stakeholders.

3.8 Presentation at conferences, symposia, meetings

4C partners will attend key climate conferences (e.g. EGU General Assembly (annually), International Carbon Dioxide Conference in 2021) as well as upcoming workshops relevant to 4C science (eg. CMIP6 related workshop).

3.9 Policy brief

We will present the most relevant results together with an overview of current policies on emissions and a set of policy recommendations towards the end of the project.

3.10 Publication of papers in high-profile journals

We will target gold open-access dissemination in journals such as Nature Geoscience, Nature Climate Change, etc. Several partners also have additional institutional practices in place to comply with green open-access requirements, such as via institutional and organisational repositories of published papers (for example, Open Research Exeter, see <https://ore.exeter.ac.uk/repository>, at UNEXE).

For scientific publications the following sentence must be added to the acknowledgement section:

“This study (or author X and Y) received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement No 821003.”

3.11 Dissemination of results

Dissemination of results (other than scientific publications) must:

(a) display the EU emblem and

(b) include the following text:

“This project has received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement No 821003 (4C)”.

4 Quality assurance of deliverables

4.1 Review process of deliverables

A template has been created for all 4C deliverables (see Appendix 1) so that uniformity is achieved. The template includes the 4C logo, the EU logo and the acknowledgement of funding. There will also be an internal quality review process of deliverables to ensure quality assurance. The review process will be two-stage. The first stage will comprise a review carried out by the Executive Board. The second stage of quality review will be carried out by the project coordinator, Prof Friedlingstein. Only once deliverables have passed both stages of review will they be deemed suitable for submission to the EU. The responsible partner will send the draft deliverable to the Executive Board at least 3 weeks prior to their submission deadline, and will email the final deliverable to UNEXE at least 2 weeks prior to submission deadline.

5. Reporting (financial and technical)

5.1 Official reporting

Three reporting periods are included in Grant Agreement:

- RP1 is at M18 (M1 to M18)
- RP2 is at M30 (M19 to M36)
- RP3 is at M48 (M37 to M48)

These reports entail each partner’s declaration of financial statements regarding costs and efforts spent in the period. The partners will provide financial reporting direct to the Project Coordinator.

5.2 Periodic reports

In addition to the deliverables and milestones, there is periodic reporting:

- Project Periodic report related to the first reporting period (1.6.2019 – 30.11.2020), due for submission within 60 days afterwards (i.e. end of January 2021).
- Project Periodic report related to the second reporting period (1.12.2020 - 31.05.2022), due for submission within 60 days afterwards (e.g. end of July 2022).

- Project Periodic report related to the third reporting period (1.06.2022 - 31.05.2023), due for submission within 60 days afterwards (e.g. end of July 2023).

The structure and content of the periodic reports is defined by the Grant Agreement and is structured as follows:

Periodic technical report containing:

- An explanation of the work carried out by the beneficiaries, including an overview of the progress towards the objectives of the action, including milestones and deliverables, differences between work expected and that actually carried out, exploitation and dissemination of the results.
- A summary for publication by the EC, answers to the H2020 questionnaire (covering issues related to the action implementation and the economic and social impact, notably in the context of the Horizon 2020 key performance indicators and the Horizon 2020 monitoring requirements).

Periodic financial report containing:

- Individual financial statement from each beneficiary.
- Explanation of the use of resources, subcontracting and in-kind contributions provided by third parties from each beneficiary.

The Coordinator, UNEXE, will be responsible for collecting the information required from all consortium partners to fill in the Periodic Reports.

5.3 Final reports

A final report has to be submitted within 60 days after the end of the project. This final report shall comprise:

- A final technical report - A final publishable summary report covering results, conclusions and socio-economic impact of the project.
- A final financial report – A final summary financial statement and a certificate on the financial statements.

6 Risk Management

6.1 Critical risks and risk mitigation measures

The overall responsibility for the risk management of 4C will reside with the Project Coordinator supported by all members of the Consortium, particularly the Executive Board. Risk Management will consist of the identification of risk; its assessment; and response. Risk identification will be a proactive Task for the entire 4C Team as well as within the framework of the WP activities. The EB will be responsible for the assessment and the response. Their risk assessment will qualify the potential impact(s) on 4C, ranking the risk according to low, medium, or high likelihood and minor, moderate or major impact on project delivery (see Table 6). The response to these various risks will be graded in proportion to their degree.

- **Minor risks** can be addressed by the Project Coordinator/Project Manager/WP Leaders;
- **Moderate risks** need to be carefully addressed by the EB and the relevant Partners. Continued forward monitoring and possibly additional adjustments will be necessary;

- **High risks** need to be carefully addressed by the EB, with support by all Partners, potentially also involving the EAB. An agreed upon strategy will be put in place to solve the issue with on-going monitoring, possibly followed by additional measures during which the Project Officer will be consulted.

Table 6 The critical risks relating to 4C project implementation and the associated risk mitigation measures.

Risk number	Description of risk	WP Number	Proposed risk-mitigation measures
1	Delay in recruitment (Low)	WP1, WP2, WP3, WP4, WP5	All partners have extensive experience in running national and EU projects, and hence have a very strong track record of staff recruitment. Open positions will be advertised widely via jobs mailing lists (e.g. climlist, metjobs), via our own network, and posted on partners and project website. In addition we will share the pool of applicants across all partners.
2	WP leader unavailable (sickness, travel, changed position / circumstances) (Low)	WP1, WP2, WP3, WP4, WP5	Each WP has a leader and deputy leader to reduce this risk.
3	Difficulties in reducing the BIM. The risk of achieving no reduction in the BIM is Low, while the risk of achieving reductions of less than 50% (the aspiration of WP1) is Medium	WP1	Hypotheses have already been formulated in the proposal on processes that need improvements that could be responsible for the BIM (e.g. land variability associated with water availability and fires, ocean variability associated with small-scale physical transport, external and internally-forced variability). These hypotheses will evolve with the annual updates and related improvements in models. Risks are also reduced by the introduction of O2, APO, and 13C budget, which will provide independent constraints on the land and ocean partitioning of the BIM and the underlying processes. Finally, the detailed evaluation of the models in T1.4 based on existing and new observations will provide key information to select models based on their performance, which should lead to reductions in the BIM.
4	Not delivering predictions for 2020-2030 (Medium)	WP2	Skilful predictions for the next decade depend on the timely design and delivery of prediction systems and establishing predictive skills including bias correction (M2.2). If a delay in reaching this milestone is foreseen, additional resources will be devoted to T2.2 and T2.3. This will include adjustment of initialization parameters in prediction systems, as well as evaluation of various bias correction methodologies in terms of their suitability for land and ocean carbon cycle predictions.
5	Difficulties in reducing the uncertainty on TCRE.	WP3	We will use ESMs with much improved processes in comparison to AR5/CMIP5, such as nitrogen

	The risk of achieving no reduction in the TCRE uncertainty is Low, while the risk of achieving reductions of less than 50% (the aspiration of WP3) is Medium		limitation, permafrost and wildfires in the land components, and variably stoichiometry and high resolution physics in the ocean components. We will make use of new observations to constrain these new processes and the land and ocean carbon fluxes over the historical period and will in parallel develop new emergent constraints to reduce the uncertainty on climate-carbon feedbacks in the future. Finally, the use of models performances to weight projections should also contribute to a reduction of TCRE uncertainty.
6	Delays in supporting the IPCC AR6 because literature cut-off dates too close to the beginning of 4C project (Medium)	WP1, WP2, WP3, WP4	A workshop for fast-track support to IPCC AR6 is scheduled at Month 3 (M4.1). It will bring together IPCC lead authors and 4C researchers to highlight priorities and key challenges, aligning efforts accordingly. Moreover, the extensive experience and involvement of 4C partners in IPCC assessments process will ensure smooth advancements. If selected for funding, the project needs to start as early as possible to reduce this risk. With delays, the proposed workshop can be held in Month 1 with some additional funding costs.
7	Difficulties to engage stakeholders (Low)	WP4	Dissemination and communication strategies have been carefully planned. Additionally, 4C benefits on the one hand of partners with solid reputation among scientific stakeholders (covering high-responsibility roles in various panels, projects etc.), and on the other hand of partners with science communication experience to involve society (from policymakers to citizens). Many project participants (and their institutions) have extensive networks, and this risk has been minimised by the selection of relevant project partners.

Appendix 1 – Template for deliverables



Deliverable Title

Deliverable X.X

Authors:



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Document Information

GRANT AGREEMENT	821003
PROJECT TITLE	Climate Carbon Interactions in the Current Century
PROJECT ACRONYM	4C
PROJECT START DATE	1/6/2019
RELATED WORK PACKAGE	WX
RELATED TASK(S)	TX.X
LEAD ORGANIZATION	x
AUTHORS	
SUBMISSION DATE	x
DISSEMINATION LEVEL	PU / CO / DE

History

DATE	SUBMITTED BY	REVIEWED BY	VISION (NOTES)

Please cite this report as: Surname, X., Surname, X, (YYYY), Deliverable Title, DX.X of the 4C project

Disclaimer: The content of this deliverable reflects only the author's view. The European Commission is not responsible for any use that may be made of the information it contains.

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Header 3 (Light blue, 14 pt font, First word capitalized, paragraph spacing: 12 before 10 after)	3
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About 4C

Climate-Carbon Interactions in the Coming Century (4C) is an EU-funded H2020 project that addresses the crucial knowledge gap in the climate sensitivity to carbon dioxide emissions, by reducing the uncertainty in our quantitative understanding of carbon-climate interactions and feedbacks. This will be achieved through innovative integration of models and observations, providing new constraints on modelled carbon-climate interactions and climate projections, and supporting Intergovernmental Panel on Climate Change (IPCC) assessments and policy objectives.

Executive Summary

Add brief summary of the deliverable

Keywords

Keyword 1, Keyword 2, etc.

Introduction - Header 1

(Dark blue, 20 pt font, First word capitalized, paragraph spacing: 24 before, 10 after)

To add the Header 1 style ALWAYS choose it from the Styles menu of Word.

Header 2

(Lighter blue, 16 pt font, First word capitalized, paragraph spacing: 18 before, 10 after)

To add the Header 2 style ALWAYS choose it from the Styles menu of Word.

Header 3

(Light blue, 14 pt font, First word capitalized, paragraph spacing: 12 before 10 after)

To add the Header 3 style ALWAYS choose it from the Styles menu of Word.

Header 4

(Light gray, 14 pt font, First word capitalized, paragraph spacing: 12 before 10 after)

To add the Header 4 style ALWAYS choose it from the Styles menu of Word.

If further subdivisions are needed below Header 4, the authors can use the format that best fits their purpose.

Example of header:

Introduction

Climate-Carbon interactions

Sub-topic 3

Normal text: Dark grey, justified. Line spacing: 1,5, paragraph spacing: 0 before, 10 pts after.

1. Numbered list format 1
2. Align left, Paragraph spacing: 0 before, 10 pt only after the last list line.

- General list format

- Align left, Paragraph spacing: 0 before, 10 pt only after the last list line.

(To add a table caption, use the “insert caption” function under the references tab. Then select Table. Or copy a caption from the template)

Table 1. Table format
(Header 4, 12 pt font, paragraph spacing: 14 before, 10 after)

TITLE	TITLE	TITLE
Light grey fill if relevant to highlight text		

(If the Table or figure numbers are not sequential select them, right click and select update fields)

Table 2. Alternative table format

TITLE	TITLE	TITLE	TITLE	TITLE
Title				

(To add a figure caption, use the “insert caption” function under the references tab. Then select figure. Or copy a caption from the template)



Figure 1. Caption



Figure 2. Caption of the second figure