

**SEVENTH FRAMEWORK PROGRAMME
THEME ENV.2009.1.1.3.1**

Consortium Agreement

**GHG-Europe - Greenhouse gas management in
European land use systems**

Grant Agreement for: Collaborative Project
Large-scale integrating project

Grant Agreement no.: 244122

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CONSORTIUM AGREEMENT

THIS CONSORTIUM AGREEMENT is based upon REGULATION (EC) No 1906/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 laying down the rules for the participation of undertakings, research centres and universities in actions under the Seventh Framework Programme and for the dissemination of research results (2007-2013) hereinafter referred to as Rules for Participation and the EC Grant Agreement, adopted on 10 April 2007 hereinafter referred to as the Grant Agreement and Annex II adopted on 10 April 2007 hereinafter referred to as Annex II of the Grant Agreement and is made on December 16, 2009, hereinafter referred to as "Effective Date"

BETWEEN:

- (1) Johann Heinrich von Thünen Institut (VTI) the Coordinator
- (2) Commissariat à l'Énergie Atomique et aux énergies alternatives LSCE (CEA)
acting for the purpose of this Agreement in its name and in the names of CNRS and UVSQ, as legal entities of the joint research unit LSCE involved in the Project.
- (3) Institute International for Applied System Analysis (IIASA)
- (4) Max Planck Institute for Biogeochemistry (MPG)
- (5) University of Aberdeen (UNIABDN)
- (6) Università deli Studi della Tuscia (UNITUS)
- (7) Vereniging voor Christelijk Hoger Onderwijs Wetenschappelijk Onderzoek en Patientenzorg (VUA)
- (8) Stichting Dienst landbouwkundig Onderzoek (Stichting DLO)
- (9) Natural Environment Research Council as represented by its component body the Centre for Ecology and Hydrology (CEH)
- (10) Eidgenössische Technische Hochschule Zürich (ETH)
- (11) Forest Research and Management Institute (ICAS)
- (12) Institut National de la Recherche Agronomique (INRA)
- (13) Poznan University of Life Science (PULS)
- (14) Technische Universität München (TUM)
- (15) Universiteit Antwerpen (UA)
- (16) Fundacion Centro de Estudios Ambientales del Mediterraneo (CEAM)
- (17) University of Helsinki (UHEL)
- (18) Federal Research and Training Centre for Forests, Natural Hazards and Landscape (BFW)
- (19) Fondazione Edmund Mach (FEM)
- (20) Technical University of Denmark (DTU)
- (21) Energy research Centre of the Netherlands (ECN)
- (22) European Forest Institute (EFI)
- (23) Ilmatieteen laitos - Finnish Meteorological Institute (FMI)
- (24) Joanneum Research (JR)
- (25) Autonomous Province of Bolzano/Bozen-South Tyrol (APB)
- (26) University of Groningen (RUG)
- (27) Swedish University of Agricultural Sciences (SLU)
- (28) SUOMEN YMPARISTOKESKUS- Finnish Environment Institute (SYKE)
- (29) UNIVERSITY COLLEGE DUBLIN, NATIONAL UNIVERSITY OF IRELAND (UCD)
- (30) Københavns Universitet (FLD-UCPH)
- (31) Universität Innsbruck (UIBK)
- (32) Alma Mater Studiorum - Università di Bologna (UNIBO)

- (33) Universidad de Granada (UGR)
- (34) Wageningen University (WUR)
- (35) Università degli Studi di Udine (UNIUD)
- (36) Universität Heidelberg (UHEI-IUP)
- (37) Consiglio Nazionale delle Ricerche (CNR)
- (38) Centre Tecnologic Forestal de Catalunya (CTFC)
- (39) Universidad de Castilla-La Mancha (UCLM)
- (40) Centre National de Recherche en Météorologie - Meteo- France (CNRM)
- (41) Potsdam-Institut für Klimafolgenforschung (PIK)

hereinafter, jointly or individually, referred to as "Parties" or "Party"

relating to the Project entitled

Greenhouse gas management in European land use systems

in short

GHG-Europe

hereinafter referred to as "Project"

WHEREAS:

The Parties, having considerable experience in the field concerned, have submitted a Proposal for the Project to the European Commission as part of the Seventh Framework Programme of the European Community for Research, Technological Development and Demonstration Activities under the funding scheme of "Collaborative Project".

The Parties wish to specify or supplement binding commitments among themselves in addition to the provisions of the Grant Agreement.

NOW, THEREFORE, IT IS HEREBY AGREED AS FOLLOWS:

Section 1: Definitions

1.1 Definitions

Words beginning with a capital letter shall have the meaning defined either herein or in the Rules for Participation or in the Grant Agreement including its Annexes without the need to replicate said terms herein.

1.2 Additional Definitions

“Consortium Plan” means the description of the work and the related agreed Consortium Budget, including the payment schedule, as updated and approved by the General Assembly.

“Consortium Budget” means the allocation of all the resources in cash or in kind for the activities as defined in Annex I of the Grant Agreement and in the Consortium Plan thereafter.

“Defaulting Party” means a Party which the General Assembly has identified to be in breach of this Consortium Agreement and/or the Grant Agreement as specified in Article 4.2 of this Consortium Agreement.

“Grant Agreement” (GA) means the Contract between the Coordinator, the Parties and the Commission regarding the performance of the Project, including its Annexes when applicable.

“Legitimate interest” means Beneficiary's interests of sufficient relevance, including but not limited to commercial interest or interest to the corporate image, which breach would result in such Beneficiary's suffering great harm in the cases provided for in this Consortium Agreement.

“Needed” means:

- For the implementation of the Project:
Access Rights are Needed if, without the grant of such Access Rights, carrying out the tasks assigned to the recipient Party would be impossible, significantly delayed, or require significant additional financial or human resources.
- For Use of own Foreground:
Access Rights are Needed if, without the grant of such Access Rights, the Use of own Foreground would be technically or legally impossible.

“Software” means sequences of instructions to carry out a process in, or convertible into, a form executable by a computer and fixed in any tangible medium of expression.

Section 2: Purpose

The purpose of this Consortium Agreement is to specify with respect to the Project the relationship among the Parties, in particular concerning the organisation of the work between the Parties, the management of the Project and the rights and obligations of the Parties concerning inter alia liability, Access Rights and dispute resolution.

The Parties agree to cooperate pursuant to the terms of this Consortium Agreement in order to execute and fulfil the Grant Agreement and perform the tasks set forth therein, including the Description of Work in Annex I of the Grant Agreement.

Section 3: Entry into force, duration and termination

3.1 Entry into force

An entity becomes a Party to this Consortium Agreement upon signature of this Consortium Agreement by a duly authorised representative having retroactive effect from the effective date of the Grant Agreement for GHG-Europe.

This Consortium Agreement shall have effect from the Effective Date identified at the beginning of this Consortium Agreement.

A new Party enters the Consortium upon signature of the Accession document Attachment 2 by the new Party and the Coordinator provided respective decision by General Assembly as set forth in Section 6.3.1.2 of this CA. Such accession shall have effect from the date identified in the Accession document.

3.2 Duration and termination

This Consortium Agreement shall continue in full force and effect until complete fulfilment of all obligations undertaken by the Parties under the Grant Agreement and under this Consortium Agreement.

However, this Consortium Agreement may be terminated in accordance with the terms of this Consortium Agreement and Annex II of the Grant Agreement (Grant Agreement Article II.37. and II.38.).

Each party may withdraw its participation in accordance with Grant Agreement Article II.36 and in accordance with the procedures set out in Article 6.3.1.2 of this Consortium Agreement.

Furthermore, if a Party enters into bankruptcy or liquidation or any other arrangement for the benefit of its creditors the General Assembly may decide to terminate the participation of that Party (Art. 6.3.1.2 of this Consortium Agreement)

If the Commission terminates the Grant Agreement or a Party's participation in the Grant Agreement, this Consortium Agreement shall automatically terminate in respect of the affected Party/ies, subject to the provisions surviving the expiration or termination under Art. 3.3 of this Consortium Agreement.

3.3 Survival of rights and obligations

The provisions relating to Access Rights, Confidentiality, Liability, Dissemination, Applicable law and Settlement of disputes shall survive the expiration or termination of this Consortium Agreement as agreed in respective articles.

Termination shall not affect any rights or obligations of a Party leaving the Consortium incurred prior to the date of termination, unless otherwise agreed between the General Assembly and the leaving Party. This includes the obligation to provide all input, deliverables and documents for the period of its participation.

Section 4: Responsibilities of Parties

4.1 General principles

Each Party undertakes to take part in the efficient implementation of the Project, and to cooperate, perform and fulfil, promptly and on time, all of its obligations under the Grant Agreement and this Consortium Agreement as may be reasonably required from it and in a manner of good faith as pre-scribed by the law governing the Grant Agreement.

Each Party undertakes to notify promptly, in accordance with the governance structure of the Project, any significant information, fact, problem or delay likely to affect the Project.

Each Party shall provide promptly all information reasonably required by a Consortium Body or by the Coordinator to carry out its tasks.

Each Party shall take reasonable measures to ensure the accuracy of any information or materials it supplies to the other Parties.

4.2 Breach

In the event the responsible Consortium Body identifies a breach by a Party of its obligations under this Consortium Agreement or the Grant Agreement, the Coordinator will give written notice to such Party requiring that such breach be remedied within 30 calendar days from the date of receipt of the written notice by the Party.

If such breach is substantial and is not remedied within that period or is not capable of remedy, the General Assembly may decide to declare the Party to be a Defaulting Party and to decide on the consequences thereof which may include termination of its participation.

In the case that the Coordinator is the Defaulting Party, the remaining members of the General Assembly may collectively give written notice requiring that such breach be remedied within 30 calendar days from the date of receipt of the written notice by the General Assembly.

4.3 Involvement of third parties

A Party that enters into a subcontract or otherwise involves third parties (including but not limited to Affiliated Entities) in the Project remains solely responsible for carrying out its relevant part of the Project and for such third party's compliance with the provisions of this Consortium Agreement and of the Grant Agreement. It has to ensure that the use of third parties does not affect the rights and obligations of the other Parties under this Consortium Agreement and the Grant Agreement including but not limited to Background and Foreground.

Section 5: Liability towards each other

5.1 No warranties

In respect of any information or materials (incl. Foreground and Background) supplied by one Party to another (or its affiliates) under the Project, no warranty or representation of any kind is made, given or implied as to the sufficiency accuracy or fitness for purpose nor as to the absence of any infringement of any proprietary rights of third parties.

Therefore,

- the recipient Party shall in all cases be entirely and solely liable for the use to which it puts such information and materials, and
- no Party granting Access Rights shall be liable in case of infringement of proprietary rights of a third party resulting from any other Party (or its Affiliates) exercising its Access Rights.

5.2 Limitations of contractual liability

No Party shall be responsible to any other Party for punitive damages, indirect or consequential loss or similar damage such as, but not limited to, loss of profit, loss of revenue or loss of contracts, provided such damage was not caused by a wilful act or by a breach of confidentiality.

A Party's aggregate liability towards the other Parties collectively shall be limited to once the Party's share of the total costs of the Project as identified in Annex I of the Grant Agreement, provided such damage was not caused by a wilful act or gross negligence

The terms of this Consortium Agreement shall not be construed to amend or limit any non-contractual liability.

5.3 Damage caused to third parties

Each Party shall be solely liable for any loss, damage or injury to third parties resulting from the performance of the said Party's obligations under this Consortium Agreement or from its use of Foreground or Background. In the event that third parties introduce claims related to the performance of the Grant Agreement or of this Consortium Agreement against one Party or several Parties, the Parties agree that each Party whose default has caused or contributed to cause such claim shall indemnify each of the other Parties against such claims.

5.4 Force Majeure

No Party shall be considered to be in breach of this Consortium Agreement if such breach is caused by Force Majeure. Each Party will notify the competent Consortium Bodies of any Force Majeure as soon as possible. If the consequences of Force Majeure for the Project are not overcome within 6 weeks after such notification, the transfer of tasks - if any - shall be decided by the competent Consortium Bodies.

Section 6: Governance structure

6.1 General structure

The organisational structure of the Consortium shall comprise the following Consortium Bodies (a more detailed description is to be found in the Annex I of the Grant Agreement):

- (a) **General Assembly** as the decision-making body of the Consortium;

- (b) **Steering Committee** as the supervisory body for the execution of the Project which shall report to and be accountable to the General Assembly; it is responsible for the scientific focus of the Project and leadership of the Consortium.
- (c) **Work Package leaders** are responsible for the scientific focus and coherence of their respective Work Package
- (d) **Task leaders** lead specific activities within the Work Packages.

The Coordinator is the legal entity acting as the intermediary between the Parties and the European Commission. The Coordinator shall, in addition to its responsibilities as a Party, perform the tasks assigned to it as described in the Grant Agreement and this Consortium Agreement.
The Project Management Team assists the Steering Committee and the Coordinator.

6.2 General operational procedures for all Consortium Bodies

6.2.1 Representation in meetings

Any member of a Consortium Body:

- should be present or represented at any meeting of such Consortium Body;
- may appoint a substitute or a proxy to attend and vote at any meeting;
- and shall participate in a cooperative manner in the meetings.

6.2.2 Preparation and organisation of meetings

Convening meetings:

The chairperson of a Consortium Body shall convene meetings of that Consortium Body.

| | Ordinary Meeting | Extraordinary meeting |
|---------------------------|---|---|
| General Assembly | At least four times during the duration of the Project. | At any time upon explicit request of the Steering Committee or 1/3 of the members of the General Assembly |
| Steering Committee | At least twice a year | At any time upon explicit request of any member of the Steering Committee |
| Work packages | At least once a year | At any time upon explicit request of any member of the Steering Committee |

Notice of a meeting:

The chairperson of a Consortium Body shall give notice in writing of a meeting to each member of that Consortium Body as soon as possible and within the minimum number of days preceding the meeting as indicated below.

| | Ordinary and extraordinary meetings |
|---------------------------|--|
| General Assembly | 45 calendar days |
| Steering Committee | 14 calendar days |
| Work packages | 10 calendar days |

Sending the agenda:

The chairperson of a Consortium Body shall prepare and send each member of that Consortium Body a written (original) or electronic version agenda within the minimum number of days preceding the meeting as indicated below.

| | |
|---------------------------|--|
| General Assembly | 21 calendar days, 10 days for an extraordinary meeting |
| Steering Committee | 7 calendar days |
| Work packages | 5 calendar days |

Adding agenda items:

Any agenda item requiring a decision by the members of a Consortium Body must be identified as such on the agenda.

Any member of a Consortium Body may add an item to the original agenda by written notification to all of the other members of that Consortium Body within the minimum number of days preceding the meeting as indicated below except if provided otherwise in this CA.

| | |
|---------------------------------|--|
| General Assembly | 14 calendar days, 7 calendar days for an extraordinary meeting |
| Steering Committee | 5 calendar days |
| Work Packages Committees | 2 calendar days |

During a meeting the members of a Consortium Body present or represented can unanimously agree to add a new item to the original agenda.

Any decision may also be taken without a meeting by circulating to all members of the Consortium Body a written document which is then agreed by written statement by the defined majority (see Article 6.2.3.) of all members of the Consortium Body.

Meetings of each Consortium Body can also be held by teleconference or other telecommunication means.

Decisions may only be executed once the relevant part of the Minutes is accepted according to Article 6.2.5.

6.2.3 Voting rules and quorum

Each Consortium Body shall not deliberate and decide validly unless a quorum of two-thirds (2/3) of its members are present or represented.

Each member of a Consortium Body present or represented in the meeting shall have one vote.

Defaulting Party members may not vote.

Decisions shall be taken by a majority of two-thirds (2/3) of the votes.

6.2.4 Veto rights

A member who can show that its own work, time of performance, costs, liabilities, intellectual property rights or other legitimate interests would be severely affected by a decision of a consortium Body may exercise a veto with respect to the corresponding decision or relevant part of the decision.

When the decision is foreseen on the original agenda, a member may veto such a decision during the meeting only.

When a decision has been taken on a new item added to the agenda before or during the meeting, a member may veto such decision during the meeting and within 15 days after the Minutes of the meeting are sent.

The exercise of a veto shall be supported with a written justification by the Party exercising a veto to the chairperson of the Consortium Body within 15 calendar days after the meeting at which the veto was exercised, and this written justification will be made available to all Parties.

In case of exercise of veto, the members of the Consortium Body shall make every effort to resolve the matter which occasioned the veto to the general satisfaction of all its members.

A Party may not veto decisions relating to its identification as a Defaulting Party. The Defaulting Party may not veto decisions relating to its participation and termination in the Consortium or the consequences of them.

A Party requesting to leave the Consortium may not veto decisions relating thereto.

6.2.5 Minutes of meetings

The chairperson of a Consortium Body shall produce written Minutes of each meeting which shall be the formal record of all decisions taken. He shall send the draft to all of its members within 10 calendar days of the meeting.

The Minutes shall be considered as accepted if, within 15 calendar days from sending, no member has objected in writing to the chairperson with respect to the accuracy of the draft of the Minutes.

The accepted Minutes shall be sent to all of the members of the Consortium Body and the Coordinator, who shall safeguard them. If requested the Coordinator shall provide authenticated duplicates to Parties.

6.3 Specific operational procedures for the Consortium Bodies

6.3.1 General Assembly

In addition to the rules described in Article 6.2, the following rules apply:

6.3.1.1 Members

The General Assembly shall consist of one representative of each Party (hereinafter General Assembly Member).

Each General Assembly Member shall be deemed to be duly authorised to deliberate, negotiate and decide on all matters listed in Article 6.3.1.2. of this Consortium Agreement.

The Coordinator shall chair all meetings of the General Assembly, unless decided otherwise in a meeting of the General Assembly.

The Parties agree to abide by all decisions of the General Assembly.

This does not prevent the Parties to submit a dispute to resolution in accordance with the provisions of Settlement of disputes in Article 11.8.

6.3.1.2 Decisions

The General Assembly shall be free to act on its own initiative to formulate proposals and take decisions in accordance with the procedures set out herein. In addition, all proposals made by the Steering Committee shall also be considered and decided upon by the General Assembly.

The following decisions shall be taken by the General Assembly:

Content, finances and intellectual property rights

- Proposals for changes to Annex I of the Grant Agreement to be agreed by the European Commission
- Changes to the Consortium Plan (including the Consortium Budget)
- Additions to Attachment 1 (Background excluded)
- Additions to Attachment 3 (Listed Affiliated Entities)

Evolution of the Consortium

- Entry of a new Party to the Consortium and approval of the settlement on the modalities and conditions of the accession of such a new Party
- Withdrawal of a Party from the Consortium and the approval of the settlement on the modalities and conditions of the withdrawal
- Declaration of a Party to be a Defaulting Party
- Remedies to be performed by a Defaulting Party
- Termination of a Defaulting Party's participation in the Consortium and measures relating thereto
- Proposal to the European Commission for a change of the Coordinator
- Proposal to the European Commission for suspension of all or part of the Project
- Proposal to the European Commission for termination of the Project and/or the Consortium Agreement

Appointments

On the basis of Annex I (Description of Work), the appointment if necessary of:

- Work Package Leaders
- Steering Committee Members

In the case of abolished tasks as a result of a decision of the General Assembly, Members shall rearrange the tasks and budgets of the Parties concerned. Such rearrangement shall take into consideration the legitimate commitments taken prior to the decisions, which cannot be cancelled.

6.3.2 Steering Committee

In addition to the rules in Article 6.2, the following rules shall apply:

6.3.2.1 Members

The Steering Committee shall consist of the Coordinator, the Work Package leaders and the Representative for Gender Issues.

The Coordinator shall chair all meetings of the Steering Committee, unless decided otherwise.

6.3.2.2 Minutes of meetings

Minutes of Steering Committee meetings, once accepted, shall be sent by the Coordinator to the General Assembly Members for information.

6.3.2.3 Tasks

The Steering Committee shall

- provide the scientific leadership of the overall project together with the Coordinator
- set up the comprehensive research strategy and the main priorities of *GHG-Europe* (in compliance with Annex I of the Grant Agreement)
- prepare the meetings, propose decisions and prepare the agenda of the General Assembly according to Article 6.3.1.2.
- prepare and propose major decisions for the major directions of the Project
- seek a consensus among the Parties with regards to technical and scientific issues
- be responsible for the proper execution and implementation of the decisions of the General Assembly
- monitor the effective and efficient implementation of the Project and supervise the progress of the Project according to the established targets and milestones
- collect information at least every 6 months on the progress of the Project, examine that information to assess the compliance of the Project with the Consortium Plan and, if necessary, propose modifications of the Consortium Plan to the General Assembly.
- approve the acceptability and quality of all products and outcomes, inclusive the activities they are based on
- prepare their meetings and propose decisions
- identify risks and resolve problems or delays occurring at the overall project level
- achieve a mutual agreement on any contingent necessary budget adjustments (subject relevant agreement of the Commission)
- support the Coordinator in preparing meetings with the European Commission and in preparing related data and deliverables
- prepare the content and timing of press releases and joint publications by the Consortium or proposed by the European Commission in respect of the procedures of the Grant Agreement Article II 30.3.
- approve the required project reports
- establish and supervise a publication policy on behalf of the project

In the case of abolished tasks as a result of a decision of the General Assembly, the Steering Committee shall advise the General Assembly on ways to rearrange tasks and budgets of the Parties concerned. Such rearrangement shall take into consideration the legitimate commitments taken prior to the decisions, which cannot be cancelled.

6.3.3 Work Package Leader

The Work Package Leaders are responsible for

- the leadership and coordination of the different task of their Work Package, coordinating on a day-to-day basis the progress of the technical work under the Work Package
- the scientific supervision of research activities and the achievement of the respective goals within their Work Package
- ensure the consistency of the methods, data and results in their Work Package
- to act as the key contact assuring communication, product and result exchange between the members within their Work Package, with other Work Package Leaders, the Project Management Team, the Steering Committee and the Coordinator
- to submit the implementation plan of the Work Package to the Steering Committee for review and to propose an update of the Consortium Plan.
- the compilation of the respective contributions of their respective Work Package to the different kind of Project reports (scientific reports and financial statements)
- following up decisions made by Consortium Bodies insofar as they affect the Work Package
- the early identification of problems or delays within their work packages and the communication of the above mentioned or any discrepancy with the Consortium Plan, including any delay in delivery to the Coordinator

Within each Work Package tasks and the persons responsible for it are clearly defined in Annex 1.

6.4 Coordinator

The Coordinator shall be the intermediary between the Parties and the European Commission and shall perform all tasks assigned to it as described in the Grant Agreement and in this Consortium Agreement.

In particular, the Coordinator shall be responsible for:

- monitoring compliance by the Parties with their obligations
- keeping the address list of members and other contact persons updated and available
- collecting, reviewing to verify consistency and submitting reports and other deliverables (including financial statements and related certifications) to the European Commission
- transmitting documents and information connected with the Project, including copies of Accession documents and changes of contact information to and between Work Package Leaders, as appropriate, and any other Parties concerned
- administering the Community financial contribution and fulfilling the financial tasks described in Article 7.3
- providing, upon request, the Parties with official copies or originals of documents which are in the sole possession of the Coordinator when such copies or originals are necessary for the Parties to present claims.

The Coordinator, if necessary, takes the ultimate decisions in the project regarding scientific direction, response to risk and eventual delays and settlement of eventual disputes.

If the Coordinator fails in its coordination tasks, the General Assembly may propose to the European Commission to change the Coordinator.

The Coordinator shall not be entitled to act or to make legally binding declarations on behalf of any other Party.

The Coordinator shall not enlarge its role beyond the tasks specified in this Consortium Agreement and in the Grant Agreement.

6.5 Project Management Team

The Project Management Team shall be proposed and appointed by the Coordinator and shall assist and facilitate the work of the Steering Committee and the Coordinator for executing the decisions of the General Assembly and the Steering Committee as well as the day-to-day management of the Project.

Section 7: Financial provisions

7.1 General Principles

7.1.1 Distribution of Financial Contribution

The financial contribution of the European Commission to the Project shall be distributed by the Co-ordinator according to:

- the Consortium Budget as included in the Consortium Plan
- the approval of reports by the European Commission, and
- the provisions of payment in Article 7.3.

A Party shall be funded only for its tasks carried out in accordance with the Consortium Plan.

7.1.2 Justifying Costs

In accordance with its own usual accounting and management principles and practices, each Party shall be solely responsible for justifying its costs with respect to the Project towards the European Commission. Neither the Coordinator nor any of the other Parties shall be in any way liable or responsible for such justification of costs towards the European Commission.

7.1.3 Funding Principles

A Party which spends less than its allocated share of the Consortium Budget will be funded in accordance with its actual duly justified eligible costs only.

A Party that spends more than its allocated share of the Consortium Budget will be funded only in respect of duly justified eligible costs up to an amount not exceeding that share.

7.1.4 Financial Consequences of the termination of the participation of a Party

A Party leaving the Consortium shall refund all payments it has received except the amount of contribution accepted by the European Commission or another contributor. Furthermore a Defaulting Party shall, within the limits specified in Article 5.2 of this Consortium Agreement, bear any additional costs occurring to the other Parties in order to perform its and their tasks and/or for remedying any past or preventing any future loss or damage deriving from the non-fulfilment of the Defaulting Party's obligations.

7.2 Budgeting

The Consortium Budget shall be valued in accordance with the usual accounting and management principles and practices of the respective Parties.

7.3 Payments

Payments to Parties are the exclusive tasks of the Coordinator.

In particular, the Coordinator shall:

- notify the Party concerned promptly of the date and composition of the amount transferred to its bank account, giving the relevant references
- perform diligently its tasks in the proper administration of any funds and in maintaining financial accounts
- undertake to keep the Community contribution to the Project separated from its normal business accounts, its own assets and property, except if the Coordinator is a Public Body or is not entitled to do so due to statutory legislation.

All payments shall be made without undue delay by the Coordinator after receipt of funds from the European Commission in accordance with the Grant Agreement, the approval of reports by the European Commission and the accepted decisions of the General Assembly on the Consortium Budget.

Payments to Parties will be handled according to the following two kinds of modalities:

- payments for past performance approved by the European Commission will be compared with the advance payment given to a Party for such past performance; the difference will be balanced directly with the Party concerned
- financing in respect of future work included in the Consortium Plan, will be forwarded to Parties not in separate instalments but in payments as they are done by the EC (advance payment and interim payments according to reported contribution). Exception to this may be decided by the General Assembly.

The Coordinator is entitled to withhold any advances either due to a Defaulting Party or to a Beneficiary not being a Party.

The Coordinator is entitled to recover any advances already paid to a Defaulting Party.

Section 8: Foreground

Regarding Foreground, Grant Agreement Article II.26. - Article II.29. shall apply with the following additions:

8.1 Joint Ownership

Joint owners shall agree on all protection measures and the division of related costs in advance

Where no joint ownership agreement has yet been concluded:

- each of the joint owners shall be entitled to Use their jointly owned Foreground on a royalty-free basis and without requiring the prior consent of the other joint owner(s), and
- each of the joint owners shall be entitled to grant non-exclusive licenses to third parties, without any right to sub-license, subject to the following conditions: at least 45 days prior notice must be given in writing to the other joint owner(s); and fair and reasonable compensation must be provided to the other joint owner(s).

8.2 Transfer of Foreground

Each Party may transfer ownership of its own Foreground following the procedures of the Grant Agreement Article II 27.

The other Parties may object to such transfer according to the Grant Agreement Article II.27.3.

The transferring Party shall notify the other Parties of such transfer and shall ensure that the rights of the other Parties will not be affected by such transfer.

The Parties recognize that in the framework of a merger or an acquisition of an important part of its assets, a Party may be subject to confidentiality obligations which prevent it from giving the full 45 days prior notice for the transfer as foreseen in Grant Agreement Article II 27.2.

8.3 Dissemination

8.3.1 Publication

Dissemination activities including but not restricted to publications and presentations shall be governed by the procedure of Article II.30.3 of the EC-GA subject to the following provisions.

Prior notice of any planned publication shall be made 45 days before the publication. Any objection to the planned publication shall be made in accordance with the GA in writing to the Coordinator and to any Party concerned within 30 days after receipt of the notice. If no objection is made within the time limit stated above, the publication is permitted.

An objection is justified if

- (a) the objecting Party's legitimate academic or commercial interests are compromised by the publication; or
- (b) the protection of the objecting Party's Foreground or Background is adversely affected.

The objection has to include a precise request for necessary modifications.

If an objection has been raised the involved Parties shall discuss how to overcome the justified grounds for the objection on a timely basis (for example by amendment to the planned publication and/or by protecting information before publication) and the objecting Party shall not unreasonably continue the opposition if appropriate actions are performed following the discussion.

The objecting Party can request a publication delay of not more than 90 days from the time it raises such an objection

8.3.2 Publication of another Party's Foreground or Background

For the avoidance of doubt, a Party shall not publish Foreground or Background of another Party, even if such Foreground or Background is amalgamated with the Party's Foreground, without the other Party's prior written approval.

For the avoidance of doubt, the mere absence of an objection according to 8.3.1 is not considered as an approval.

8.3.3 Cooperation obligations

The Parties undertake to cooperate to allow the timely submission, examination, publication and defence of any dissertation or thesis for a degree which includes their Foreground or Background. However, confidentiality and publication clauses have to be respected.

Nothing in the Consortium Agreement will prevent publication for the purposes of obtaining a degree, provided that external examiners may where necessary to protect another Party's information be required to sign a confidentiality agreement, and that a Party may request that a thesis is deposited in a university library only under restricted access conditions.

8.3.4 Use of names, logos or trademarks

Nothing in this Consortium Agreement shall be construed as conferring rights to use in advertising, publicity or otherwise the name of the Parties or any of their logos or trademarks without their prior written approval.

Section 9: Access Rights

9.1 Background covered

In accordance with and subject to the provisions of the Grant Agreement, any Party may enter in Attachment 1 any specific Background excluded from the obligation to grant Access Rights in accordance with the provisions of this Consortium Agreement. All other Background except that listed in Attachment 1 shall be available for the granting of Access Rights in accordance with the provisions of this Consortium Agreement. However, only the General Assembly can permit a Party to add excluded Background to Attachment 1.

9.2 General Principles

Each Party shall implement its tasks in accordance with the Consortium Plan and shall bear sole responsibility for ensuring that its acts within the Project do not knowingly infringe third party property rights.

As provided in the Grant Agreement Article II.32.3. Parties shall inform the Consortium as soon as possible of any limitation to the granting of Access Rights to Background or of any other restriction which might substantially affect the granting of Access Rights (e.g. the use of open source code software in the Project).

If the General Assembly considers that the restrictions have such impact, which is not foreseen in the Consortium Plan, it may decide to update the Consortium Plan accordingly.

Any Access Rights granted expressly exclude any rights to sublicense unless expressly stated otherwise.

Access Rights shall be free of any administrative transfer costs.

Access Rights are granted on a non-exclusive basis, if not otherwise agreed in writing by all the Parties according to the Grant Agreement Article II.32.7.

Foreground and Background shall be used only for the purposes for which Access Rights to it have been granted.

All requests for Access Rights shall be made in writing to the coordinator and to any Party concerned.

The granting of Access Rights may be made conditional on the acceptance of specific conditions aimed at ensuring that these rights will be used only for the intended purpose, only for as long as is necessary for those purposes, and that appropriate confidentiality obligations are in place.

The requesting Party must show that the Access Rights are Needed.

9.3 Access Rights for implementation

Access Rights to Foreground and Background Needed for the execution of the own work of a Party under the Project shall be granted on a royalty-free basis.

9.4 Access Rights for Use

Access Rights to Foreground if Needed for Use of a Party's own Foreground including for third-party research shall be granted upon a written agreement on fair and reasonable conditions.

A third party shall not be granted direct Access to Foreground generated by other Parties unless those Parties explicitly agree to it in writing.

Access rights for internal research activities shall be granted on a royalty-free basis.

A request for Access Rights may be made up to twelve months after the end of the Project or, in the case of Art 9.7.2.1.2, after the termination of the requesting Party's participation in the Project.

Access Rights to Background if Needed for Use of a Party's own Foreground shall be granted upon a written agreement on fair and reasonable conditions.

9.5 Access Rights for Affiliated Entities

Affiliated Entities have Access Rights under the conditions of the Grant Agreement Article II.34.3.

Such Access Rights to Affiliated Entities shall be granted on fair and reasonable conditions and upon written bilateral agreement.

Affiliated Entities which obtain Access Rights in return grant Access Rights to all Parties and fulfil all confidentiality and other obligations accepted by the Parties under the Grant Agreement or this Consortium Agreement as if such Affiliated Entities were Parties. If an Affiliate Entity fails in any respect to comply with its obligations as if it were a Party, and fails to rectify its non-compliance after being given a reasonable opportunity to do so by the General Assembly, all Access Rights granted to it shall terminate immediately.

Access Rights may be refused to Affiliate Entities if such granting is contrary to the Legitimate Interests of the Party which owns the Background or the Foreground.

Access Rights granted to any Affiliated Entity are subject to the continuation of the Access Rights of the Party to which it is affiliated, and shall automatically terminate upon termination of the Access Rights granted to such Party.

Upon cessation of the status as an Affiliated Entity, any Access Rights granted to such former Affiliated Entity shall lapse.

Further arrangements with Affiliated Entities may be negotiated in separate agreements.

9.6 Additional Access Rights

For the avoidance of doubt any grant of Access Rights not covered by the Grant Agreement or this Consortium Agreement shall be at the absolute discretion of the owning Party and subject to such terms and conditions as may be agreed between the owning and receiving Parties.

9.7 Access Rights for Parties entering or leaving the Consortium

9.7.1 New Parties entering the Consortium

All Foreground developed before the accession of the new Party shall be considered to be Background with regard to the said new Party. New Parties joining the Project shall have Access Rights to the Foreground obtained prior to the Party's joining the Project at the same conditions foreseen for Access Rights to Background according to Art.9.4 of this Consortium Agreement.

With respect to any New Party entering the Consortium:

“Background” shall mean information which is held by any of the Parties prior to the accession of that New Party to the Grant Agreement, as well as copyrights or other intellectual property rights pertaining to such information, the application for which has been filed before the New Party's accession to that Grant Agreement, and which is Needed for carrying out the Project or for Use of own Foreground.

9.7.2 Parties leaving the Consortium

9.7.2.1 Access Rights granted to a leaving Party

9.7.2.1.1 Defaulting Party

Access Rights granted to a Defaulting Party and such Party's right to request Access Rights shall cease immediately upon receipt by the Defaulting Party of the formal notice of the decision of the General Assembly to terminate its participation in the Consortium.

9.7.2.1.2 Non-defaulting Party

A Party leaving voluntarily and with the other Parties' consent shall have Access Rights to the Foreground developed until the date of the termination of its participation in the Project. The time limit for its right to request these Access Rights shall start on the same date.

9.7.2.2 Access Rights to be granted by any leaving Party

Any Party leaving the Project shall continue to grant Access Rights pursuant to the Grant Agreement and this Consortium Agreement as if it had remained a Party for the whole duration of the Project.

9.8 Specific provisions for Access Rights to Software

9.8.1 Definitions relating to Software

“Application Programming Interface” means the application programming interface materials and related documentation containing all data and information to allow skilled Software developers to create Software interfaces that interface or interact with other specified Software.

“Controlled License Terms” means terms in any license that require that the use, copying, modification and/or distribution of Software or another work (“Work”) and/or of any work that is a modified version of or is a derivative work of such Work (in each case, “Derivative Work”) be subject, in whole or in part, to one or more of the following:

- (a) (where the Work or Derivative Work is Software) that the Source Code or other formats preferred for modification be made available as of right to any third party on request, whether royalty-free or not;
- (b) that permission to create modified versions or derivative works of the Work or Derivative Work be granted to any third party;
- (c) that a royalty-free license relating to the Work or Derivative Work be granted to any third party.

For the avoidance of doubt, any Software license that merely permits (but does not require any of) the things mentioned in (a) to (c) is not a Controlled License (and so is an Uncontrolled License).

“Object Code” means software in machine-readable, compiled and/or executable form including, but not limited to, byte code form and in form of machine-readable libraries used for linking procedures and functions to other software.

“Software Documentation” means software information, being technical information used or, useful in, or relating to the design, development, use or maintenance of any version of a software programme.

“Source Code” means software in human readable form normally used to make modifications to it including, but not limited to, comments and procedural code such as job control language and scripts to control compilation and installation.

9.8.2. General principles

For the avoidance of doubt, the general provisions for Access Rights provided for in this Section 9 are applicable also to Software as far as not modified by this Article 9.8.

Parties’ Access Rights to Software do not include any right to receive Source Code or Object Code ported to a certain hardware platform or any right to receive Source Code, Object Code or respective Software Documentation in any particular form or detail, but only as available from the Party granting the Access Rights.

The intended introduction of Intellectual Property (including, but not limited to Software) under Controlled License Terms in the Project requires the approval of the Steering Committee to implement such introduction into the Consortium Plan. For instance, if open source software is used in the Project by doing part of the work with the help of such software, this can have serious impact on the possible use of the results and therefore has to be agreed between the Parties.

9.8.3. Access to Software

Access Rights to Software which is Background or Foreground shall comprise:

- Access to the Object Code; and,
- where normal use of such an Object Code requires an Application Programming Interface (hereafter API), Access to the Object Code and such an API; and,
- if a Party can show that the execution of its tasks under the Project or the Use of its own Foreground is technically or legally impossible without Access to the Source Code, Access to the Source Code to the extent necessary.

9.8.4. Software license and sublicensing rights

9.8.4.1 Object Code

9.8.4.1.1 Foreground - Rights of a Party

Where a Party has Access Rights to Object Code and/or API which is Foreground for Use, such Access shall, in addition to the access for Use foreseen in Article 9.4, as far as Needed for the Use of the Party's own Foreground, comprise the right:

- to make an unlimited number of copies of Object Code and API; and
- to distribute, make available, market, sell and offer for sale such Object Code and API alone or part of or in connection with products or services of the Party having the Access Rights;

provided however that any product, process or service has been developed by the Party having the Access Rights in accordance with its rights to use Object Code and API for its own Foreground.

If it is intended to use the services of a third party for the purposes of this Article 9.8.4.1.1, the Parties concerned shall agree on the terms thereof with due observance of the interests of the Party granting the Access Rights as set out in Article 9.2 of this Consortium Agreement.

9.8.4.1.2 Foreground - Rights to grant sublicenses to end-users

In addition, Access Rights to Object Code shall, as far as Needed for the Use of the Party's own Foreground, comprise the right to grant in the normal course of the relevant trade to end-user customers buying/using the product/services, a sublicense to the extent as necessary for the normal use of the relevant product or service to use the Object Code alone or as part of or in connection with or integrated into products and services of the Party having the Access Rights and, as far as technically essential:

- to maintain such product/service;
- to create for its own end-use interacting interoperable software in accordance with the Council Directive of 14 May 1991 on the legal protection of computer programs (91/250/EEC).

9.8.4.1.3 Background

For the avoidance of doubt, where a Party has Access Rights to Object Code and/or API which is Background for Use, Access Rights exclude the right to sublicense. Such sublicensing rights may, however, be negotiated between the Parties.

9.8.4.2 Source Code

9.8.4.2.1 Foreground - Rights of a Party

Where, in accordance with Article 9.8.3, a Party has Access Rights to Source Code which is Foreground for Use, Access Rights to such Source Code, as far as Needed for the Use of the Party's own Foreground, shall comprise a worldwide right to use, to make copies, to modify, to develop, to adapt Source Code for research, to create/market a product/process and to create/provide a service.

If it is intended to use the services of a third party for the purposes of this Article 9.8.4.2.1, the Parties shall agree on the terms thereof, with due observance of the interests of the Party granting the Access Rights as set out in Article 9.2 of this Consortium Agreement.

9.8.4.2.2 Foreground – Rights to grant sublicenses to end-users

In addition, Access Rights, as far as Needed for the Use of the Party's own Foreground, shall comprise the right to sublicense such Source Code, but solely for purpose of adaptation, error correction, maintenance and/or support of the Software.

Further sublicensing of Source Code is explicitly excluded.

9.8.4.2.3 Background

For the avoidance of doubt, where a Party has Access Rights to Source Code which is Background for Use, Access Rights exclude the right to sublicense. Such sublicensing rights may, however, be negotiated between the Parties.

9.8.5 Specific formalities

Each sublicense granted according to the provisions of Article 9.8.4 shall be made by a traceable agreement specifying and protecting the proprietary rights of the Party or Parties concerned.

Section 10: Non-disclosure of information

All information in whatever form or mode of transmission, which is disclosed by a Party (the “Disclosing Party”) to any other Party (the “Recipient”) in connection with the Project during its implementation and which has been explicitly marked as “confidential”, or when disclosed orally, has been identified as confidential at the time of disclosure and has been confirmed and designated in writing within 15 days from oral disclosure at the latest as confidential information by the Disclosing Party, is “Confidential Information”.

The Recipients hereby undertake in addition and without prejudice to any commitment of non-disclosure under the Grant Agreement, for a period of 5 years after the end of the Project:

- not to use Confidential Information otherwise than for the purpose for which it was disclosed;
- not to disclose Confidential Information to any third party without the prior written consent by the Disclosing Party;
- to ensure that internal distribution of Confidential Information by a Recipient shall take place on a strict need-to-know basis; and
- to return to the Disclosing Party on demand all Confidential Information which has been supplied to or acquired by the Recipients including all copies thereof and to delete all information stored in a machine readable form. If needed for the recording of ongoing obligations, the Recipients may however request to keep a copy for archival purposes only.

The Recipients shall be responsible for the fulfilment of the above obligations on the part of their employees and shall ensure that their employees remain so obliged, as far as legally possible, during and after the end of the Project and/or after the termination of employment.

The above shall not apply for disclosure or use of Confidential Information, if and in so far as the Recipient can show that:

- the Confidential Information becomes publicly available by means other than a breach of the Recipient's confidentiality obligations;
- the Disclosing Party subsequently informs the Recipient that the Confidential Information is no longer confidential;
- the Confidential Information is communicated to the Recipient without any obligation of confidence by a third party who is in lawful possession thereof and under no obligation of confidence to the Disclosing Party;
- the disclosure or communication of the Confidential Information is foreseen by provisions of the Grant Agreement;
- the Confidential Information, at any time, was developed by the Recipient completely independently of any such disclosure by the Disclosing Party; or
- the Confidential Information was already known to the Recipient prior to disclosure.

The Recipients shall apply the same degree of care with regard to the Confidential Information disclosed within the scope of the Project as with its own confidential and/or proprietary information, but in no case less than reasonable care.

Each Party shall promptly advise the other Party in writing of any unauthorised disclosure, misappropriation or misuse by any person of Confidential Information as soon as practicable after it becomes aware of such unauthorised disclosure, misappropriation or misuse.

If any Party becomes aware that it will be required, or is likely to be required, to disclose Confidential Information in order to comply with applicable laws or regulations or with a court or administrative order, it shall, to the extent it is lawfully able to do so, prior to any such disclosure

- notify the Disclosing Party, and
- comply with the Disclosing Party's reasonable instructions to protect the confidentiality of the information.

The confidentiality obligations under this Consortium Agreement and the Grant Agreement shall not prevent the communication of Confidential Information to the European Commission.

Section 11: Miscellaneous

11.1 Attachments, inconsistencies and severability

This Consortium Agreement consists of this body text and
Attachment 1 (Background excluded)
Attachment 2 (Accession document)
Attachment 4 (Initial list of Members and other contact persons)

In case this Consortium Agreement is in conflict with the Grant Agreement, the terms of the latter shall prevail. In case of conflicts between the appendices and the body text of this Consortium Agreement, the latter shall prevail.

Should any provision of this Consortium Agreement become invalid, illegal or unenforceable, it shall not affect the validity of the remaining provisions of this Consortium Agreement. In such a case, the Parties concerned shall be entitled to request that a valid and practicable provision be negotiated which fulfils the purpose of the original provision.

11.2 No representation, partnership or agency

The Parties shall not be entitled to act or to make legally binding declarations on behalf of any other Party. Nothing in this Consortium Agreement shall be deemed to constitute a joint venture, agency, partnership, interest grouping or any other kind of formal business grouping or entity between the Parties.

11.3 Notices and other communication

Any notice to be given under this Consortium Agreement shall be in writing to the addresses and recipients as listed in the most current address list kept by the Coordinator based on the initial list of members and other contact persons in Attachment 4.

Formal notices:

If it is required in this Consortium Agreement (Article. 9.7.2.1.1 and 11.4) that a formal notice, consent or approval shall be given, such notice shall be signed by an authorised representative of a Party and shall either be served personally or sent by mail with recorded delivery or telefax with receipt acknowledgement.

Other communication:

Other communication between the Parties may also be effected by other means such as e-mail with acknowledgement of receipt (e.g. Minutes).

Any change of persons or contact details shall be notified immediately by the respective Party to the Coordinator. The amended address list shall be accessible to all concerned and shall not constitute an amendment or modification of this Consortium Agreement.

11.4 Assignment and amendments

No rights or obligations of the Parties arising from this Consortium Agreement may be assigned or transferred, in whole or in part, to any third party without the other Parties' prior formal approval.

Amendments and modifications to the text of this Consortium Agreement require a separate written agreement between all Parties.

The Grant Agreement with all Annexes and all official amendments to the GA forms an integral part of this Consortium Agreement.

11.5 Mandatory statutory law

Nothing in this Consortium Agreement shall be deemed to require a Party to breach any mandatory statutory law under which the Party is operating.

11.6 Language

This Consortium Agreement is drawn up in English, which language shall govern all documents, notices, meetings and processes relative thereto.

11.7 Applicable law

This Consortium Agreement shall be construed in accordance with and governed by the laws that govern the Grant Agreement.

11.8 Settlement of disputes

All disputes arising out of or in connection with this Consortium Agreement should be solved amicably among parties with the coordinator acting as arbiter and moderator. If all attempts for a solution among the parties fail, disputes shall be finally settled under the Rules of Arbitration of the International Chamber of Commerce by one or more arbitrators appointed in accordance with the said Rules.

The place of arbitration shall be Brussels if not otherwise agreed by the conflicting Parties.

The language to be used in the arbitral proceedings shall be English, if not otherwise agreed by the conflicting Parties.

Intellectual property matters, in particular the joint ownership of Foreground according to Article 8.1 of this Consortium Agreement, shall be settled under the Rules of Arbitration of the WIPO (World Intellectual Property Organisation, Geneva). The place of arbitration shall be Brussels. The language to be used in the arbitral proceedings shall be English.

The award of the arbitration will be final and binding upon the Parties.

Nothing in this Consortium Agreement shall limit the Parties' right to seek injunctive relief or to enforce an arbitration award in any applicable competent court of law.

Section 12 Technical Provisions

12.1. Tasks of each Party

Each Party will actively contribute to the Work Packages, Tasks and deliverables which it is associated to, as indicated in Table 1. The nature of the contribution varies between Tasks and Parties, but can be summarized as follows.

Modelling Parties shall make available if needed their modeling results (and models where feasible) in the format and extent agreed on in the Project Description of Work and subsequently developed modeling protocols. Moreover, modelers shall provide if needed a detailed documentation of their model to allow scientific interpretation of modelling results. If needed necessary for interpretation part of the code may need to be disclosed.

Principle investigator (PI) of experimental sites shall make available if Needed from his Background all pre-existing experimental data, unless third party rights would be violated and will gather additional data from their site if Needed in the Project for a minimal and harmonized cross-site database to the extent the work can be held within the Party's share of the Consortium Budget. In case data or knowledge held by third parties is needed in the Project, the PI will establish links to this Party and support the project management towards an agreement regarding data sharing and involvement of the third party for mutual benefit. PIs shall identify these data within six months after starting the project.

Parties involved in database development and model-data integration methodology will make available if Needed their tools for the benefit of the Project in a transparent manner.

Table 1: List of deliverables, associated lead partner, contributing partners and month of deliverable.

| Description | WP | Lead partner | Contributing partner(s) | Month |
|---|----|--------------|-------------------------|-------|
| Workshop on recent and past agricultural management (tillage practice, fertiliser application, harvest rates) | 1 | 3 | 12, 5 | 7 |
| Complete European harmonized driver maps and time series for natural drivers including direct and diffuse radiation for past, present and future | 1 | 4 | 2 | 12 |
| Complete driver maps for forest type, forest age class distribution, harvest and disturbance for Europe for past, present and future | 1 | 22 | 8, 3 | 18 |
| Complete improved driver maps and monthly time series for reduced and oxidised wet and dry N deposition for European scale for past, present and future | 1 | 4 | | 18 |
| Complete compilation of new improved maps of European land use changes between 1900 and 2006/2010 | 1 | 34 | 4, 3, 12 | 18 |
| Complete driver maps for agricultural management practice for past to present | 1 | 3 | 12, 5 | 18 |
| Complete socio-economic driver maps with high accuracy for 1990-2020 and lower accuracy for 1950-1990 | 1 | 3 | | 18 |

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|--|---|----|--|----|
| Updated driver maps of application rates from inorganic and organic fertiliser in agricultural systems since 1950 for European level | 1 | 3 | 12, 5 | 24 |
| Complete quantitative assessment of the annual to decadal variability in drivers, hotspots of changes and the temporal magnitude of regional trends and variability in natural drivers, visualized in driver change maps for decadal periods from 1900 to 2010 | 1 | 4 | 3, 5, 12, 22, 34 | 36 |
| Workshop on the effect of land use changes on GHG fluxes | 2 | 1 | 30, 29 | 6 |
| Complete the set up of 12 GHG measuring sites along a Romanian forest management gradient | 2 | 11 | | 7 |
| Workshop on the effect of agricultural management on GHG fluxes | 2 | 12 | 1, 5, 6, 27 | 12 |
| Complete updated data base on GHG fluxes in forests | 2 | 15 | 9, 18, 20, 32 | 12 |
| Complete synthesis of GHGs in peatlands as affected by land management and climate drivers | 2 | 14 | 1, 9, 7, 5 | 14 |
| Complete and deliver to data base at least 20 site years of CO ₂ flux data from at least 6 different scrubland sites | 2 | 16 | 33, 38, 39 | 24 |
| Complete analysis of fire impact on C and N cycles (woody encroachment) over 10 years from 18 experimental burnt sites | 2 | 38 | 33, 16, 39 | 24 |
| Complete pan-European soil C sampling and synthesis on the impact of different land use changes | 2 | 1 | 29, 30 | 30 |
| Complete comparison and validation of three peatland models | 2 | 14 | 1, 9, 7, 5 | 36 |
| Complete assessment of forest management's impact on Romanian forest. | 2 | 11 | 15 | 36 |
| Complete synthesis of European agricultural management impacts on GHG fluxes | 2 | 12 | 1, 5, 6, 27 | 36 |
| Complete synthesis of processes affected by N deposition in forests including new data from resampled ¹⁵ N deposition experiment | 2 | 15 | 9, 18, 20, 32 | 36 |
| Complete synthesis in Mediterranean shrublands and woody encroachments impact on GHG fluxes | 2 | 16 | 33, 38, 39 | 36 |
| Annual datasets of GHG fluxes at site level from six selected regions | 3 | 7 | 2, 4, 6, 8, 10, 12, 13, 17, 19, 21, 22, 23, 25, 26, 31, 34, 37, 40 | 24 |
| Magnitude and variability of GHG fluxes at site level from six selected regions | 3 | 7 | 2, 4, 6, 8, 10, 12, 13, 17, 19, 21, 22, 23, 25, 26, 31, 34, 37, 40 | 24 |
| Complete compilation of existing data from flux towers and chambers, biomass inventories and soil C stocks of the 6 data rich regions | 3 | 7 | 2, 4, 6, 8, 10, 12, 13, 17, 19, 21, 22, 23, 25, 26, 31, 34, 37, 40 | 24 |
| Database of high resolution meteorological data for six selected regions | 3 | 7 | 10, 13, 21, 23, 31, 40 | 24 |
| Magnitude of lateral exchange fluxes for the six regions | 3 | 7 | 2, 6, 8, 10, 12, 13, 17, 19, 21, 22, 25, 26, 31, 34, 37 | 36 |
| Annual datasets of GHG fluxes at site level from six selected regions | 3 | 7 | 2, 4, 6, 8, 10, 12, 13, 17, 19, 21, 22, 23, 25, 26, 31, 34, 37, 40 | 36 |
| Complete regional scale estimates of the impact on land management on GHG budgets in 6 selected regions | 3 | 7 | 2, 4, 6, 8, 10, 12, 13, 17, 19, 21, 22, 23, 25, 26, 31, 34, 37, 40 | 36 |
| Complete regional scale estimates of the uncertainty of GHG balances | 3 | 7 | 2, 4, 6, 8, 10, 12, 13, 17, 19, 21, 22, 23, 25, 26, 31, 34, 37, 40 | 36 |
| Inverse atmospheric inversions for two regions | 3 | 7 | 2, 4, 40 | 36 |
| Complete the assessment of the decadal scale variability of GHG fluxes in the selected six regions | 3 | 7 | 2, 4, 6, 8, 10, 12, 13, 17, 19, 21, 22, 23, 25, 26, 31, 34, | 40 |

| | | | | |
|---|---|---|--|----|
| | | | 37, 40 | |
| Complete the vulnerability assessment of the effect of changes in land management for 6 selected regions | 3 | 7 | 2, 4, 6, 8, 10, 12, 13, 17, 19, 21, 22, 23, 25, 26, 31, 34, 37, 40 | 40 |
| Complete sectoral model evaluation using data collated from previous projects | 4 | 5 | 1, 5, 8, 12, 22, 24, 28 | 12 |
| Complete attribution analysis for each plot scale site from pervious projects using each sectoral model | 4 | 5 | 1, 5, 8, 12, 22, 24, 28 | 24 |
| Complete attribution analysis for each GHG-Europe data rich region using each sectoral model | 4 | 5 | 5, 8, 12, 22, 24, 28 | 30 |
| Complete plot and regional level sensitivity analysis | 4 | 5 | 1, 5, 8, 12, 22, 24, 28 | 33 |
| Complete sectoral model evaluation using data collected during the project | 4 | 5 | 1, 5, 8, 12, 22, 24, 28 | 36 |
| Complete pan-European sectoral attribution analyses and deliver to WP 6 | 4 | 5 | 1, 4, 5, 8, 12, 22, 24, 28 | 38 |
| Complete comparison of pan-European sectoral attribution analyses with top-down analyses from WP5 | 4 | 5 | 1, 4, 5, 8, 12, 22, 24, 28 | 40 |
| Protocols for site scale simulations of fluxes with data oriented models | 5 | 2 | 4 | 6 |
| Protocols for factorial experiments with LPGml and ORCHIDEE | 5 | 2 | 41 | 6 |
| Protocols for land use change and management model evaluation and site simulations in WP 2 and 3 | 5 | 2 | 1, 7, 34 | 6 |
| Complete generic and data oriented model evaluation using data collected from previous projects | 5 | 2 | 1, 4, 6, 41 | 12 |
| Mid-term synthesis of GHG-Europe results as two scientific publications | 5 | 2 | 1, 3, 4, 5, 6, 7 | 21 |
| Delivery of complete functional relationships and spatio-temporal patterns for the future vulnerability analysis | 5 | 2 | | 26 |
| Complete model evaluation using data collected during the project | 5 | 2 | 1, 4, 6, 21, 41 | 36 |
| Complete European time-varying gridded maps of main carbon stocks and fluxes quantified sensitivity to climate, CO ₂ , nitrogen, land use, and land management intensity | 5 | 2 | 1, 4, 6, 41 | 38 |
| Complete comparison of model results between ecosystem models and data oriented models and with top-down analyses from WP5 | 5 | 2 | 1, 4, 6, 41 | 40 |
| Final synthesis on the manageability of European terrestrial GHG emissions | 5 | 2 | 1, 3, 4, 5, 6, 7 | 42 |
| Detailed report on Policy Implications for Post Kyoto policies | 6 | 3 | 5 | 6 |
| Database on EU-Policy Scenario Results. Major environmental, societal, market, and technological impacts | 6 | 3 | | 6 |
| Documentation of scenario analysis. A detailed description of the flow of information through the coupled models plus illustration using early specified scenario | 6 | 3 | | 12 |
| Database on Long-term Climate Policy Scenario Results. Major environmental, societal, market, and technological impacts in electronic data base format | 6 | 3 | | 36 |
| Database Vulnerability Scenario Results. Major environmental, societal, market, and technological impacts in electronic data base format | 6 | 3 | | 36 |
| Summary Report for Policy Makers on policy assessment and implications | 6 | 3 | 1, 5 | 42 |
| Workshop with modellers and experimentalists to set up an effective data base system including parameter uncertainties and reproducible model run parameters | 7 | 6 | 4, 5 | 2 |
| Report on the workshop results with instructions for data acquisition and delivery | 7 | 6 | | 4 |
| Prototype of the database system (Database structure ready with an example of each dataset type) | 7 | 6 | | 12 |
| Heterogeneous data uncertainty protocol | 7 | 4 | 6, 5 | 12 |
| Prototype of the QA/QC tools | 7 | 6 | | 18 |
| Storage of uncertainty meta-data in a standardized from in the project database | 7 | 6 | | 18 |

| | | | | |
|--|---|---|-------------|------------|
| First version of the standardized and quality controlled data in the database | 7 | 6 | | 24 |
| Representation of model experiments and results in a reproducible format in the data base | 7 | 6 | 4, 5 | 30 |
| Complete tools for assessing parameter distribution and geo-statistical geostatistics tools | 7 | 6 | | 30 |
| Participation of Participants at Conference of the Parties (COP) meetings for post-2012 negotiations | 8 | 1 | | Every Dec. |
| Implementation of web page | 8 | 1 | | 2 |
| Organization of kick-off meeting | 8 | 1 | 6 | 2 |
| Press releases or press conference after the kick-off meeting | 8 | 1 | 3, 5, 8, 22 | 2 |
| Organization first progress meeting | 8 | 1 | | 14 |
| Press releases or press conference after the first progress meeting | 8 | 1 | 3, 5, 8, 22 | 14 |
| Annual policy briefing documents of project results | 8 | 1 | 3, 5, 8, 22 | 14 |
| First project period report to commission | 8 | 1 | all | 18 |
| Side event at Conference of the Parties (COP) to present project results (December 2011) | 8 | 1 | ? | 25 |
| Organization of second progress meeting | 8 | 1 | | 26 |
| Press releases or press conference after the second progress meeting | 8 | 1 | 3, 5, 8, 22 | 26 |
| Brochure explaining the scientific findings to the broad public and to secondary schools | 8 | 1 | | 30 |
| Reporting period report to commission | 8 | 1 | all | 36 |
| Open science conference on European GHG fluxes together with final project meeting | 8 | 1 | | 38 |
| Final press conference and press release on project findings | 8 | 1 | 3, 5, 8, 22 | 38 |
| Final reporting to the EC | 8 | 1 | all | 42 |

12.2 GHG-Europe Data policy

12.2.1 Scope

The GHG-Europe Data Policy addresses issues related to the provision, exchange, availability, maintenance, use and publication of data and products as defined under 12.2.4, 1.-7. produced by the GHG-Europe research activities or acquired from third parties as a support to this research.

The GHG-Europe Data Policy is a voluntary commitment negotiated with all GHG-Europe Parties supporting the Open Access philosophy. It does not affect any of the provisions regarding Access Rights outlined in Section 9 and excluded Background outlined in Attachment 1 of this Consortium Agreement.

GHG-Europe is based on partial funding from the European Commission. The participating Parties agree, where possible, and subject to existing or future third party rights, to deliver to the Project also data and knowledge produced from other funding sources. For the avoidance of doubt, the owning Party is under no obligation to agree to deliver such data. The PI and the administration of each participating Party are responsible that their scientific staff is informed about the obligation of data delivery according to this contract and that the data delivery is considered in the work contracts.

Each scientist shall make data available through the database, according to the rules in this policy document, to other scientists within the GHG-Europe consortium, unless other regulations exist. The European Community Institutions and Bodies shall enjoy access rights to Foreground for the purpose of developing, implementing and monitoring environmental policies according to Special Clause 29 relating to environmental research by the Commission.

12.2.2 Purpose

The purpose of the GHG-Europe Data Policy is to set up fundamental principles in view of

- easing collaboration among the participants of the GHG-Europe project;

- ensuring timely submission of quality-checked, consistent data and products for the use within the consortium;
- protecting the researchers' IPR and rights to publish their results;
- providing rules for the use of the data within the consortium and by third parties;
- building a homogeneous body of valuable scientific information on GHG fluxes over European ecosystems;
- providing the broader scientific community with an easy access to the above integrated knowledge during and beyond the lifetime of GHG-Europe.

12.2.3 Principles

- (1) All scientific data, tools and products used in publications of GHG-Europe are unambiguously identified and made publically accessible via a central database ("GHG-Europe database") so that the research results and the way towards the results are fully traceable by independent experts.
- (2) The GHG-Europe data policy is in line with the recommendations of the Global Climate Observing System (GCOS) and the Group on Earth Observation's (GEO) guidelines and data principles. The GHG-Europe Consortium endorses the GEOSS Data Sharing Principles¹:
 - a. There will be full and open exchange of data, metadata, and products inside and outside GHG-Europe, recognizing relevant international instruments and national policies and legislation.
 - b. All shared data, metadata, and products will be made available with minimum time delay.
 - c. All shared data, metadata, and products will be free of charge or no more than cost of reproduction for research and education.
- (3) An open data policy on its own is not sufficient to ensure scientific quality and traceability. Data quality control and assessment and rigorous, consistent uncertainty analysis need to be an integral part of an open data policy.
- (4) The GHG-Europe data policy ensures fair data use that involves several stages of information and opportunity of data owners to actively participate in scientific work, rules for crediting authorship and consent to publication by data owners.
- (5) Recognizing the strong synergy with running EU projects NitroEurope IP, CC-TAME and Carbo-Extreme, the Parties agree, where possible, and subject to existing or future third party rights, to grant full immediate access to their data, metadata and products needed for research in the respective projects via cooperation agreements. For the avoidance of doubt however, no Party is under any obligation to agree to deliver such data
- (6) GHG-Europe engages to include its database into a web portal of carbon and GHG data.
- (7) GHG-Europe encourages the Partners to endorse the Open Database License (PDbL; Open Data Commons 2010²) with its social and professional norms for acknowledgement and putting derived works in the public domain.

12.2.4 Data management infrastructure and operations

GHG-Europe is building the GHG-Europe database. Università della Tuscia (UNITUS) is developing and operating this database in coordination with Johann Heinrich von Thünen-Institut (vTI). UNITUS handles all data, metadata and products except for the atmospheric concentration data and the results of the atmospheric model inversions from Task 5.3, which are handled by Commissariat à l'Énergie Atomique (LSCE).

¹ GEO-VI – 17-18 November 2009 Document 7(Rev2), http://www.earthobservations.org/documents/geo_vi/07_Implementation_Guidelines_for_the_GEOSS_Data_Sharing_Principles_Rev2.pdf

² <http://www.opendatacommons.org/licenses/odbl/>

12.2.5 Contents of the GHG-Europe database

The GHG-Europe database will host consolidated data, metadata and products from CarboEurope-IP and data collected and produced in the GHG-Europe project. The GHG-Europe database will not archive raw data and interim steps of data processing and modeling. Any information hosted in the database is a “dataset”, or “data”

1. Documented, quality-checked observations and secondary data products with uncertainties + author/owner
2. Documented, quality-checked modeling protocols with uncertainties + author/owner
3. Documented, quality-checked model parameters with uncertainties + author/owner
4. Documented, quality-checked model results with uncertainties + author/owner
5. Executable files of the models used to generate the results
6. Documented, quality-checked drivers with uncertainties + author/owner
7. Meta-analysis data with uncertainties + references

In recognition that raw data represent a potentially valuable source of future science developments, including possible revision of the processed data, the Principal Investigators (PIs) agree to ensure that they are stored safely with the relevant processing software or, alternatively, with documentation on retrieval algorithms.

12.2.6 Data set identification

Data and products submitted to the database, which are not yet consolidated for publication or yet restricted for internal use within the GHG-Europe project are identified by file name and versioning.

For all data and products in the public domain of the GHG-Europe database, uniform resource identifiers and universal numerical fingerprints are applied to the data sets. Recognizing recommendation of the World Data Centers individual data sets and products are identified by Scientific and Technical Data Digital Object Identifiers (STD-DOI)³, which are globally administered by the German National Library of Science and Technology.

12.2.7 Metadata standards

GHG-Europe complies to metadata standards for inclusion of the database in other networks. Metadata standards will be defined in the Protocols developed during the project. The Protocols will ensure that the metadata standards comply with the requirements for unambiguous identification, authorship and ownership of the data, transparency, versioning and publication with STD-DOI.

12.2.8 Authorship of data

Every dataset has an author and an owner identified in the metadata of the dataset. An author is a natural person. An owner is either an institution, a natural person or a group of persons or a combination of persons and institutions according to the legal situation of the data contributors.

Every dataset has one contact person identified in the metadata of the dataset. The contact person receives all requests and information about downloads of data. The contact person is responsible for quality control, updating the dataset or changes in the metadata of the dataset.

12.2.9 Submission of data to the GHG-Europe database

In order to warrant timeliness and continuity to the research activities within GHG-Europe, it is essential that data produced by one Partner is delivered as soon as possible to the other Partners via the GHG-Europe database. Datasets collected over some defined period of time (of the order of three to six months) and products have been allocated submission deadlines related to deliverables in the Description of Work. Data submitted to the database cover the reporting periods and previous periods in case of updates. Data submission has to follow the Protocols established during the project.

³ STD-DOI. 2010. Publication and Citation of Scientific Primary Data. <http://www.std-doi.de/>, viewed 2010-04-22.

12.2.10 Use of data

The GHG-Europe data policy ensures fair data use that involves several stages of information and opportunity of data owners to actively participate in scientific work, rules for crediting authorship and consent to publication by data owners.

The database is separated into a public and an internal project domain.

Data within the database will be immediately public unless individual property rights restrict or delay publication. In the latter case the data are stored in the internal project domain of the database. PIs and their PhD students are obliged to grant immediate access to the data for project partners for project purposes according to the rules below. Agreement to publication of the data shall not unnecessarily be delayed. The period between producing the data and their publication, to validate and analyse the data, should not exceed two years.

Conditions of use of data in the internal project domain

These data were generated or collected within the framework of GHG-Europe project. The user agrees

- to contact the Data Originator prior to any use of the data,
- not to disclose the data to other parties,
- to restrict the use of the data to the context of the research topic as agreed with the Data Originator,
- that the Intellectual Property Right remains with the Data Originator,
- not to use the data for commercial purposes. Access Rights to Foreground data, generated within the GHG Europe Project, if Needed for Use of a Party's own Foreground shall be governed by the terms of Article 9.4.
- to offer the Data Originator(s) an intellectual participation in the planned research,
- to offer co-authorship of any publication or communication based on these data if the Data Originator(s) participated intellectually in the research;
- in the event that the Data Originator(s) only contributed the data, Data Originators must be duly acknowledged,
- to send the publication to all Data Originator(s) 45 days before submission. Any objection to the planned publication by the Data Originator(s) shall be made in writing to the Coordinator and to any Party concerned within 30 days after receipt of the notice. If no objection is made within the time limit stated above, the publication is permitted. The reception of such a request for publication has to be acknowledged/confirmed. The 30 days period starts with confirmation of reception.

Conditions of use of data in public domain

Data sets in the public domain of the GHG-Europe database shall be regarded as scientific publications and shall be quoted with their STD-DOI.

The data is provided without cost for online access.

12.2.11 Publication of data

To make primary scientific data citeable as publications via STD-DOI³, data must meet the criteria stated below:

- Quality control of the primary data set by the author and by the data publishing agency,
- Quality control of the descriptive metadata set by the author and by the data publishing agency
- Long-term availability of the published data in online repositories (World Data Centres and GFZ Potsdam)

Published data must be openly accessible and cannot be modified, like articles in scientific literature.

Changes in the data require a new STD-DOI.

To allow the use of STD-DOI in the GHG-Europe database access to the primary data with assignment of a persistent identifier and resolver system (DOI resolver) will be implemented. The author of the data is ultimately responsible for quality control. The database manager coordinates the quality control and manages the organizational and technical issues of publication via STD-DOI. The database manager establishes a practicable mechanism to define consolidated data sets and to organize the publication with STD-DOI. The assignment of a data DOI is free of charge.

12.2.12 Long-term accessibility of GHG-Europe data

To guarantee the long-term accessibility of GHG-Europe data, metadata and products, publication via STD-DOI and cooperation with emerging research and IT infrastructures (e.g. ENCORE, GENESI-DR⁴, INSPIRE⁵, ICOS⁶) is sought.

Amalgamation of the project data with other data requires the authorization of the project coordinator, the General Assembly, or where applicable, the original providers in case of external data sets used in GHG-Europe. Amalgamated data shall recognize the contribution of GHG-Europe via acknowledgement: *The data were acquired in the EU project GHG-Europe (EC FP7, GA N° 244122).*

GHG-Europe encourages the Partners to endorse the Open Database License (PDbL; Open Data Commons 2010⁶) with its social and professional norms for acknowledgement and putting derived works in the public domain. The PDbL governs the rights over the database, and not the contents of the database individually. Endorsing the PDbL means that the database is made freely available to any kind of user in the belief that its wide dissemination will lead to greater understanding and new scientific insights and that global scientific problems require international cooperation. The endorsement of the PDbL requires the authorization by the General Assembly.

12.2.13 Data quality and completeness

It is the PIs' responsibility to perform required calibration and validation prior to data submission to the GHG-Europe database, and ensure that the data are of the best possible quality and completeness. It will be one of the roles of the Workpackage 7 to support and supervise quality checks.

12.3 Non-financial resources made available

The parties mentioned in the partner description in the Description of Work as well as all the associated expertise, data and infrastructure will contribute to a successful fulfillment of the Project goals. To achieve respective Project deliverables partners agree to contribute relevant resources that maybe needed to complement the requested EC contribution. Exceptions to this general agreement are specified in the Section "Background excluded"

⁴ <http://www.genesi-dr.eu/>

⁵ <http://inspire.jrc.ec.europa.eu/>

⁶ <http://www.icos-infrastructure.eu/>

Section 13: Signatures

AS WITNESS:

The Parties have caused this Consortium Agreement to be duly signed by the undersigned authorised representatives in the day and year first above written.

(1) Johann Heinrich von Thünen Institute (VTI)

Signature(s)

Name(s) **Prof. Folkhard Isermeyer**

Title(s) **President**

Stamp of the organization

Date

Authorised to sign on behalf of

(2) Commissariat à l'Énergie Atomique et aux énergies alternatives LSCE (CEA)

Signature(s)

Name(s) **Dr. Yves Caristan**

Dr. Jean-Paul Duraud

Title(s) **Director
DSM/DIR**

**Co-Director
DSM/DIR**

Stamp of the organization

Date

Authorised to sign on behalf of

(3) Internationales Institut für Angewandte Systemanalyse (IIASA)

Signature(s)

Name(s) **Prof. Detlof von Winterfeldt**

Ms. Susan Riley

Title(s) **Director**

**Head
Office of Sponsored Research**

Stamp of the organization

Date

Authorised to sign on behalf of

(4) Max-Planck-Gesellschaft zur Förderung der Wissenschaften e.V. (MPG)

Signature(s)

| | | |
|----------|---|---|
| Name(s) | Prof. Martin Heimann | Prof. Susan Trumbore |
| Title(s) | Managing Director | Director |
| | Max-Planck-Institut für Biogeochemie (MPI-BGC) | Max-Planck-Institut für Biogeochemie (MPI-BGC) |

Stamp of the organization

Date

Authorised to sign on behalf of

(5) The University Court of the University of Aberdeen (UNIABDN)

Signature(s)

Name(s) **Dr. Elizabeth Rattray**

Title(s) **Deputy Director
Research & Innovation**

Stamp of the organization

Date

Authorised to sign on behalf of

(6) Università degli Studi Della Tuscia (UNITUS)

Signature(s)

Name(s) **Prof. Piermaria Corona**

Dr. Marco Barbini

Title(s) **Director
DISAFRI**

**Administrative Secretary
DISAFRI**

Stamp of the organization

Date

Authorised to sign on behalf of

**(7) VERENIGING VOOR CHRISTELIJK HOGER ONDERWIJS
WETENSCHAPPELIJK ONDERZOEK EN PATIENTENZORG (VUA)**

Signature(s)

Name(s) **Dr. Rob Neutelings**

Title(s) **Managing Director
Faculty of Earth and Life Science**

Stamp of the organization

Date

Authorised to sign on behalf of

(8) Stichting Dienst Landbouwkundig Onderzoek (Stichting DLO)

Signature(s)

Name(s) **Mr. Kees Slingerland**

Mr. Auke de Bruin

Title(s) **Managing Director**

Director Operations

Stamp of the organization

Date

Authorised to sign on behalf of

(9) Centre for Ecology and Hydrology (Natural Environment Research Council) (CEH)

Signature(s)

Name(s) **Ms. Shiralee Aland**

Ms. Carol Hughes

Title(s) **Research Contracts Advisor**

Research Contracts Advisor

Stamp of the organization

Date

Authorised to sign on behalf of

(10) Eidgenössische Technische Hochschule Zürich (ETH)

Signature(s)

| | | |
|----------|---|---|
| Name(s) | Prof. Peter Chen | Prof. Roman Boutellier |
| Title(s) | Vice President Research ETH Zurich | Vice President Human Resources + Infrastructure ETH Zurich |

Stamp of the organization

Date

Authorised to sign on behalf of

(11) Institutul de Cercetari si Amenajari Silvice (ICAS)

Signature(s)

Name(s) **Dr. Gheorghe Dumitriu**

Ms. Claudia Balan

Title(s) **Director**

Economic Director

Stamp of the organization

Date

Authorised to sign on behalf of

(12) Institut National de la Recherche Agronomique (INRA)

Signature(s)

Name(s) **Dr. Michel Beckert**

Dr. Alain Brelurut

Title(s) **Président
Centre de Clermont-Ferrand –
Theix**

**Directeur des Services d'Appui
Centre de Clermont-Ferrand –
Theix**

Stamp of the organization

Date

Authorised to sign on behalf of

(13) Poznan University of Life Science (PULS)

Signature(s)

Name(s) **Prof. Jan Pikul**

Title(s) **Vice Rector**

Stamp of the organization

Date

Authorised to sign on behalf of

(14) Technische Universitaet Muenchen (TUM)

Signature(s)

Name(s) **Ms. Ulrike Ronchetti**

Title(s) **Legal Representative**

Stamp of the organization

Date

Authorised to sign on behalf of

(15) UNIVERSITEIT ANTWERPEN (UA)

Signature(s)

Name(s) **Prof. Alain Verschoren**

Title(s) **Rector**

Stamp of the organization

Date

Authorised to sign on behalf of

(16) Fundacion Centro de Estudios Ambientales del Mediterraneo (CEAM)

Signature(s)

Name(s) **Dr. Millán Millán M.**

Title(s) **Executive Director**

Stamp of the organization

Date

Authorised to sign on behalf of

(17) HELSINGIN YLIOPISTO (UHEL)

Signature(s)

Name(s) **Prof. Johanna Björkroth**

Title(s) **Vice-Rector**

Stamp of the organization

Date

Authorised to sign on behalf of

**(18) Federal Research and Training Centre for Forests, Natural Hazards and Landscape
(BFW)**

Signature(s)

Name(s) **Dr. Harald Mauser**

Title(s) **Deputy Head**

Stamp of the organization

Date

Authorised to sign on behalf of

(19) Fondazione Edmund Mach (FEM)

Signature(s)

Name(s) **Dr. Roberto Viola**

Dr. Francesco Salamini

Title(s) **Director**
Research and Innovation Centre

President

Stamp of the organization

Date

Authorised to sign on behalf of

(20) DANMARKS TEKNISKE UNIVERSITET (DTU)

Signature(s)

Name(s) **Mr. Claus Nielsen**

Dr. Lars Pallesen

Title(s) **Director**

President

Stamp of the organization

Date

Authorised to sign on behalf of

(21) Energy research Centre of the Netherlands (ECN)

Signature(s)

Name(s) **Dr. Ton Hoff**

Dr. Kees van der Klein

Title(s) **Director**

Vice-Director

Stamp of the organization

Date

Authorised to sign on behalf of

(22) European Forest Institute (EFI)

Signature(s)

Name(s) **Prof. Risto Päivinen**

Title(s) **Director**

Stamp of the organization

Date

Authorised to sign on behalf of

(23) Ilmatieteen laitos - Finnish Meteorological Institute (FMI)

Signature(s)

Name(s) **Prof. Petteri Taalas**

Title(s) **Director General**

Stamp of the organization

Date

Authorised to sign on behalf of

(24) Joanneum Research (JR)

Signature(s)

Name(s) **Prof. Bernhard Pelzl**

Mr. Edmund Müller

Title(s) **Managing Director**

Managing Director

Stamp of the organization

Date

Authorised to sign on behalf of

(25) Autonomous Province of Bolzano (APB)

Signature(s)

Name(s) **Dr. Luis Durnwalder**

Title(s) **President**

Stamp of the organization

Date

Authorised to sign on behalf of

(26) University of Groningen (RUG)

Signature(s)

Name(s) **Prof. Dr. Sibrand Poppema**

Title(s) **President**

Stamp of the organization

Date

Authorised to sign on behalf of

(27) SVERIGES LANTBRUKSUNIVERSITET (SLU)

Signature(s)

Name(s) **Prof. Mats Olsson**

Ms. Ingrid Ragnarsdotter Jajke

Title(s) **Head of department
Department of Soil and Environment**

Project Support Manager

Stamp of the organization

Date

Authorised to sign on behalf of

(28) SUOMEN YMPARISTOKESKUS (SYKE)

Signature(s)

Name(s) **Dr. Lea Kauppi**

Dr. Juha Kämäri

Title(s) **General Director**

Research Director

Stamp of the organization

Date

Authorised to sign on behalf of

(29) University College Dublin (UCD)

Signature(s)

Name(s) **Prof. Donal Doolan**

Title(s) **Head of Financial Management**

Stamp of the organization

Date

Authorised to sign on behalf of

(30) Københavns Universitet (FLD-UCPH)

Signature(s)

Name(s) **Karen Laigaard**

Title(s) **Vice President**

Stamp of the organization

Date

Authorised to sign on behalf of

(31) Universität Innsbruck (UIBK)

Signature(s)

Name(s) **Univ. Prof. Dr. Ulrike Tappeiner**

Title(s) **Head of the Institute
Faculty of Biology/Institute of Ecology**

Stamp of the organization

Date

Authorised to sign on behalf of

(32) Alma Mater Studiorum - Università di Bologna (UNIBO)

Signature(s)

Name(s) **Prof. Guglielmo Costa** **Prof. Luca Corelli Grappadelli**

Title(s) **Director** **Vice-Director**

Stamp of the organization

Date

Authorised to sign on behalf of

(33) Universidad de Granada (UGR)

Signature(s)

Name(s) **Prof. Dolores Suárez Ortega**

Title(s) **Vice-Rector for Research**

Stamp of the organization

Date

Authorised to sign on behalf of

(34) Wageningen University (WUR)

Signature(s)

Name(s) **Mr. Kees Slingerland**

Title(s) **Director**

Stamp of the organization

Date

Authorised to sign on behalf of

(35) Università degli Studi di Udine (UNIUD)

Signature(s)

Name(s) **Prof. Pierluigi Bonfanti**

Title(s) **Department head**

Stamp of the organization

Date

Authorised to sign on behalf of

(36) Universität Heidelberg (UHEI-IUP)

Signature(s)

Name(s) **Dr. Marina Frost**

Title(s) **Registral**

Stamp of the organization

Date

Authorised to sign on behalf of

(37) Consiglio Nazionale delle Ricerche (CNR)

Signature(s)

Name(s) **Dr. Antonio Raschi**

Title(s) **Director**

Stamp of the organization

Date

Authorised to sign on behalf of

(38) Centre Tecnologic Forestal de Catalunya (CTFC)

Signature(s)

Name(s) **Dr. Gloria DOMINGUEZ TORRES**

Title(s) **Director**

Stamp of the organization

Date

Authorised to sign on behalf of

(39) Universidad de Castilla-La Mancha (UCLM)

Signature(s)

Name(s) **Prof. Francisco José Quiles Flor**

Title(s) **Vice Chancellor**

Stamp of the organization

Date

Authorised to sign on behalf of

(40) Centre National de Recherche en Météorologie (CNRM)

Signature(s)

Name(s) **Dr. Philippe Bougeault** **Dr. Joël Poitevin**

Title(s) **Director** **Deputy Director**

Stamp of the organization

Date

Authorised to sign on behalf of

(41) Potsdam-Institut für Klimafolgenforschung e.V. (PIK)

Signature(s)

Name(s) **Prof. Hans Joachim Schellnhuber** **Prof. Ottmar Edenhofer**

Title(s) **Director** **Deputy-Director
Research Domain III –
Sustainable Solutions**

Stamp of the organization

Date

Attachment 1: Background excluded

Background excluded from Access Rights:

Partner 1 (VTI)

For the purpose of the GHG-Europe Project, VTI hereby excludes the following background:

- all background generated by employees, agents or representatives of VTI other than those directly involved in the GHG-Europe Project.
- all background generated by employees, agents or representatives of VTI that are directly involved in the GHG-Europe Project, which is unrelated to the work plan, aims and objectives of the GHG-Europe Project.
- all background which VTI, due to existing or future third party rights, is unable to grant access rights to.

Partner 2 (CEA)

CEA excludes from its obligation to grant Access Rights to any Background which

- is not generated by its laboratory LSCE involved in carrying out the Project,
- is generated by LSCE during the term of the Project, outside the scope of it, and
- is covered by specific written research or development agreements with third parties for which CEA, due to third party rights, is not able to grant Access Rights to or from whom CEA needs to get permission to grant Access Rights to.

Partner 3 (IIASA)

IIASA excludes:

- Pre-Existing Know-How belonging to IIASA developed by scientists not participating in GHG-Europe;
- Pre-Existing Know-How developed by scientists participating in GHG-Europe which is outside the scope of GHG-Europe;
- All Pre-Existing Know-How that is covered under specific research agreements and confidentiality agreements and therefore subject to third-party rights;
- New and all Pre-Existing Know-How developed at IIASA by other research programs than GHG-Europe.

Partner 4 (MPG)

The Max-Planck-Gesellschaft zur Förderung der Wissenschaften e.V. (MPG), represented by the Director at the Max-Planck-Institut für Biogeochemie, Prof. Dr. Martin Heimann, hereby excludes all background generated by the Max-Planck-Gesellschaft zur Förderung der Wissenschaften e.V., other than that generated within the Max-Planck Research Group Biogeochemical Model-Data Integration lead by Dr. Markus Reichstein and the research groups in the BGC Systems Department represented by Dr. Christoph Gerbig, Dr. Jost Lavric and Prof. Heimann at the Max-Planck-Institut für Biogeochemie, as well as Background which MPG is not able to grant access to, due to existing third party rights and background which is not related to the project as indicated in the Description of Work.

Partner 8 (Alterra)

For the purpose of the GHG-Europe Project, Alterra hereby excludes the following background:

- all background that has been and/or will be generated by employees, agents or representatives of Alterra other than those directly involved in the GHG-Europe Project.

- all background that has been and/or will be generated by employees, agents or representatives of Alterra that are directly involved in the GHG-Europe Project, which is unrelated to the work plan, aims and objectives of the GHG-Europe Project.
- all background which Alterra, due to existing or future third party rights, is unable to grant access rights to.

Partner 10 (ETH)

For the purpose of the GHG-Europe Project, ETH Zurich hereby excludes the following background:

- all background generated by employees, agents or representatives of ETH Zurich other than those directly involved in the GHG-Europe Project.
- all background generated by employees, agents or representatives of ETH Zurich that are directly involved in the GHG-Europe Project, which is unrelated to the work plan, aims and objectives of the GHG-Europe Project.
- all background which ETH Zurich, due to existing or future third party rights, is unable to grant access rights to.

Partner 13 (PULS)

For the purpose of the GHG-Europe Project, PULS excludes following background:

- all background generated by employees of PULS other than those directly involved in the GHG-Europe Project,
- all background generated by employees of PULS that are directly involved in the GHG-Europe Project, which is unrelated to the work plan, aims and objectives of the GHG-Europe Project,
- all background which PULS, due to existing or future third party rights, is unable to grant access rights to.

Partner 14 (TUM)

For the avoidance of doubt Technische Universitaet Muenchen will only make available Background of the Lehrstuhl für Vegetationsökologie, Prof. Jörg Pfadenhauer. The following Background shall be expressly excluded:

- Background that has been and/or will be created and developed by personnel and/or scientist and/or students at Technische Universitaet Muenchen not directly involved in the Project;
- Background that has been and/or will be developed outside of the Project to which Technische Universitaet Muenchen due to third party rights is not able to grant access rights.

Partner 15 (UA)

The Universiteit Antwerpen excludes the following Background from any obligation to grant Access Rights:

- All Background generated by Universiteit Antwerpen other than the Background that was generated by the Dept. of Biology-Research group Plant- and Vegetation Ecology; and
- All Background that has been, and/or will be derived outside the scope of the technical field of the Project and
- All Background that has been and/or will be created and developed by personnel and/or scientists and/or students at the above mentioned research teams that are not directly involved in the Project and
- All Background which Universiteit Antwerpen, due to third party rights, is not able to grant Access Rights to. This represents the status at the time of signature of this Consortium Agreement

Partner 17 (UHEL)

Helsingin yliopisto (University of Helsinki) hereby excludes from its obligation to grant Access Rights to Background all Background generated by Helsingin yliopisto apart from that generated by the research groups who are directly involved in carrying out the Project. Helsingin yliopisto also hereby excludes from its obligation to grant Access Rights to Background all Background that has been and/or will be derived outside the Project which Helsingin yliopisto due to third party rights, are not able to grant Access Rights to or for whom it needs to get permission from in order to grant Access Rights.

Partner 20 (DTU)

Denmarks Tekniske Universitet excludes the following Background from any obligation to grant Access Rights:

- all Background generated by DTU other than the Background that was generated by the Biosystems Division, Risø, and
- all Background that has been, and/or will be derived outside the scope of the technical field of the Project, and
- all Background that has been and/or will be created and developed by personnel and/or scientists and/or students at the above mentioned research teams that are not directly involved in the Project, and
- all Background which DTU, due to third party rights, is not able to grant Access Rights to. This represents the status at the time of signature of this Consortium Agreement

Partner 21 (ECN)

ECN standardwise excludes access to background knowledge for any project partners.

Partner 29 (UCD)

UCD specifically excludes the granting of access rights to the following:

- UCD Background created by UCD researchers not participating in the Project.
- UCD Background created by researchers participating in the Project, but in parallel with the Project and outside the scope of the Project.
- UCD Background to which UCD is prohibited to grant access or otherwise make available due to contractual obligations.

Partner 30 (UCPH)

For the purpose of the GHG-Europe Project, UCPH hereby excludes the following background:

- all background generated by employees, agents or representatives of UCPH other than those directly involved in the GHG-Europe Project.
- all background generated by employees, agents or representatives of UCPH that are directly involved in the GHG-Europe Project, with the exception of the previously sampled and new resampled data for calculation of soil C stocks in 3 chronosequences mentioned in the Description of Work in Annex I of the Grant Agreement for partner 30.
- all background which UCPH, due to existing or future third party rights, is unable to grant access rights to.

Partner 31 (UIBK)

UIBK excludes all Background that has been created by UIBK researchers other than those members of the research group of Ecosystem Research & Landscape Ecology at the Institute of Ecology directly involved in carrying out the GHG-Project. UIBK further excludes all Background that has been derived by members of the research group of Ecosystem Research & Landscape Ecology at the Institute of Ecology, which is outside the scope of the tasks allocated to UIBK under the GHG-Project. UIBK also excludes all Background which due to third-parties' rights it is unable to grant Access-rights to.

Partner 32 (UNIBO)

The following background shall be excluded for Alma Mater Studiorum Università di Bologna (UNIBO):

- Any background which has been developed by other than the research group involved in the Project;
- Any background which is subject to non disclosure with other Third parties;
- Any background developed by the research group involved in the Project on research topics which are not specifically subject to the Project activities, as described in the Description of Work.

Partner 35 (UniUd)

Background excluded:

- New and Pre-Existing Know-How developed at UniUd by scientists not participating in GHG-Europe
- All Pre-Existing Know-How that is covered under specific research agreements and confidentiality agreements and therefore subject to third-party rights.

Partner 36 (UHEI-IUP)

University of Heidelberg (UHEI-IUP) hereby excludes from its obligation to grant Access Rights to all Background generated by UHEI other than that generated by the research of Prof. Ingeborg Levin's group at UHEI, and Background derived from a non EU-project which UHEI due to third party rights is not able to grant access rights to.

UHEI-IUP excludes all background that has been and/or will be created by UHEI-IUP other than by those members of the research group of Prof. Levin's directly involved in carrying out the Project. UHEI-IUP further excludes all background that has been or will be derived outside the Project by members of Prof. Levin's research group. UHEI-IUP also excludes all background which due to third-party rights it is unable to grant access rights to, or for which UHEI-IUP needs to obtain permission to grant access rights to, including, but not limited to, all background arising from work funded by industry, government or charitable sources.

Partner 38 (CTFC)

The following background shall be excluded for Centre Tecnologic Forestal de Catalunya (CTFC):

- Any background which has been developed by other than the research group involved in the Project;
- Any background which is subject to non disclosure with other Third parties;
- Any background developed by the research group involved in the Project on research topics which are not specifically subject to the Project activities, as described in the Description of Work.

Partner 40 (CNRM)

Background included:

The Background of Météo-France, France, is all Know-how and Background generated by the members of the research groups of “Centre National de Recherches Météorologiques,/Groupe de Météorologie à Moyenne Echelle” which are directly involved in carrying out the Project, as well as Know-How and Background generated in collaboration with third parties, as far as needed to duly perform our work in the project.

Background excluded:

Météo-France hereby excludes from its obligation to grant Access Rights to Background all Background generated by Météo-France and by the members of the research group of “Centre National de Recherches Météorologiques / Groupe de Météorologie à Moyenne Echelle” other than that generated by the members of the research groups which are directly involved in carrying out the Project, as well as Background generated in collaboration with third parties.

Météo-France also hereby excludes specifically from its obligation to grant Access Rights to Background to all data, Databases, Corpus Data, software source code, materials, not generated through the direct participation in the Project or which Météo-France is not free to provide.

Attachment 2: Accession document

ACCESSION

of a new Party to

[Acronym of the Project] Consortium Agreement, version [..., YYYY-MM-DD]

[OFFICIAL NAME OF THE NEW PARTY AS IDENTIFIED IN THE GRANT AGREEMENT]

hereby consents to become a Party to the Consortium Agreement identified above and accepts all the rights and obligations of a Party starting [date].

[OFFICIAL NAME OF THE COORDINATOR AS IDENTIFIED IN THE GRANT AGREEMENT]

hereby certifies that the Consortium has accepted in the meeting held on [date] the accession of [the name of the new Party] to the Consortium starting [date].

This Accession document has been done in 2 originals to be duly signed by the undersigned authorised representatives.

[Date and Place]

[INSERT NAME OF THE NEW PARTY]

Signature(s)

Name(s)

Title(s)

[Date and Place]

[INSERT NAME OF THE COORDINATOR]

Signature(s)

Name(s)

Title(s)

Attachment 3: Listed Affiliated Entities

Attachment 4: Initial list of members and other contact persons

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