

Guideline document on project management, rules and time schedules to be distributed to all partners

Deliverable 9.1





OPTIMISING BIO-BASED FERTILISERS IN AGRICULTURE – PROVIDING A KNOWLEDGE BASIS FOR NEW POLICIES (No. 818309 — LEX4BIO)

Project funded by the European Commission within the Horizon 2020 programme (2014-2020)

Deliverable 9.1 Guideline document on project management, rules and time schedules to be distributed to all partners – Version 1.0.

Work-package n°9

Due date of deliverable	30.8.2019	Submission date	30.8.2019
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Nature of the deliverable		
R	Report	R
Dec	Websites, patents, filling etc.	-
Dem	Demonstrator	-
0	Other	-

Dissemination Level		
PU	Public	PU
CO	Confidential, only for members of the consortium (including the Commission Services)	-

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Version log			
Issue date	Revision N°	Author	Change
12.6.2019	0.1	Markku Maula	First version in Kickoff meeting
23.8.2019	0.2	Markku Maula	Draft version for comments
30.8.2019	1.0	Markku Maula	Deliverable 9.1 delivered



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LEX4BIO aims to reduce the dependence upon mineral/fossil fertilisers, benefiting the environment and the EU's economy. The project will focus on collecting and processing regional nutrient stock, flow, surplus and deficiency data, and reviewing and assessing the required technological solutions. Furthermore, socioeconomic benefits and limitations to increase substitution of mineral fertiliser for BBFs will be analysed. A key result of LEX4BIO will be a universal, science-based toolkit for optimising the use of BBFs in agriculture and to assess their environmental impact in terms of non-renewable energy use, greenhouse gas emissions and other LCA impact categories. LEX4BIO provides for the first-time connection between production technologies of BBFs and regional requirements for the safe use of BBFs.

The project runs from June 2019 to May 2023. It involves 21 partners and is coordinated by LUKE (LUONNONVARAKESKUS - Natural Resources Institute Finland).

More information on the project can be found at: http://www.lex4bio.eu



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ANNEX 1

Deliverable 9.1 Guideline document on project management, rules and time schedules to be distributed to all partners



D9.1: GUIDELINE DOCUMENT ON PROJECT MANAGEMENT, RULES AND TIME SCHEDULES TO BE DISTRIBUTED TO ALL PARTNERS

I. GENERAL DESCRIPTION

The main objective of the project management is to efficiently carry out management activities of LEX4BIO consortium and to create fluent working environment for all the participants from different organisations. D9.1 Guideline document on project management, rules and time schedules to be distributed to all partners is one tool for achieving those objectives and for helping implementation of the project. The tool guides all partners in operative activities as agreed in Description of the Action (DoA).

D9.1 Guideline document on project management, rules and time schedules to be distributed to all partners is online documentation available at the LEX4BIO intranet at https://tila.tiimeri.fi/sites/luke-lex4bio. On contrary to paper or PDF versions, online documentation in PowerPoint format is more dynamic, can be updated continuously, is visible for all partners in real-time, and can be used in training of administrative issues any time. The Guidelines focuses on the procedures inside the project and does not repeat the detailed technical information which can be found in H2020 Online Manual or IT Support guide and which mainly concern the Project Coordinator and the Project Management Office.

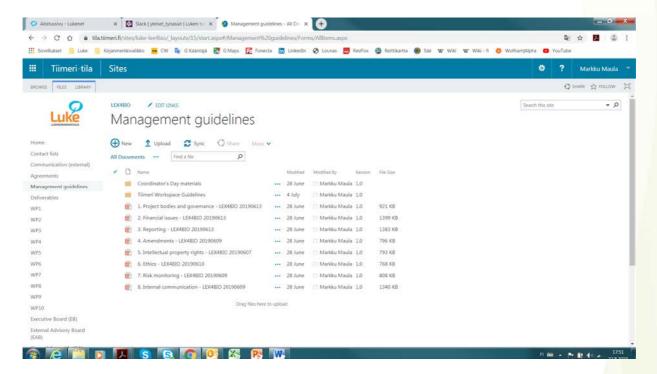
Luke's Project Management Office will update the guidelines and all people involved in the project and registered to the internal webpage will be able to use it. Partners can always find the latest versions of management guidelines from a given and known place.



II. CONTENT

Management Guide is structured into eight sections in order to help different specialists to find their own topic easily. The partners can utilise material also in their own organisation's internal communication.

The overall folder structure of the Guidelines is shown in a screenshot below.



The content of the folders is the following:

- 1. **Project bodies and governance** contains descriptions of Grant Agreement, Consortium Agreement, responsibilities of each partner and project management bodies, their members and responsibilities and the schedule of their meetings.
- 2. **Financial issues** include guidance on eligible costs, budget and its changes, payments, keeping records and audits.
- 3. **Reporting** includes guidance on internal reporting, continuous reporting, periodic technical and financial reporting and final reporting.
- 4. **Amendments** to the Grant Agreement contain the guidelines about when an amendment is needed and amendment procedure in the project.
- 5. **Intellectual property rights** gives guidance on issues of the background, results, access rights, dissemination and confidentiality in the project.
- 6. **Ethics** gives guidance on ethical issues.
- 7. **Risk monitoring** gives guidance on issues linked to risk monitoring during the implementation of LEX4BIO.
- 8. Internal communication contains instructions for using the LEX4BIO intranet.



III. PEOPLE RESPONSIBLE FOR UPDATING THE GUIDELINE DOCUMENT

Section of the guidelines	Person responsible
1. Project bodies and governance	Markku Maula
2. Financial issues	Sanna Piikkilä
3. Reporting	Markku Maula
4. Amendments	Markku Maula
5. Intellectual property rights	Hanna Lindqvist
6. Ethics	Sari Torkko
7. Risk monitoring	Markku Maula
8. Internal communication	Miitta Eronen

Updated August 29, 2019





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Part 1 – Agreements and governance





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Agreements

Grant Agreement (GA)

- EU standard contract defining basic conditions,
 rights and obligations of beneficiaries with regard to the EU
- Signed by the EC and the Coordinator
- Beneficiaries accede through Accession Form

Consortium Agreement (CA).

- Mandatory between beneficiaries, does not involve EC
- Sets framework (rights, obligations, responsibilities) among beneficiaries for successful implementation
- GA overrides CA, CA complements GA
- Based on DESCA model agreement



Grant Agreement (GA)

Terms and Conditions

Annex 1 Description of the action (DoA)

Annex 2 Estimated **budget** for the action

2a Additional information on the estimated budget

Annex 3 Accession Forms

Annex 4 Model for the financial statements

Annex 5 Model for the certificate on the financial statements

Annex 6 Model for the certificate on the methodology



Consortium Agreement (CA)

- 1. Definitions
- 2. Purpose
- 3. Entry into force, duration and termination
- 4. Responsibilities of Parties
- 5. Liability towards each other
- 6. Governance structure
- 7. Financial provisions
- 8. Results
- 9. Access Rights
- 10. Non-disclosure of information

- 11. Miscellaneous
- 12. Signatures

Attachment 1. Background included

Attachment 2. Accession document

Attachment 3. List of Third Parties

Attachment 4. Identified Affiliated Entities



Responsibilities of parties, each partner (GA Art. 7-18, 41, CA 4-5)

Each partner

- Takes part in efficient implementation, cooperates, performs and fulfills, promptly and on time, all obligations brought by GA and CA
- Notifies promptly significant information/fact/problem/delay affecting project
- Provides all information reasonably required by a Consortium Body/the Coordinator
- Ensures accuracy of supplied information/materials to other parties
- If enters into subcontract/involves third parties, remains responsible for carrying out its part and for such third party's compliance with CA and GA
- Must keep records and other supporting documentation on scientific and technical implementation in line with accepted standards



Responsibility (GA Art. 41, CA 4 & 7)

Technical implementation

- The beneficiaries have **full responsibility for implementing the action** and complying with the Grant Agreement.
- The beneficiaries are jointly and severally liable for the technical implementation of the action as described in Annex 1. If a beneficiary fails to implement its part of the action, the other beneficiaries become responsible for implementing this part (without being entitled to any additional EU funding for doing so), unless the Commission expressly relieves them of this obligation.

Justifying Costs

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



Governance



Task 9.1: Management task (M1–48)

Luke leading, all parthers participating

Coordination of work

 Luke will be responsible for monitoring progress with the work plan, together with the Executive Board, resolving problems and informing the EC of any necessary changes.

• Ensuring the contractual and legal correctness of activities

• Ensuring that all project activities and procedures comply with the Grant Agreement, Description of Work and Consortium Agreement. Timely achievement of deliverables and milestones.

Reporting

 Luke will compile the WP coordinators' input according to the reporting guidelines provided by the EC and will submit periodic reports and the final report to the EC.



Task 9.1: Management task (M1-48)

Meetings

 Organising of four consortium meetings (including GA meetings and EAB meetings), monthly Skype meetings with WP leaders (EB meetings)

Conflict resolution

• Luke will oversee the conflict management and resolution procedure as set out in Section 3.2.

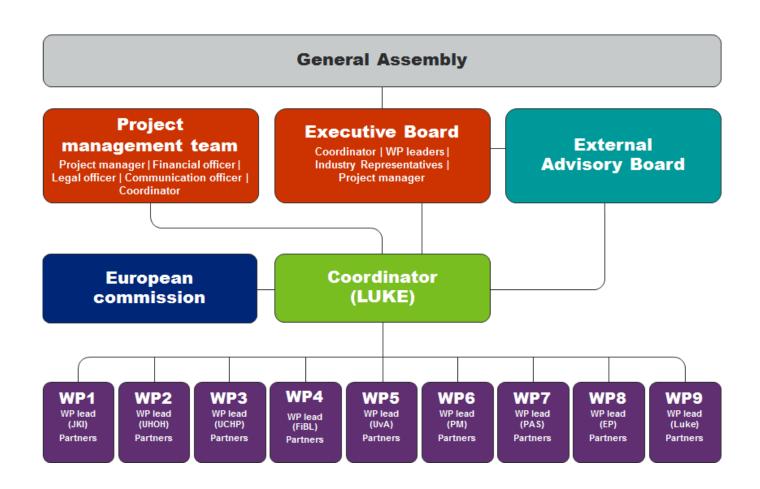


Governance and procedures (CA. 6)

- General structure (6.1)
- General operating procedures for consortium bodies (6.2)
 - Preparation and organisation of meetings (6.2.2)
 - Voting rules and quorum (6.2.3)
 - Veto rights (6.2.4)
- Specific operating procedures for consortium bodies (6.3-6.6)
 - General Assembly (GA) (6.3.1)
 - Executive Board (6.3.2)
 - Coordinator (6.4) and Management support team (6.5)
 - External Advisory Board (EAB) (6.6)
 - WP Leaders



Organisation Structure of LEX4BIO





General Assembly (GA) (CA 6.3.1)

- Governs LEX4BIO, consisting of one authorised representative from each partner.
- Normally chaired by the Coordinator.
- The highest decision-making body of the project for major issues such as major changes of work plan, budget reallocation and changes in partnership.
- The role of the GA is to:
 - Share project results, promote good practice in research and dissemination activities, to inform the partners about dissemination opportunities, and to enhance collaboration with research, entrepreneurial, advocacy and policymaking activities outside the consortium;
 - Monitor and assess the overall progress and output of the project according to the objectives, timetable, deliverables and milestones and to recommend solutions for any shortcomings;
 - Approve budget revisions, incorporation of new contractors and measures towards defaulting parties.



Executive Board (EB) (CA 6.3.2)

- Consists of the Coordinator, WP leaders, an industry representative and an administration manager.
- Normally chaired by the Coordinator.
- Is the operational management body of the project supporting the Coordinator.
- The EB will be responsible
 - for monitoring the progress of LEX4BIO project and
 - for considering amendments to the work plan as required (to be implemented after approval by the GA).
- The EB will
 - coordinate the operational implementation of the WPs, in particular, monitor timely execution and oversee the planned activities,
 - ensure quality of work at WP level and review deliverables at the WP level, prior to submission to the EC.



Preparation and organisation of meetings (CA 6.2)

	Ordinary meeting	Extraordinary meeting		
General Assembly				
Convening meetings	At least once a year - 12.6.2019 in Hämeenlinna, Finland - 11-13.3.2020 in Saint-Malo, France	At any time upon written request of the Executive Board or 1/3 of the Members of the General Assembly		
Notice of a meeting	45 calendar days preceeding the meeting	15 calendar days		
Sending the agenda	21 calendar days preceeding the meeting	10 calendar days		
Adding agenda items	14 calendar days preceeding the meeting	7 calendar days		
Minutes of the meeting	accepted if, within 15 calendar days from sen	Draft minutes within 10 calendar days of the meeting. The minutes shall be considered as accepted if, within 15 calendar days from sending, no Member has sent an objection in writing to the chairperson with respect to the accuracy of the draft of the minutes.		
Executive Board				
Convening meetings	At least quarterly - via Skype/Lync/Adobe Connect	At any time upon written request of any Member of the Executive Board		
Notice of a meeting	14 calendar days preceeding the meeting	7 calendar days		
Sending the agenda	7 calendar days preceeding the meeting	7 calendar days preceeding the meeting		
Adding agenda items	2 working days preceeding the meeting	2 working days preceeding the meeting		
Minutes of the meeting	accepted if, within 15 calendar days from sen	Draft minutes within 10 calendar days of the meeting. The minutes shall be considered as accepted if, within 15 calendar days from sending, no Member has sent an objection in writing to the chairperson with respect to the accuracy of the draft of the minutes.		



External Advisory Board (EAB)

- EAB is comprised of five representatives from different levels of policymaking and other key stakeholders with expertise and interest in the topics of LEX4BIO.
- This will **serve to evaluate the progress** of the project and **gain broader insight** into the needs of farmers, food industry, authorities and administrators, for securing safe and optimal use of BBFs and being a multiplication **channel to disseminate results**.
- EAB members will be invited to consortium meetings yearly and for the final workshop/conference.
 - Consortium meetings will be arranged in Finland, Germany, Hungary, France and Spain
- The EAB includes the following parties:
 - Dr. Arwyn Jones, EC, Directorate-General JRC, Land Resource Management
 - Mr. Laurent Largant, General Delegate of Afaïa and Chairman of CEN/TC 223 (soil improvers and growing media)
 - Dr. Juha Nousiainen, Valio, Director, a Finnish dairy cooperative owned by farmers
 - Mr. Erwin Pfundtner, AGES, a member of the fertiliser working group of the EC and a member of the STRUBIAS expert group within the JRC in Seville,
 - Representative of The Baltic Marine Environment Protection Commission (HELCOM): Agri group or HELCOM Secretariat.



Luke as coordinating partner

- Luke as coordinating partner is the intermediary between the EC and the consortium.
- Luke is fully prepared to perform all tasks to be assigned to it in the Grant Agreement and Consortium Agreement



Luke's Project Management Team

- Executes the daily management of the project.
- Consists of the coordinator, project manager, financial and legal officer and communication officer from the Research Support Services of Luke.
- This will allow the coordinator to focus on scientific management of the project.



The coordinator and management team

- Act as the intermediary between the EC and LEX4BIO partners
- Collect and provide all the necessary information from and to the partners (including minutes of GA meetings, progress reports and financial statements)
- Is in charge of the **organisational management** of all LEX4BIO activities
- Administers the financial allocation between beneficiaries and activities
- Ensures that all the appropriate payments are made to the other beneficiaries without delay
- Keeps the records and financial accounts making it possible to determine at any time what portion of the financial contribution has been paid to each beneficiary for the purposes of the project



The coordinator and management team

- Informs the EC of the distribution of the financial contribution and the date of transfers to the beneficiaries
- Reviews the periodic reports and final report to verify consistency with the project tasks before transmitting them to the EC
- Monitors the compliance by beneficiaries with their obligations under the Grant Agreement
- Prepares the meetings and agendas of GA and EB meetings, chairs meetings, prepares the minutes of meetings and monitors the implementation of decisions taken at meetings

Luke's Management Team

- Coordinator Kari Ylivainio
 - kari.ylivainio@luke.fi
- Communication officer Miitta Eronen
 - miitta.eronen@luke.fi
- Financial officer Sanna Piikkilä
 - sanna.piikkila@luke.fi
- Legal officer Hanna Lindqvist
 - hanna.lindqvist@luke.fi
- Project manager Markku Maula
 - markku.maula@luke.fi



WP leaders

- Responsible for
 - implementation of various tasks
 - the timely **delivery of deliverables** (Table 3.1b) **and milestones** (Table 3.2a) and
 - the gathering of **information for monitoring reports** from the participants in their WPs
- This practice allows the early detection of any problems arising and allows partners and EB to take any action necessary.
- They will promote partner interaction within a WP, as well as between WPs.
- Every WP leader is an **Executive Board member**



WP leaders

WP	WP leader
1	Judith Schick (JKI); will be replaced for the duration of her maternity leave by Sylvia Kratz (JKI)
2	Andrea Bauerle (earlier Ehmann) (UHOH)
3	Else Bünemann (FiBL)
4	Lars Stoumann Jensen (UCPH)
5	Chris Slootweg (UvA)
6	Ludwig Hermann (PM)
7	Marzena Smol (PAS)
8	Manon Ballester (EP)
9	Kari Ylivainio (Luke)



WP meetings and reporting

- WP partners will report to WP leaders monthly via an internet meeting, the WP leader to the coordinator, and the coordinator will be responsible for communication with the EC.
- Monthly WP meetings are one key way for communicating and managing the project. For each WP, a detailed document with work plan and time schedules are created to be used by WP leader in Monthly Meetings with partners to monitor the progress, evaluate risks, IPR and ethics, and to plan next activities.



Part 2 – Financial Issues





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Task 9.2: Financial Task (M1–48)

Luke leading, all partners participating

Executing payments and distribution of grant to partners

• Luke will distribute the EC contribution to the participants according to the rules laid down in the Grant Agreement, and within 30 days of receipt.

Budget monitoring

• Luke will oversee and monitor the proper deployment of resources and will collect period certificates and financial statements from participants. All participants will be responsible for submitting their own periodic budget reports to the EC through ECAS as required in the Grant Agreement.



LEX4BIO estimated budget (CA. 6.5)

- Total eligible costs EUR 6,000,137.50
- The maximum grant amount is EUR 5,999,968.75 (GA Art. 5.1)
 - cannot be exceeded or raised
 - is not the 'final grant amount'
- Reimbursement is based on actual costs
- Budget figures in GA, Annex 2



Payments and payment arrangements

(GA Art 21)

One pre-financing payment EUR 3,199,983.33 (net-amount)

- EUR 299,998.44 of the pre-payment amount is in the guarantee fund.
 - (= 5% of the maximum grant amount)
- Luke will distribute beneficiaries their shares which will be calculated in the same proportion as is partner's proportion of the grant amount.

One or more **interim payments** (on the basis of the request(s))

- Interim payments reimburse the eligible costs incurred for the implementation of the action during the corresponding reporting periods.
- The EC will pay to the coordinator the amount due as interim payment within 90 days after receiving the periodic report.
- Payment is subject to the approval of the periodic report.
- The total amount of pre-financing and interim payments must not exceed 90% of the maximum grant amount.



Payments and payment arrangements cont. (GA Art 21)

One payment of the balance

- The payment of the balance reimburses the remaining part of the eligible costs incurred by the beneficiaries for the implementation of the action.
- If the total amount of earlier payments is lower than the final grant amount, the EC will pay the balance within 90 days from receiving the final report.
- If the total amount of earlier payments is greater than the final grant amount the payment of the balance takes the form of a recovery.



Budget transfers and re-allocation (GA Art 4)

- The estimated budget breakdown (indicated in Annex 2) may be adjusted without an amendment by transfers of amounts between beneficiaries, budget categories and/or forms of costs set out in Annex 2, if the action is implemented as described in Annex 1 (DoA).
- A beneficiary can NOT transfer budget to a form of costs that it did not set out in its estimated budget — except within the personnel costs category and to costs of internally invoiced goods and services
- The transfer of budget intended to increase the eligible costs for 'subcontracting' is considered to reflect a significant change of Annex 1 normally requires an amendment



Budget transfers and re-allocation (GA Art 4)

Budget transfers and re-allocation	Y/N - Amendment needed?
From one beneficiary to another	Possible, no amendment needed
From one budget category to another	Possible, no amendment needed
Re-allocation of Annex 1 tasks	NOT possible, amendment needed
Transfers between forms of costs (actual costs, unit costs, etc.)	Possible (NEW), no amendment if within personnel costs NOT possible, amendment needed if between other cost categories
New subcontracts	Possible BUT amendment strongly advised



Eligible costs and keeping records

Eligible costs

- must be actually incurred by the beneficiary
- they must be **incurred in the duration of the project** (with the exception of costs relating to the submission of the periodic report for the last reporting period and the final report)
- they must be **indicated in the estimated budget** set out in Annex 2
- they must be incurred in connection with the action as described in Annex 1 and necessary for its implementation
- they must be identifiable and verifiable, in particular recorded in the beneficiary's accounts in accordance with the beneficiary's usual cost accounting practices
- they must comply with the applicable national law on taxes, labour and social security
- they must be reasonable, justified and must comply with the principle of sound financial management, in particular regarding economy and efficiency



Eligible costs and keeping records cont.

- Eligible costs (direct and indirect) must be declared under the following forms
 - for direct personnel costs
 - for direct costs of subcontracting
 - for other direct costs
 - for indirect costs
- **Direct costs** are costs that are **directly linked to the action implementation** and can therefore be attributed to it directly. They must **not include any indirect costs**.
- Indirect costs are costs that are not directly linked to the action implementation and therefore cannot be attributed directly to it.
- Indirect costs are calculated on the basis of a 25% flat-rate of the total direct eligible costs, excluding direct eligible costs for subcontracting and financial support to third parties.
- Beneficiaries must keep detailed records and other supporting documents to prove the eligibility of the costs declared.



Eligible costs and keeping records cont.

- Non-deductible VAT is eligible
- Invoices and travel receipts: make sure to identify the Project and Work Package (WP) in question
- Costs are to be documented, identified in the book keeping and archived for at least 5 years after the balance is paid (3 years for grants up to 60 000 eur)
- Sources of information and guidelines:
 - Grant Agreement
 - Annotated Model Grant Agreement http://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/amga/h2020-amga_en.pdf
 - H2020 Online Manual http://ec.europa.eu/research/participants/docs/h2020-funding-guide/grants/grant-management_en.htm



Eligible personnel costs

- are eligible, if they are related to personnel working for the beneficiary under an employment contract or equivalent appointing act and assigned to the action
- must be limited to salaries (including during parental leave), social security contributions, taxes and other costs included in the remuneration, if they arise from national law or the employment contract (or equivalent appointing act)
- declared as actual costs or unit costs (UH, WU)
- calculation method(s) defined in the Grant Agreement
- for persons who do NOT work exclusively for the action, the beneficiaries must keep time records (i.e. time-sheets)
- the number of actual hours declared for a person must be **identifiable and verifiable**, keep timesheets (full time recording, dated, signed, divide time between WPs)
- Note! if the time recording system is not deemed to be reliable, all personnel costs may be rejected



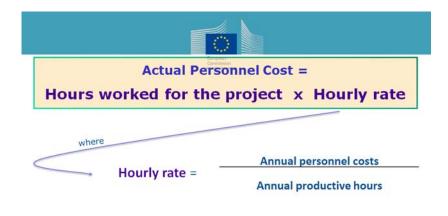
Timesheet example

TIME RECORDING FOR A HORIZON 2020 ACTION																Month:					Year:										
Title of the action (acronym):															Grant Agreement No:																
Beneficiary's	teneficiary's / linked third party's name:																														
Name of the	perso	n worl	king o	n the	actio	n:														rsonn Grant Aj		14)									
DAY]	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16 17 18 19 20 21 22 23 24 25 26 27 2						28	29	30	31	Total					
e.g. work package																															
Total Hours																															
Short description of the activities carried out in the month:																															
Signed (name of the person working for the action): Date: Signature:											Signed (name of the supervisor): Date: Signature:																				



Eligible personnel costs cont.

Calculating actual personnel costs



- → The hourly rate is to be calculated per financial year OR monthly (NEW)
- → If the financial year is not closed at the time of reporting, the beneficiary must use the last closed financial year available.





Eligible costs: subcontracting and other direct costs

Direct costs of subcontracting

- declared as actually incurred costs, no indirect costs (flat rate) on subcontracting
- subcontracting may cover only a limited part of the action
- the tasks to be implemented and the estimated cost for each subcontract must be set out in Annex 1 and the total estimated costs of subcontracting per beneficiary must be set out in Annex 2

Travel costs and related subsistence allowances

- are eligible if they are in line with the beneficiary's usual practices on travel
- must be correctly identified and allocated to the action
- costs must be adequately recorded

The **depreciation costs** of equipment or other assets

 depriciation costs are eligible, but only the part of the equipment's "full capacity" used for the project can be charged (must be recorded)



Eligible costs: Other direct costs and indirect costs

- Costs of renting or leasing equipment or other assets
 - are eligible, if they do not exceed the depreciation costs of similar equipment or assets and do not include any financing fees
- Costs of other goods and services
 - are eligible, if they are purchased specifically for the action
 - this category **covers**, for instance **consumables and supplies** e.g. catering during full-day project meeting, **dissemination** including open access, translations and publications, protection of results, **certificates** on the financial statements (if they are required by the Agreement) or certificates on the methodology

Indirect costs

- also called overheads
- are all those eligible costs that cannot be identified and calculated by the beneficiary as being directly attributed to each project
- indirect costs are calculated on the basis of a 25% flat-rate of the total direct eligible costs, excluding direct eligible costs for subcontracting and financial support to third parties



Reviews and Audits (GA Art. 22)

- The EC will —during the implementation of the action or afterwards
 - carry out reviews on the proper implementation of the action, compliance with the obligations under the Agreement and continued scientific or technological relevance of the action
 - carry out audits on the proper implementation of the action and compliance with the obligations under the Agreement

1.3.7.	WT7	Tentative	schedule	of	project	reviews
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Review number ¹⁹	Tentative timing	Planned venue of review	Comments, if any
RV1	19	to be decided	please contact the PO two months in advance
RV2	37	to be decided	please contact the PO two months in advance
RV3	49	to be decided	please contact the PO two months in advance

- Reviews and audits may be started up to two years after the payment of the balance
- Reviews and audits can be carried out by The Commission or external reviewers or auditors
- The beneficiaries must for a period of **five years after the payment of the balance keep records** and other supporting documentation in order to prove the proper implementation of the action and the costs they declare as eligible (GA, Art 18)
- Also the sub-contractors or third parties are under this obligation



LEX4BIO Management Guide

Part 3 - Reporting



(GA Art. 19-20)

- Continuous reporting in the participant portal
 - Deliverables, milestones, publications, dissemination activities.
- Submission of deliverables
 - The coordinator must submit the 'deliverables' identified in Annex 1 (DoA), in accordance with the timing and conditions set out in it (44 deliverables in LEX4BIO)
- Periodic reporting: Technical and financial reports, including requests for payment,
 - The reports are drawn up using the forms and templates in the electronic exchange system
- Reporting periods
 - Period 1. 1.6.2019 31.11.2020 (M18, 18 months)
 - Period 2. 1.12.2020 31.5.2022 (M36, 18 months)
 - Period 3. 1.6.2022 31.5.2023 (M48, 12 months)
- Submitted by the coordinator within 60 days from the end of the reporting period



Periodic reporting for the Commission

(GA Art. 19-20)

Periodic technical reports

- an explanation of the work carried out by the beneficiaries
- an overview of the **progress towards the objectives** of the action
 - includes milestones and deliverables identified in Annex 1 and
 - includes explanations justifying the differences between work plan and the work that was actually carried out
- a **summary** for publication
- the answers to the 'questionnaire', covering issues related to the action implementation and the economic and societal impact

Periodic financial reports, including requests for payment

- an individual **financial statement** from each beneficiary (see the model in GA, Annex 4)
- an explanation of the use of resources
- a periodic **summary financial statement** created automatically by the electronic exchange system, including the **request for interim payment**
- If an individual financial statement is not submitted for a reporting period, it may be included in the periodic financial report for the next reporting period.



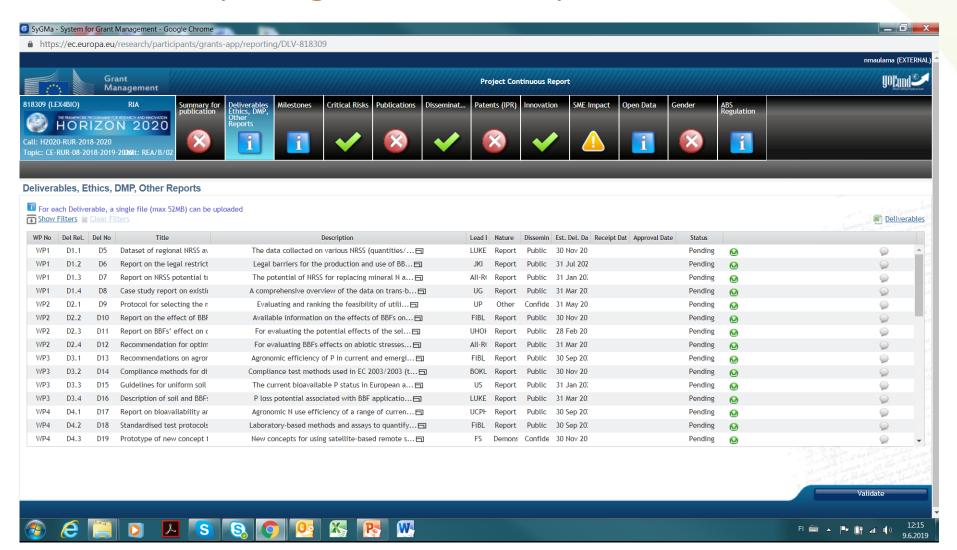
Final reporting for the Commission

(GA Art. 19-20)

- Final technical report with a summary for publication containing:
 - an overview of the results and their exploitation and dissemination
 - the **conclusions** on the action
 - the **socio-economic impact** of the action
- Final financial report containing:
 - a 'final summary financial statement' (see GA Annex 4), created automatically by the electronic exchange system, consolidating the individual financial statements for all reporting periods and including the request for payment of the balance
 - a 'certificate on the financial statements' (drawn up in accordance with GA Annex 5) for each beneficiary and for each linked third party, if it requests a total contribution of EUR 325 000 or more, as reimbursement of actual costs and unit costs without indirect costs.



Continuous reporting LEX4BIO Participant Portal View





Financial statement model

O grint format A4

MODEL ANNEX 4 FOR H2020 GENERAL MGA .-- MULTI

Associated with document Ref. 4cas(2015)4544132 - 2

FINANCIAL STATEMENT FOR /BENEFICIARY /name// LINKED THIRD PARTY /name//, FOR REPORTING PERIOD (reporting period)

	Eligible costs (per budget category)														Receipts		Additional information		
	A	. Direct perso	nnel costs		B. Direct costs of subcontracting	[C. Direct costs of fin support]	D	. Other direct co	sts	E. Indirect costs	[F. Costs of] Total costs			Receipts	Reimburse ment rate %	Maximum EU 3 contribution	Requested EU contribution	Information for indirect costs :	
	A.1 Employees equivalent) A.2 Natural per direct contract	sons under	A.4 SME o without sal A.5 Scholic arc natural without sal	any ianics that possons		[C.2 Prises]	D.1 Travel D.2 Equipment	[0.4 Costs of large research infrastructure]	0.5 Costs of intomally invoiced goods and sovices		[A.2 Costs		(F.2 Costs of)		Mosophs of the action, to be reported in the last reporting period, according to Article 5.5.3				Costs of in-kind contributions not used on promises
	A.5 Seconded p [A.6 Personnel access to resea	for providing					0.5 Other goods and services												
4 Form of costs	Actual	Unit	u	nit	Actual	Actual	Actual	Actual	Unit	Flat-rate 25%	o	nit	[Unit][Lump sum]						
		Total b	No hours	Total c	ď	回	r	(a)	Total h	i=0,25 x (a+b+ c+f+[g] + h+ 6 6 [j :] +[j2] -p)	No units	Total [j2]	Total [j2]	k = =+b+c+d+[c] +f+ [c]+h+ i+ [i2]+[i2]	-	m	n	•	,
(short name beneficiary/linked third party)																			

The beneficiary/linked third party hereby confirms that:

The information provided is complete, reliable and true.

The costs declared are eligible (see Article 6).

The costs can be substantiated by adequate records and supporting documentation that will be produced upon request or in the context of checks, reviews, audits and investigations (see Articles 17, 18 and 22). For

the last reporting period: that all the receipts have been declared (see Article 5.3.3).

U yease cectare all eligible costs, even intraey exceed the amounts indicated in the estimated duaget (see Annex 4). Unity amounts that were decisied in your notividus inhands statements can be taken into account (agazon), in order to replace other costs that are round to be neligible.

¹ See Article 6 for the eligibility conditions

*The indirect costs claimed must be free of any amounts covered by an operating grant (proceived under any EU or Excelor, funding programme; see Article 52.E). If you have received an operating grant during this reporting period, you cannot claim indirect costs unless you cannot claim indirect costs unless you cannot claim indirect costs.

⁵ This is the theoretical amount of EU contribution that the system calculates automatically (by multiplying the reimbursement rate by the total costs declared). The amount you request (in the column 'requested EU contribution') may be less,

Flat rate: 12% of eligible direct costs, from which are excluded: direct costs of subcontracting, costs of in-kind contributions not used on premises, direct costs of financial support, and unit costs declared under budget category Fif they include indirect costs (see Article 6.2.E)

Only specific unit costs that do not include indirect costs



Reporting for the Commission cont. Deliverables to be submitted during the first 18 months

- D1.1, Dataset of regional NRSS available for producing BBFs in the EU, LUKE, 18
- D1.2, Report on the legal restrictions for using BBFs in the EU, JKI, 26
- D1.3, Report on NRSS potential to replace mineral N and P fertilisers in the EU, All-RG, 32
- D1.4, Case study report on existing inter-regional and trans-boundary exchange of NRSS/BBFs, UG, 34
- D2.1, Protocol for selecting the most promising BBFs to be studied in LEX4BIO, UP, 12
- D2.2, Report on the effect of BBFs on soil quality and C sequestration, FiBL, 30
- D2.3, Report on BBFs' effect on crop growth and physiology, UHOH, 45
- D2.4, Recommendation for optimising BBF formulation under various climatic conditions, All-RG, 46
- D3.1, Recommendations on agronomic P efficiency of different BBFs across European climate, crop and soils, FiBL, 40
- D3.2, Compliance methods for different types of BBFs, BOKU, 42
- D3.3, Guidelines for uniform soil testbased P fertilisation recommendations across the EU, US, 44
- D3.4, Description of soil and BBFs characteristics affecting P leaching, LUKE, 46



Reporting for the Commission cont. Deliverables to be submitted during the first 18 months (2)

- D4.1, Report on bioavailability and agronomic N use efficiency of BBFs across different European climates, crops and soils, UCPH, 40
- D4.2, Standardised test protocols to characterise N bioavailability in BBF and fertiliser replacement value, FiBL, 40
- D4.3, Prototype of new concept for satellitebased remote sensing and spectral imaging of crops and soils to guide variable rate application of BBFs for more optimal N use efficiency, FS, 42
- D4.4, Case study report on potential N losses from BBFs to the aquatic and atmospheric environment in European cropping system, UCPH, 44
- D5.1, Report on organic contaminants in BBFs and their persistency and crop uptake from soil, UvA, 40
- D5.2, Risk assessment of heavy metal after application of BBFs across EU: human health and environmental losses, LUKE,
 42
- D5.3, Report on the effects of BBF manufacturing and use on the abundance of antibiotic resistance genes and mobile genetic elements in soils, UH, 44
- D5.4, Toolkit for ecotoxicological methods to assess the environmental risks associated with using BBFs in agriculture, JKI,
 46



Reporting for the Commission cont. Deliverables to be submitted during the first 18 months (3)

- D6.1, Review and assessment of published LCA studies, PM, 10
- D6.2, Draft convention for comparable LCA studies of fertilising products manufactured from primary and secondary raw materials, PM, 18
- D6.3, LCA study of processes and products subject to the current project, parameters based on the new convention, PM, 42
- D6.4, Final convention for comparable LCA studies of fertilising materials from primary and secondary resources, PM, 46
- D7.1. Report on socioeconomic impacts of current products and practices, incl. nonaccounted externalities, PM, 30
- D7.2, Report on drivers and barriers regarding the replacement of conventional fertilisers by BBFs for all stakeholders in the value chain, PAS, 36
- D7.3, Models of region and framework specific solutions for processing, transport and use of BBFs, UG, 44
- D7.4, White paper onregulation potential for encouraging more efficient utilisation of BBFs, UG, 46
- D7.5, White paper on socioeconomic and policy recommendations encouraging stakeholders' interest and social acceptance to use BBFs, PAS, 46
- D7.6, Policy brief with a clear concise summary of policy recommendations, PAS, 46



Reporting for the Commission cont. Deliverables to be submitted during the first 18 months (4)

- D8.1, Dissemination, communication and exploitation plan, EP, 6
- D8.2, Portfolio of communication materials and the general project website, EP, 6
- D8.3, Synergy report and action plan, EP, 8
- D8.4, Project newsletters compiled, EP, 48
- D8.5, Policy roadmap, LUKE, 9
- D8.6, Report on communication and dissemination activities and outcomes, LUKE, 48
- D9.1, Guideline document on project management, rules and time schedules to be distributed to all partners, LUKE, 2
- D9.2, Minutes of the General Assembly meetings compiled, LUKE, 48
- D9.3, Data management plan (DMP), LUKE, 6
- D9.4 Continuously updated risk management plan, LUKE, 36
- D10.1 H Requirement No. 1, LUKE, 9
- D10.2 NEC Requirement No. 2, LUKE, 8
- D10.3 EPQ Requirement No. 3, LUKE, 8
- D10.4 POPD Requirement No. 4, LUKE, 6



Milestones to be submitted during the first 18 months (1)

- MS1, 1.1. Database of NRSS in EU, LUKE, 28 Choropleth maps ready for the report (M16, update M28)
- MS2, 1.2. Literature review of legal obstacles, JKI, 26 Dataset ready for the writing of the report
- MS3, 1.3. Mineral NP fertiliser statistics, All-RG, 16 Dataset completed for the use of NP fertiliser in EU countries
- MS4, 1.4. Dataset on inter-regional and transboundary NRSS/BBF flow, UG, 24 Dataset ready for the writing of the report
- MS5, 2.1. BBFs to be studied within LEX4BIO selected, UP, 9 Current and novel BBFs evaluated (internal report) and most promising BBFs selected (minutes of EB meeting)
- MS6, 2.2. Database on effect of BBFs on soil quality, FiBL, 18 Spreadsheet complete
- MS7, 2.3. Container/phenotyping experiment in progress, UHOH, 12 Containers/phenotyping set up and first crop
 planted (internal reporting)
- MS8, 3.1. Pot trial protocol, FiBL, 10 Protocol available
- MS9, 3.2. Overview on national fertiliser regulations, BOKU, 14 Internal dataset of national P fertiliser regulation completed
- MS10, 3.3. Soil sample archive, US 16 LUCAS and field trial soil samples collected
- MS11, 3.4. Rainfall simulation, LUKE 16 Soil samples acquired for rainfall simulation



Milestones to be submitted during the first 18 months (2)

- MS12, 4.1. 1st year field trial data acquired, UCPH, 16 1st year field and greenhouse trials conducted and internally reported
- MS13, 4.2. Laboratory assays established, FiBL, 18 Laboratory assay protocols available
- MS14, 4.3. 1st year satellite data acquired, FS, 16 1st year results internally reported
- MS15, 4.4. 1st year model simulations completed, UCPH, 32 1st year model simulations of env. emissions reported to WP6
- MS16, 5.1. Evaluation and quantification of bioavailable organic contaminants in BBFs, UvA, 16 Internal dataset of
 organic contaminants in BBFs ready
- MS17, 5.2. LUCAS soil samples ready for analyses, LUKE, 16 LUCAS soil samples collected
- MS18, 5.3. Risk evaluation of antibiotic resistance in BBFs, UH, 24 Internal dataset ARGs and MGEs in BBFs
- MS19, 5.4. Comparison of ecotoxicological methods to assess the risks associated with using BBFs, JKI, 24 -Recommendation of ecotoxicological tests for BBF evaluation (internal report)



Milestones to be submitted during the first 18 months (3)

- MS20, 6.1. Review and assessment of published LCA studies, PM, 6 Internal review report
- MS21, 6.2. Convention for LCA studies on BBFs and mineral fertilisers established, PM, 16 Internal report
- MS22, 6.3. LCA study ompleted, interpreted and compared with previous LCA studies, PM, 30 Dataset ready for the wrting of the report
- MS23, 6.4. New convention approved by partners and external experts, PM, 40 Minutes of WP6 meetings with stakeholders
- MS24, 7.1. Knowledge of the total impact of current fertilising practices, PM, 8 Internal report
- MS25, 7.2. Knowledge of drivers and barriers for stakeholders in the value chain, PAS, 16 Internal report (desk research M8, results of surveys M16)
- MS26, 7.3. Optimised models for region and framework-specific solutions, UG, 44 Internal report (M16, updates M30 and M44)
- MS27, 7.4. Exhibiting the mutual reliance between framework and practice, UG, 46 Internal report (M18, updates M36 and M46)
- MS28, 7.5. Policy recommendations that have been agreed with NDF, PAS, 46 Minutes, report



Milestones to be submitted during the first 18 months (4)

- MS29, 8.1. Project identity, DEC plan, online presence and materials ready, EP, 6 Visuals, accounts and some materials created, available and used by partners
- MS30, 8.2. Synergies identified and project cluster used for better cooperation, LUKE, 4 Synergies identified and other projects contacted, cooperation methods agreed
- MS31, 8.5. Roadmap for policies defined, LUKE, 8 Clear roadmap discussed and created
- MS32, 9.2. Draft guideline on project management sent to partners, LUKE, 1 Coordinator sends to partners
- MS33, 9.3. Templates for minutes of meetings is ready, LUKE, 1 Coordinator sends to partners
- MS34, 9.4. Draft data management plan sent to partners, LUKE, 4 Coordinator sends to partners
- MS35, 9.5. Draft risk management plan sent to partners, LUKE, 1 Coordinator sends to partners
- MS36, 9.6. Half-yearly activity and financial progress reports are delivered, LUKE, 44 Partners send to coordinator (M8, M14, M26, M32 and M44)



Internal reporting and quality check

Internal reporting every 6 months

- Progress reports of each WP to be reviewed against the DoA by Executive Board
- Reports of working months and other costs of each partner to be reviewed by Coordinator and Management Support Team
- EC-conform reporting templates will be used, templates will be in Tiimeri – Reporting Logs

Work plan of each WP for next 6 months

- Will be developed in parallel with the reporting of the previous 6 months activities
- Work plan template will be in Tiimeri –Reporting Logs



Internal reporting and quality check

Deliverables

- Will be evaluated by two evaluators: first by WP leader (or some other person) and secondly by the Coordinator
- Executive Board will decide the evaluators beforehand
- The evaluation of a deliverable starts 3 weeks before submission
- The list evaluators and the timetable is in Tilmeri Deliverables
- Publications and dissemination activities, patents and innovations
 - To be reviewed by WP8 and WP9
 - Have to be reported via separate excel sheet in Tiimeri Reporting Logs



LEX4BIO Management Guide

Part 4 - Amendments





This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 818309 (LEX4BIO).

This output reflects only the author's view and the European Union cannot be held responsible for any use that may be made of the information contained therein.

(changes to the Grant Agreement), GA Art 55

- The Agreement may be amended, unless the amendment entails changes to the Agreement which would call into question the decision awarding the grant or breach the principle of equal treatment of applicants.
- Amendments may be requested by the Consortium or by the Commission.
- The coordinator submits and receives requests for amendment on behalf of the beneficiaries.
- When is the amendment necessary?
 - Changes in the beneficiaries
 - Not when only the name/address of beneficiaries or linked third party changes
 - Not when only the name/address of the bank or name/address of account holder changes
 - Changes in the project's implementation = changes in DoA
 - Changes in the budget



(changes to the Grant Agreement) cont., GA Art 55

Budget transfers and re-allocation	Amendment needed?
From one beneficiary to another (if no change in DoA)	No
From one budget category to another	No
Re-allocation of Annex 1 tasks	Yes
Transfer between forms of costs (actual costs, unit costs etc.)	Yes, if was not incl. budget
Transfer within personnel costs	No
Transfer to costs of internally invoiced Goods and services	No
New subcontracts	Yes



(changes to the Grant Agreement) cont., GA Art 55

Amendment procedure

- Partners are free to make a notice about the need for amendment to the Coordinator.
- General Assembly makes decision about launching the amendment.
- The coordinator signs and submits the amendment on behalf of the consortium in the electronic exchange system.
 - If a change of coordinator is requested without its agreement, the submission must be done by another beneficiary (acting on behalf of the other beneficiaries).
- The request for amendment must include:
 - the reasons why
 - the appropriate supporting documents



(changes to the Grant Agreement) cont., GA Art 55

After submission of the amendment

- The EU services have 45 calendar days to assess the request
 - May request additional information/clarification
 - May reject the request
 - May agree and accept it
- An amendment enters into force on the day of the signature of the receiving party.
- An amendment takes effect on the date agreed by the parties or on the date on which the amendment enters into force.



LEX4BIO Management Guide

Part 5 – Intellectual Property Rights





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Background (GA Art. 24-25, CA 9.1)

- Background. "any data/know-how/information whatever its form or nature (tangible or intangible), including any rights such as intellectual property rights — that is held by the beneficiaries before and is needed to implement the action or exploit the results."
- Background included identified and agreed on with possible legal restrictions or limits (CA. Attachment 1)
- Background can be added by written notice to other partners. If background is changed/removed → approval by General Assembly needed



Results (GA Art. 26-29, CA 8)

- Owned by partner that generates them
- Two (or more) partners own jointly if generated together and not possible to establish contributions
 - Joint ownership agreement!
- Joint owners can (unless otherwise agreed!)
 - use jointly owned results for non-commercial research activities royalty-free without prior consent of joint owners
 - otherwise exploit jointly owned results/grant non-exclusive licenses to third parties if other joint owners are given at least 45 calendar days advance notice and fair and reasonable compensation
- Possibility of **protecting results** must be examined; joint owners agree on protection measures and division of costs in advance
- Third parties
 - If third parties (incl. personnel) claim rights to results → beneficiary must ensure compliance with obligations
 - If third party generates results → beneficiary must obtain all necessary rights (transfer/licenses/other)



Results cont. (GA Art. 26-29, CA 8)

- Obligation to ensure 'exploitation' of results (directly or indirectly, in particular through transfer or licensing) by further research activities, developing, creating or marketing product/process, creating and providing service or standardisation activities
- Obligation to 'disseminate' results by disclosing to the public by appropriate means
- Obligation to ensure open access
- Beneficiaries may transfer ownership → specific obligations in GA apply to new owner



Access rights (GA Art. 25, 31, CA 9)

- Granted rights exclude any rights to sublicense
- Free of administrative transfer costs, granted on non-exclusive basis, used only for purposes for which granted
- All requests made in writing, must show that access rights are needed
- Implementation
 - \bullet When needed for implementation of own tasks in project \rightarrow royalty-free access right to background/results
- Exploitation
 - Access rights to results → on fair and reasonable conditions
 - Access rights to background if needed for exploitation, including for research on behalf of third party \rightarrow on fair and reasonable conditions
 - Request for access rights can be made up to 12 months after end of project
- Background
 - Access rights granted to listed background according to restrictions/limitations given (attachment 1 in CA)



Access rights: Affiliated entities (AE)

(GA Art. 25.4 & 31.3; CA 9.5)

- AE have access rights if identified in CA/Attachment
- Access rights requested by AE from party holding background/results.
 Alternative: party granting can agree with party requesting to include right to sublicense to latter's AE (listed in Attachment 4)
- Access rights to AE granted on fair and reasonable conditions and by written agreement
- AE obtaining access rights need to fulfil all confidentiality and other obligations under CA/GA as if they were parties
- Access rights may be refused to AE due to conflicting legitimate interests of owning party
- When status as AE ends, any access rights granted also end



Dissemination (CA 8.4)

- During project and one year after → dissemination of own results by one or several partners governed by procedure in GA (Art. 29.1) and CA (8.4)
- Prior notice to other beneficiaries at least 30 days before publication
- Objection made in writing to coordinator and party/parties within 15 calendar days after receipt of notice. Publication delay max. 60 days.
 If no objection → publication is permitted
- Objection justified if.
 - Protection of objecting party's result/background adversely affected
 - Party's legitimate interests in relation to results/background significantly harmed
 - Proposed publication includes confidential information of objecting party
- Objection must include precise request for necessary modifications
- Cooperation for timely submission, examination, publication and defense of any dissertation/thesis that includes results/background subject to confidentiality and publication provisions agreed in CA
- Another party's results/background shall not be included in any dissemination activities without prior written approval (unless already published)



Confidentiality (GA Art. 36, CA 10)

- Information in whatever form/mode of communication disclosed in connection with project and explicitly marked as "confidential" at time of disclosure/disclosed orally identified as confidential (confirmed and designated in writing within 15 calendar days as confidential information) → "Confidential Information"
- For a period of 4 years after end of project.
 - Not use confidential information otherwise than for purpose for which disclosed
 - Not disclose confidential information to third party without prior written consent
 - Ensure internal distribution of confidential information on strict need-toknow basis
 - Return/destroy on request all confidential information



LEX4BIO Management Guide

Part 6 - Ethics





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Code of conduct

- We base our work on fundamental principles of research integrity during the whole LEX4BIO project. These principles are: reliability, honesty, respect and accountability.
- We comply with codes, regulations and applicable laws relevant to our topic.
- Reliability in ensuring the quality of research, reflected in the design, the methodology, the analysis and the use of resources.
- **Respect** for colleagues, research participants, society, ecosystems, cultural heritage and the environment.



Ethics requirements (WP10)

- Human participants as volunteers for social sciences research (D10.1, M9)
 - Details of procedures and criteria in recruiting research participants for depth interviews and structured questionnaires (WP7)
 - Information on the informed consent procedures
- Non-EU countries (D10.2, M8)
 - Our Norwegian and Swiss partners confirm their work is compatible with EU standards and legislation
 - Details on materials which will be imported to/exported from the EU (if any) must be submitted as a deliverable



Ethics requirements (WP10) (cont.)

- Environment, health & safety (D10.3, M8)
 - Confirmation for not causing harm to the environment
 - Health and safety procedures followed for staff involved in the project (if needed)
- Personal data (D10.4, M6)
 - General Data Protection Regulation 2016/679 will be followed when collecting data in interviews and surveys (WP7) and in communication activities (WP8)



LEX4BIO Management Guide

Part 7 – Risk Monitoring





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Risk monitoring

- Monitoring regularly project progress and identifying and managing potential risk is one of the objectives in WP9, lead by Luke.
- Risk management will primarily be placed under the responsibility of the WP leaders and coordinated by the coordinator.
- The objective is to make all known project risks explicit before they become problems and lead to delays.
- Risk information will be translated into decisions and mitigating actions (both present and future).
- Critical risks for the implementation foreseen at this stage and proposed mitigation measures are listed in Table 3.2b. These risks include technical, operational, but also economic risks. At the beginning of the project and each period this table will be reviewed and updated, and it will also be included in the project handbook.

Risk monitoring (cont.)

Task 9.4: Data management, ethics and risk assessment (M1-48)

- Luke will produce a DMP for the project within six months of the start of the grant and will review it at regular intervals.
- Research ethics approval and monitoring. All research participants will obtain ethical approval for the proposed research from their respective institutional authorities according to their usual practices within 3 months of the start of the project. Luke will verify that ethical approval has been confirmed.
- Risk assessment. Coordinator and WP leaders will be responsible for overall risk assessment and management, and updating of risk management plan

Continuously updated risk management plan (D9.4)

- Will be released for official documentation (M1, M12, M24, M36).
- This document includes the original risk management plan and its updates.
- Draft risk management plan will be prepared and sent to partners by the Coordinator in June 2019. (MS35)



Critical Implementation risks and mitigation actions (1)

Risk number, Description of risk, WP Number(s) - Proposed risk-mitigation measures

- 1. Inadequate resources medium, WP1, WP10, WP2, WP3, WP4, WP5, WP6, WP7, WP8, WP9
- While efforts have been made to correctly budget the project, unexpected difficulties might arise. They have to be identified as quickly as possible through frequent interactions as described above. The EB will propose solutions to emerging resource challenges, if necessary in consultation with the EC. All partners are prepared to temporarily commit more resources if needed.
- 2. Little commitment and engagement of relevant stakeholder groups medium, WP1, WP2, WP3, WP4, WP5
- Experts within the consortium have an extensive network of personal contacts they can put to use and organisations act as multipliers. Additional communication channels can be employed if necessary.
- 3. Data are inaccessible/poor quality or not sufficient data can be collected medium, WP1, WP2, WP3, WP4, WP5, WP6, WP7
- EUROSTAT/OECD data on NRSS/BBF are publicly available online. For soils LUCAS datasets from previous soil sampling campaign are already available and can be utilised. For satellite data task lead partner (FS) has access to and will acquire additional data from proprietary satellites.
 Between partners mutual exchange of information indispensable (face-to-face meetings, on-line meetings) and intensive clustering with other projects and platforms to obtain as much data as possible.
- 4. Ensure confidentiality of data/results low, WP1, WP2, WP3, WP4, WP5, WP6, WP7
- SOPs for dissemination, training of partners and DEC manual at the beginning of the project. Periodically updated DMP will also include details on confidentiality of data.
- 5. Sufficient amounts of BBFs for field experiments not available low, WP2, WP3, WP4
- Field experiments will be conducted only with those BBFs for which sufficient amounts of BBFs are available and if possible, multiple sources/suppliers can will be identified a priori, whereas novel pilot scale BBFs are tested primarily in pot experiments.



Critical Implementation risks and mitigation actions (2)

Risk number, Description of risk, WP Number(s) - Proposed risk-mitigation measures

- 6. Extreme weather conditions cause crop failure medium/high, WP2, WP3, WP4, WP5
- Pot trials will be conducted either in growth chambers or in greenhouses to avoid extreme heat (Spain) or heavy rainfall. Field trials experience natural weather conditions and risks failure due to extreme weather; however, field trials are spread over different countries and climates to minimise such risks. LEX4BIO utilises also other field trials conducted by other projects as well as past trials to ensure data collection.
- 7. Unable to conduct laboratory analyses due to malfunction of equipment/reagents unavailable/ state-of-the art methods may have sudden drawbacks medium, WP2, WP3, WP4, WP5
- Soil and plant samples can be stored and analysed later. If results are needed fast, commercial laboratories, with known quality assurance, can be utilised for many analyses; alternatively, several partners in the consortium have similar equipment and can do analyses. All partners will be required to have back-up plans in case of these events.
- 8. Results of laboratory analyses are not reliable low/medium, WP2, WP3, WP4, WP5
- Project partners have a long history in conducting the full range of analyses planned. The same in-house reference sample is used in pot/field trial plant nutrient analyses among all partners and sample exchange between partners (e.g. DGT analyses) improves results reliability. If preliminary assay tests for BBFs are negative or not satisfactory, the range of assays will be expanded accordingly to the difficult types of BBF
- 9. Conversion/relationship between soil testing methods soil type/region/laboratory specific medium, WP2, WP3, WP4, WP5
- Additional (detailed) soil tests conducted. Grouping soil samples (e.g. by soil texture, pH) provides more accurate conversion.
- 10. Season dependent analyses low, WP3, WP4, WP5
- Field trials and outdoor pot trials are dependent on the growing season; careful planning will be undertaken to maximise utilisation of the growth period and ensure high-quality results. Some toxicity tests have a seasonality, e.g. earthworms grow very slowly in winter however, this risk can be accounted for by smart planning.



Critical Implementation risks and mitigation actions (3)

Risk number, Description of risk, WP Number(s) - Proposed risk-mitigation measures

- 11. Simulation model not applicable to all experimental datasets of the project medium, WP4
- Recalibration of soil or crop modules will be done on additional data from the country/region in question local partners ensure data availability
 for this.
- 12. Difficulties in finding collaborative farms in EU medium, WP5
- If collaborative farms are not found, studies can be conducted in partner Universities research farms.
- **13. BBF technology suppliers cannot or refuse to supply plausible process data** medium, WP6
- Data from comparable BBF production processes are used for the LCA evaluation; alternatively, system expansion may be done/restructured to take account of the missing data.
- 14. Anonymity of personal data broken low, WP7
- Questionnaires will not allow identification of participants.
- 15. Transport costs and times become outdated due to changes in road infrastructure and traffic taxes low, WP7
- Updated information on transport times will be obtained from google maps. A sensitivity analysis will be performed on the unit cost of transport to include the effect of possible effect of new road transport taxes.



LEX4BIO Management Guide

Part 8 – Internal Communication





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Internal communication via Tiimeri

- Tilmeri joint work space service is a tool for working together inside consortium to collect information from the participants, jointly modify documents and store different material accumulated during the project.
- Tilmeri is a flexible and safe place to handle and store information and all the participants (and only they) have access to it.
- LEX4BIO Tiimeri Owners in the Project Management Office e.g. Markku Maula (markku.maula@luke.fi) give user permissions for new users.
- Tiimeri is a web-based tool and does not demand separate installation.



Tiimeri – Signing in

- "Tiimeri" is the name of Luke's shared online workspace for collaboratively storing and editing documents securely. It is based on the Microsoft SharePoint platform.
- In order to access the workspace of the proposal, Luke needs to grant you access permissions, after which you'll receive a link by email.

Go to LEX4BIO

Follow this site to get updates in your newsfeed.

- The first time you use Tiimeri, you will need to sign in using the Eduuni-ID service and your organisation's email address.
- You can sign in using a Google account, for example, and still act as a representative of your own organisation with your work email address. E.g. Facebook, LinkedIn, Microsoft, Twitter accounts, can also be used to sign in.
- You will then gain access to the files stored on the Tiimeri workspace of the proposal.



Tiimeri registration in detail

- 1. Go to network address https://tila.tiimeri.fi (IE recommended)
- 2. Click the link "New user? Sign up Eduuni-ID here"
 - There are English user guides for Eduuni-ID registration process and for changing the sign-in method at the start page of Tiimeri.
- 3. Change the registration language if it's not English (click the link "In English")
- 4. Start the registration process by choosing "Start Sign Up"
- 5. Select the sign-in method
 - The sign-in method that you choose will be attached to the Eduuni-ID.
 - You can change the sign-in method later if necessary
- 6. Fill your work email address, name and organization fields.
 - If you have been a member of Luke's work spaces before, use the same email address as you've been using before. This way you get the same access rights as before.
- 7. Click "Save" and continue to Tiimeri by clicking the link "Tiimeri-tila"
- 8. At Tiimeri's home page you will see the work spaces you have rights



Using Tiimeri second time

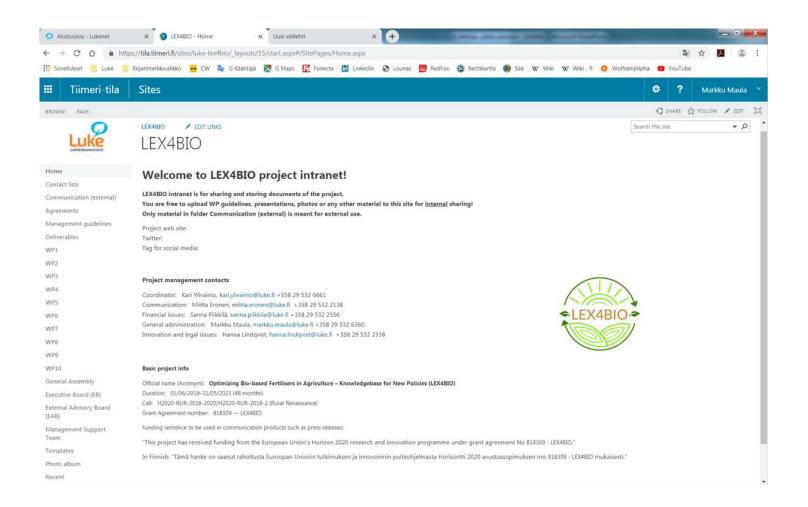
When you have registered and signed in Tiimeri once, you don't need to fill that information again. Next time you just need to:

- 1. Go to the network address: https://tila.tiimeri.fi
- 2. Click the link "Sign in" (right-top corner)
- 3. You will be automatically signed in Tiimeri with the method you have chosen before

Now you have access to the material of LEX4BIO project and you can also share your files, data, news, photos with other project partners. Only project participants have access to LEX4BIO workspace.



LEX4BIO in Tiimeri looks like this...



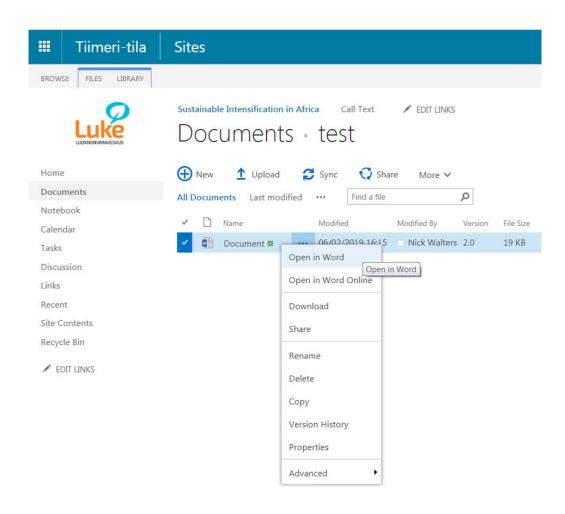


Tiimeri – Editing files

- Accessing files in the desktop version of Word by navigating to "Documents" on the panel on the left, then right-clicking) and selecting "Open in Word" (as opposed to "Open in Word Online"). The same applies to Excel and PowerPoint files. Left-clicking directly on the file automatically opens in the online version. The desktop version has fewer bugs and more extensive track change options. See the next slide.
- Saving regularly. Multiple people can work simultaneously on the same file. The programme prevents multiple people from working on the same area of a file at the same time, in order to prevent conflicts. The desktop version shows in the bottom-left of the screen if multiple authors are working simultaneously.
 - Saving the file updates any changes. You will only see the changes made by the other authors if they have saved their changes, and once you have saved the file. Therefore, we encourage you to save every few minutes using "Ctrl" + "S" (Mac: "Cmd" + "S") or by clicking the "Save" button, which has a green circular arrow.
 - Do not "Save As", as this will save a new version of the file and confuse other contributors. Tilmeri automatically and regularly saves versions of each file, so if you need to view a previous version, you can do so by right-clicking on the file and selecting "Version History".



Tiimeri – Editing files





Tiimeri – Troubleshooting

- If you encounter problems when using Tilmeri, such as a conflict when attempting to save, try performing all of the following steps, in this order:
 - 1. Clear your browser's cookies: https://www.wikihow.com/Clear-Your-Browser%27s-Cookies
 - 2. Clear the Microsoft Upload Center: https://support.office.com/en-ie/article/microsoft-office-upload-center-f08161d9-ab64-4486-af69-7cd30b34df71
 - 3. Delete cache files:
 - Open the Office Upload Center
 - In the Upload Center, click Settings, and then click Delete Cached Files
 - Restart your computer
- If these do not work, contact markku.maula@luke.fi for assistance.

