Horizon 2020 Societal challenge 5
Climate action, environment, resource
Efficiency and raw materials

D8.3: QUALITY ASSSURANCE PLAN

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AUTHOR(S)	Floor Brouwer (WUR-LEI)
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INTERNAL REVIEWER	George Beers (Project Coordinator)

DOCUMENT HISTORY

VERSION	INITIALS/NAME	DATE	COMMENTS-DESCRIPTION OF ACTIONS
0	VERSION 0.1	12.11.2016	CLARIFY THE USE OF KEY PERFROMANCE INDICATORS IN SIM4NEXUS
1	VERSION 1	10.1.2017	COMMENTS FROM JANEZ SUSNIK (UNESCO-IHE), MARIA WITMER (PBL) AND XAVIER DOMINGO (EURECAT) – MAKE EXPLICIT THE LINK BETWEEN KPI , IMPACTS AND OBJECTIVES OF SIM4NEXUS
2	VERSION 2	23.01.2017	EDITORIAL COMMENTS ARE MADE, MAKE THE FLOW OF WORK EXPLICIT FROM OBJECTIVE TOWARDS THE MEANS
3	VERSION 3	28.11.2017	FINAL REPORT UPDATED ACCORDING TO 1ST YEAR REVIEW RECOMMENDATIONS

Version 3 of the report follows from the comments of the project reviewers, received on 12 October 2017. The table below illustrates how the comments have been addressed.

Review comments 12/10/2017	Adjustments in report
The contingency measures are mentioned twice, but only as a ToDo of the EB (Section 2.3, Section 3.4) and the PCT (Section 3.4)	Section 2.5 includes a plan to update the existing list of contingency measures and mitigation actions. Section 2.5 also includes a plan for regular monitoring.

Table of Contents

Executive summary

Task 8.3 'Quality Assurance' aims at defining, implementing and maintaining a set of management structures to coordinate and monitor all project management activities. In order to support that objective, Task 8.3 puts in place the following elements, to enable a coordinated action of consortium members to meet the necessary quality levels:

- Collaboration tools.
- Internal communication, including the communication towards the whole consortium and communication targeted at specific work packages.
- Procedures and guidelines. Steps are implemented to the assessment of the quality of the deliverables, which primarily is a responsibility of the WP leads and co-leads. In addition, the assessment of the quality of the deliverables, examining consistency and coherence across work-packages is carried out by the responsibility of the scientific co-ordinator of the project. In addition, procedures are provided on (i) the list of Key Performance Indicators and the monitoring process (M6); periodic monitoring of the contributions of the work packages towards achieving the KPIs (M12, M18, M24, M36, M48); (ii) the periodic technical progress report (twice a year), prepared by the Scientific Coordinator, and based on the technical (draft) reports delivered by the WPs; (iii) the three meetings of the External Advisory Board (EAB), organized by the Scientific coordinator, which takes place three times during the project.
- Risks and change management.

This deliverable serves two purposes: (i) being a guidance for all members of the project consortium to conduct their contractual project activities with a high quality level, as well as easing their collaborative work and (ii) establishing a framework for the project coordination team (PCT) to effectively carrying out all management activities and monitor the project for current and future risks and avoid negative effects.

Changes with respect to the DoA

The current deliverable presents more detail on the quality assurance.

Dissemination and uptake

The deliverable is available at the website (www.sim4nexus.eu).

Short Summary of results (<250 words)

Defining, implementing and maintaining a set of management structures to coordinate and monitor all project management activities. The report puts in place the following elements, to enable a coordinated action of consortium members to meet the necessary quality levels:

- Collaboration tools.
- Internal communication, including the communication towards the whole consortium and communication targeted at specific work packages.
- Procedures and guidelines. Steps are implemented to the assess the quality of the deliverables, which primarily is a responsibility of the WP leads and co-leads. In addition, the assessment of the quality of the deliverables, examining consistency and coherence across work-packages is carried out by the responsibility of the scientific co-ordinator of the project. In addition, procedures are provided on (i) the list of Key Performance Indicators and the monitoring process (M6); periodic monitoring of the contributions of the work

packages towards achieving the KPIs (M12, M18, M24, M36, M48); (ii) the periodic technical progress report (twice a year), prepared by the Scientific Coordinator, and based on the technical (draft) reports delivered by the WPs; (iii) the three meetings of the External Advisory Board (EAB), organized by the Scientific coordinator, which takes place three times during the project.

- Risks and change management.

Evidence of accomplishment

Report.

Glossary / Acronyms

TERM	EXPLANATION / MEANING
CA	CONSORTIUM AGREEMENT
CAP	COMMON AGRICULTURAL POLICY
CBD	CONVENTION ON BIOLOGICAL DIVERSITY
DOA	DESCRIPTION OF THE ACTION
EASME	EXECUTIVE AGENCY FOR SMALL AND MEDIUM-SIZED ENTERPRISES
EAB	EXTERNAL ADVISORY BOARD
EB	EXECUTIVE BOARD
EEIG	EUROPEAN ECONOMIC INTEREST GROUPING
GA	GRANT AGREEMENT
IPR	INTELLECTUAL PROPERTY RIGHTS
KPI	KEY PERFORMANCE INDICATOR
PCT	PROJECT COORDINATION TEAM
SIM4N4XUS	SUSTAINABLE INTEGRATED MANAGEMENT FOR THE NEXUS OF WATER-LAND-FOOD-ENERGY-CLIMATE FOR A RESOURCE-EFFICIENT EUROPE
UNFCCC	UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE
WFD	WATER FRAMEWORK DIRECTIVE

1. Introduction

1.1 Purpose and scope

Task 8.3 'Quality Assurance' aims at defining, implementing and maintaining a set of management structures to coordinate and monitor project management activities. In order to support that, Task 8.3 puts in place the following elements, to enable a coordinated action of consortium members to meet the necessary quality levels. The purpose of this document is two-fold:

1. Serve as a guideline and reference for project management activities to be followed throughout the entire project duration.
2. Be used as a source of reference for all the members of the SIM4NEXUS project consortium, compiling all the procedures and tools to enable a successful collaborative work towards achieving the project objectives with the highest quality.

The document covers procedures and best practices for the following project management activities:

- Project governance.
- Communication and collaboration.
- Management of documents and other project outcomes (including drafting of deliverables).
- Reporting (financial and activities).
- Risk management.
- Change management.
- IPR management.

This document is released in Month 8 of the project (January 2017), following an initial discussion in the Project Coordination Team (PCT) on Key Performance Indicators (KPIs), November 2016 (Month 6 of the project). The deliverable offers a release of procedures, tools to support the procedures and guidelines. The processes and guidelines described in this deliverable are advanced and have been proven successful in other projects. However, it is envisioned that, as time passes and the procedures are put in place and the tools are used, some modifications and adaptations might be required. Therefore, this document will be revised when felt necessary in the project. Once relevant, the consortium will be notified about such changes in due time.

1.2 Structure of the document

This deliverable is structured into 7 main sections that correspond to each of the activities listed in Section 1.1. Each section has a different structure but is always organised along four main topics:

1. General description of the activity and purpose.
2. Associated procedures: who does what and when.
3. Best practices, guidelines and other specific considerations.
4. Tools supporting the procedures.

2 Project Governance

2.1 Governance bodies

The organizational structure of SIM4NEXUS has been designed taking into account the complexity and the effort required to encompass management of knowledge, intellectual property, innovation activities, communication and coordination and exploitation and sustainability activities. Figure 2.1 depicts and overview of the governing structure of SIM4NEXUS.

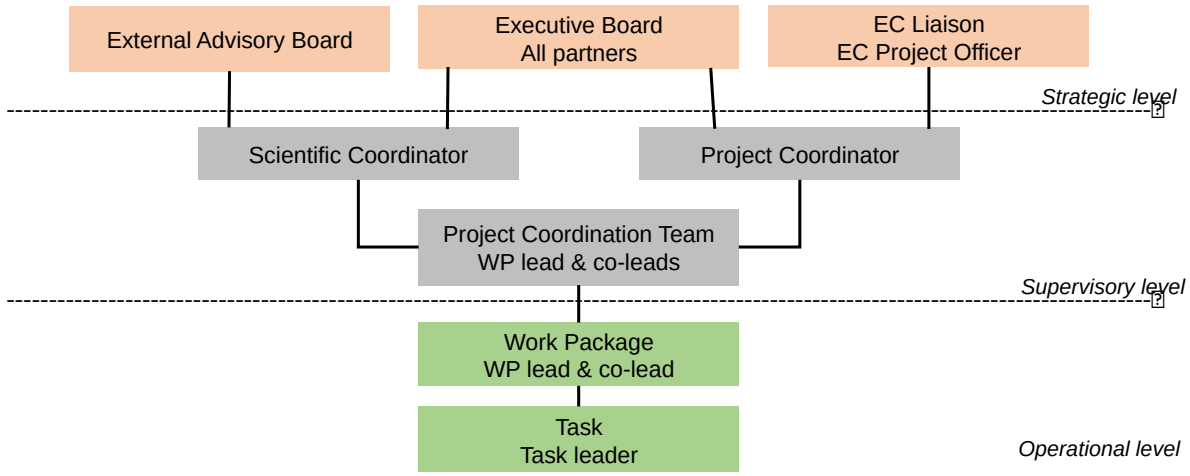

Figure 1. SIM4NEXUS organisation structure

The general principle is that decisions should be made at the lowest possible level; going up from the expert level to the task leader, the WP leader, Project Management Team and ultimately the Executive Board. WP leaders or Task leaders cannot make decisions alone in case such a decision affects other WP or Task respectively. The External Advisory Board does not have a formal decision making power. However, any advice given by the EAB or its members should be carefully considered by the appropriate body. Before the start of the project, partners did conclude a Consortium Agreement based on the DESCA H2020 model. A description of the voting mechanism for the Executive Board is included in the DESCA model. Should voting be necessary, the Project Coordination Team will also use this voting mechanism. The following sections explain the composition of the governing bodies, outlining their main responsibilities.

2.2 Project coordinator

George Beers (WUR-LEI) is the Project Coordinator of SIM4NEXUS and the Chair of the Executive Board. The main role of the Project Coordinator will be:

- Acting as the communication link between Consortium and EASME (Executive Agency for Small- and Medium-Sized Enterprises), including the Project Advisor, as well as the Financial and Legal Officer from EASME.
- Chairing and organising the meetings of the Executive Board (EB)
- Supervising execution of decisions made at the Executive Board
- Monitoring the overall progress of the project, including deviations that may affect the general project goals
- Leading WP8 Project Management, including Internal communication, Legal, Administrative and Financial management
- Giving support to all partners

The Project Coordinator will be assisted by the Assistant Project Leader SIM4NEXUS (Marianne Selten) in handling contract revisions, cost statements and associated materials (e.g. audit certificates),

reorganization of budget allocation due to possible re-allocation of tasks and other project activities. The details of the tasks and responsibilities assigned to the Project Coordinator are described in the Grant Agreement (GA) and the Consortium Agreement (CA).

2.3 Executive Board

The Executive Board (EB) is the formal decision-making body of SIM4NEXUS, in any issues related to financial, resources, negotiation, Grant Agreement amendments, defaulting parties, additional partners, issues related to conflict resolution, contingency planning and IPR, etc., and is formed by one representative of each consortium member. Voting right of the Executive Board is one person one vote; simple majority is required to approve decisions. Equal vote, the vote of the project coordinator is decisive.

The EB will meet in M2 (July 2016), M18 (November 2017) and M36 (May 2019). All further details on the functioning of the EB and its responsibilities, and other specifications are described and regulated by the terms of the Consortium Agreement (CA).

2.4 Scientific Coordinator

Floor Brouwer is the Scientific Coordinator and the Chair of the Project Coordination Team. The main responsibilities of the Scientific Coordinator are the following:

- Coordinating the Work Packages.
- Assessment of the quality of the output of the WPs. This includes an assessment of the quality of the products, regarding consistency and coherence of technical reports across WPs.
- Monitoring the overall scientific and technical progress of the project, tracking deviations from the Work Plan and implementing the necessary contingencies. This includes periodic (twice a year) technical progress reports, based on the technical (draft) reports delivered by the WPs.
- Chairing and organising the meetings of the Project Coordination Team.
- Organising the meetings of the External Advisory Board (EAB).
- Preparing the Technical Progress Report and reporting to the Executive Board.

For objective assessment of the quality of the deliverables and giving direction to WPs for scientific and technological development, the Scientific Coordinator will be supported by the External Advisory Board (EAB).

2.5 Project Coordination Team (PCT)

The PCT is the body governing the work in the project. In SIM4NEXUS it is crucial to have good interaction between the Work Packages. The WPs have quite different objectives, teams from different disciplines and organisations. However all WPs are working on the same main objective; an excellent functioning serious game that supports the implementation of the NEXUS. Of course there are PCT meetings for the WP leads where information will be exchanged. Also there is the one-way communication in which deliverables of one WP are input for another WP. For some relations between WPs we expect high level of interaction, because a step in one WP might lead to changes in the other; e.g. experiences in the cases will affect the tools and maybe also (fine-tuning) models or data to be used. Going systematically through all WP interactions and as it can be seen from the Figures of WP interlinkages that can be found in each WP, some 'hot spots' of interaction haven been identified. These are at WP1-WP3, WP1-WP5, WP2-WP3, WP2-WP4, WP2-WP5, WP3-WP5 and WP4-WP5. For these hot spots of interaction the WPs will appoint linking pins; namely, experts that will be assigned in both WPs with a special assignment in keeping coordination between the 2 WPs.

The PCT will review the existing critical implementation risks and mitigation actions during the first quarter of 2018, with a view to make them more explicit. The expert consolidated review report

(12.10.2017) will be the starting point for their update. Measures will be more explicit (who, what, when), with main responsibility by a single WP (co-)lead. Approval by the EB is searched for in case it requires an amendment of the Grant Agreement. The consortium is informed about the outcomes of this action through the minutes of the PCT. Monitoring of the critical implementation risks and mitigation actions will be twice a year (first quarter 2018; third quarter 2018; first quarter 2019; third quarter 2019; first quarter 2020). This will enable fast reactions where considered necessary.

2.6 Work Package Leader

One of the most important roles in the project is Work Package Leader. Because in the project a broad scope and variety of themes and issues need to be covered and integrated, in each of the WPs the Leader is supported by a Co-leader from a different organization and with a different perspective on the WP challenge. In total 14 organisation are directly involved in the WP leadership. The responsible person in each organisation and its respective role, has been identified in Table 1.

Table 1. Key Roles in the project

Role	Partner	Responsible
WP1 Leader / Co-leader	UTH / KTH	Chrysi Laspidou / Mark Howells
WP2 Leader / Co-leader	PBL / UNESCO-IHE	Maria Witmer / Janez Susnik
WP3 Leader / Co-leader	UNEXE / UPM	Lydia Vamvakeridou / Maria Blanco
WP4 Leader / Co-leader	EURECAT / EPSILON	Gabriel Anzaldi / Marc Bonazountas
WP5 Leader / Co-leader	WUR-LEI / ACT	Floor Brouwer / Pierre Strosser
WP6 Leader / Co-leader	SI / DHI	Alexandre Bredimas / Chengzi Chew
WP7 Leader / Co-leader	FT / PIK	Guido Schmidt / Frank Wechsung
WP8 Project Coordinator / Scientific Coordinator	WUR-LEI WUR-LEI	George Beers / Floor Brouwer

Work Packages (WPs) are the main operative governing units of the project. Each WP is led by a duo, a primary responsibility at the WP leader, working with the Co-leader who will also act as sparring partner and back-up for the WP Leader. The main responsibilities for the WP leader are:

- Coordinating and monitoring all Tasks, Deliverables and Milestones assigned to the WP.
- Coordinating the preparation and review of deliverables.
- Quality assessment of the deliverables from the tasks.
- Assessing input from other WPs and interact with other WPs in case of misfits.
- Reporting to the Scientific Coordinator and Project Coordinator on any possible deviations.
- Organising and chairing the WP meetings.

2.6.1 Task Leader

Each Task is led by one partner, the Task Leader, whose main responsibilities are:

- Coordination and monitoring of all activities necessary to complete the task.
- Report to the WP leader of any possible deviations.
- Organise and chair Task meetings (when necessary).

2.7 External Advisory Board (EAB)

The EAB consists of experts independent from the consortium (Table 2 for the members of the EAB).

Table 2. Members External Advisory Board

NAME	ORGANIZATION	SPECIFIC FIELD OF EXPERTISE
Iakovos Ganoulis	Special Secretary for Water in the Ministry of Reconstruction of Production, Environment & Energy, Greece	Advise on the process of integrating policies related to food, water, energy, land and climate.

NAME	ORGANIZATION	SPECIFIC FIELD OF EXPERTISE
Kitty van der Heijden	World Resources Institute (WRI)– Director WRI - Europe	Advise on the process of integrating policies related to food, energy, water, land and climate. In order to cope with these challenges and to understand the Nexus, a common transnational approach is seen most advantageous
Xavier Leflaive	Organisation for Economic Co-operation and Development (OECD), Water Team Leader in the Environment Directorate	Process of integrating policies related to food, water, energy, land and climate, with focus on policy coherence, the use of economic instruments and the political economy of reform.
Jamie Pittock	Australian National University, Canberra	Australian perspective and research findings on the management of the complex inter-dependencies of the Nexus, as well as experience in the United States.
Patrick Reed	Professor of Civil and Environmental Engineering at Cornell University	Process of integrating policies related to food, water, energy, land and climate. Focus on risk management, multi-sector tradeoff analysis, and state-of-the-art approaches for understanding key multi-sector dependencies.
Albert Vermuë	Secretary-General of the European Union of Water Management Associations (EUWMA)	The water component of the Nexus and keen to seek ways for improving the integration of water policies across the European, national and regional scales.
Mario Giampietro	ICREA Research Professor (Institute of Environmental Science and Technology, ICTA)	Project Coordinator of the H2020 project 'Moving towards Adaptive Governance in Complexity: Informing Nexus Security (MAGIC)'

The EAB will be active for the duration of the project and will elect the chair. The role of the EAB will be to provide direct feedback on the project interim and final results and to share relevant information about related studies and initiative with which they are involved. It will be invited to develop relevant ideas with the project team and to ensure linkages with stakeholders and contacts with key actors in the field of policy and decision-making related to water, food, energy, land and climate change. Throughout the project these linkages will be important for information dissemination. The EAB will convene 3 times in a regular meeting: a meeting around the end of year 1 (M12, to present the first results and the planning); a mid-term meeting (M24, to assess the direction of the project and the achievements made), and a meeting to advise on the final phase and focus on the exploitation and business of SIM4NEXUS (M36). In addition, the members of the EAB will be consulted for ad-hoc advice and reviews. In case of Scientific dispute within the consortium the Scientific Coordinator may use the advice from the EAB. During the lifespan of the project the EAB will be extended with specific experts on specific issues on an ad-hoc basis. Minutes are taken by WUR-LEI to record conclusions of these meetings.

3 Communication and collaboration

In addition to e-mail, Skype and phone conversation, in order to facilitate internal communication and collaboration among the members of the consortium, there are two main means that require to be treated specifically in this deliverable presenting Quality Assurance: project distribution mailing lists and meetings (face to face, Skype and/or video-/teleconferences).

3.1 Mailing lists

It is encouraged to all members of the consortium to address the correct mailing list. Current mailing lists available are compiled in Table 3: additional mailing lists can be set up on request.

Table 3. SIM4NEXUS distribution mailing lists

Target group	Distribution list address
Project mail address	sim4nexus@wur.nl
Members of the Executive Board	See projectplace: Documents -> WP8 -> Mailinglists -> Mailinglist S4N_keycontacts per partner.xlsx
All SIM4NEXUS consortium members (including financial partners) (about 130 addresses)	See Projectplace: Documents -> WP8 -> Mailinglists -> Mailinglist S4N_total.xlsx
Distribution list for Monthly Update (all consortium members, plus Project Adviser)	See Projectplace: Documents -> WP8 -> Mailinglists -> Mailinglist S4N_Monthly Updates.xlsx
PCT representatives (about 25 addresses)	See Projectplace: Documents -> WP8 -> Mailinglists -> Mailinglist S4N_WP (co)leaders.xlsx

We may create distribution lists with Google Groups (http://groups.google.com), especially for the PCT. The good thing is that it is not necessary to share the user (only the admin knows it), and it is easy: each email sent to mygroup@googlegroups.com (you choose an available address in the googlegroups.com domain), will be resent to the emails set up in that group. When you want to answer, you only have to answer to that email. Progress on this will be announced in the Monthly Update.

3.2 Internal Communication

Communication means are used as appropriate, including tele- or video conferencing and e-mail. However meetings in person are also part of the project, as they also serve to improve relationships between individuals, the importance of which should not be underestimated in a project with so many experts from different organisations and disciplines involved. Any important information discussed in a meeting or over the telephone is confirmed by e-mail or minutes of meetings. Decisions are always confirmed by e-mail, by the relevant decision maker.

3.2.1 Use of Projectplace

A project specific facility for the planning of tasks and sharing documents (Projectplace) where partners can share internal documents, will be facilitated by WP8. All consortium partners are invited to register with Projectplace. A Workspace 'SIM4NEXUS' is provided for anyone in the consortium to share information. Please send an e-mail to sim4nexus@wur.nl, if you wish to register and have access to Projectplace.

3.2.2 SIM4NEXUS mailbox

A mailbox is available for all communication with the project coordinator and scientific coordinator, and can be reached at: sim4nexus@wur.nl.

3.2.3 Monthly Update of SIM4NEXUS

An internal mechanism is introduced to report progress on the project. The Monthly Update started January 2016, and is released on a monthly basis since then.

- Information on any issues related to the Grant Agreement, including payments.
- Update with progress in the work packages.
- Inform consortium on partners who contribute to outreach in the project (e.g. conference presentations and stakeholder involvement).
- Interaction with related projects on the Nexus.

The Monthly Update is prepared by the Scientific Coordinator, who seeks for contributions from the leads/co-leads of the work packages. By the end of 2016, the distribution list includes approximately 130 e-mail addresses. The Monthly Update is released during the last days of the month.

3.3 External communication: project website

A project specific website (www.sim4nexus.eu) is launched as one of the activities in WP7. The website will be updated and the revision will be launched early 2017.

3.4 Project meetings, Skype and phone conferences

The following meetings are envisioned to be organised during the project (see Table 4).

Table 4. Governance Units in SIM4NEXUS

Governance level	Members	Decision Making Mechanism	Related Tasks
Executive Board (EB) / Strategic; Chair: George Beers (WUR-LEI)	All partners	Strategic decisions shall be made at EB meetings. Voting rights: one person one vote; simple majority is required to approve decisions. Equal vote, the vote of the coordinator is decisive.	Highest decision making body, supervising overall progress of the project Decide on key issues, e.g. resources re-allocation, defaulting partners, additional partners, contract amendments. Issues related to conflict resolution and contingency planning
Project Coordination Team (PCT)/; Chair: Floor Brouwer (WUR-LEI)	WP Leads and Co-leads	Decisions shall be made at PCT level. Voting rights: one person one vote; simple majority is required to approve decisions.	Coordinating activities and outcomes of WPs, and supervising overall Scientific & Technological progress Quality review of scientific reports and deliverables Making decisions across WPs Conflict resolution process and contingency planning Reporting to the Executive Board
Work Package / Operational Chair: WP Leader	All WP members	Decisions shall be made within the WP. Voting rights: one person one vote; simple majority is required to approve decisions.	Executive decisions made on WP and Task level, assess input and feedback across WPs Day to day coordination and monitoring of tasks in WP Making on-going decisions affecting the WP Review of deliverables and contributions to reporting Report to Project Coordination Team
Task / Operational Chair: Task leader	All task members	Decisions shall be made within the WP	Day-to-day coordination and control of sub-tasks Monitor execution, delays and quality of performance within each task, and report to the WP Leader

3.5 Periodicity of meetings, Skype and phone conferences

In order to reduce the ecological footprint, the project team will undertake efforts to optimize travel by cost-effective travel management; enhancing virtual meetings by video conferences or Skype; and by using recycled paper for office print outs, etc. Periodicity and type of foreseen meetings is depicted in Table 5.

Table 5. Periodicity of meetings

Meetings	Periodicity	Type	Chair	Attendees
Executive Board	3 meetings: M2, M18, M36	Physical meetings	Project Coordinator	All partners *(Executive Board Representatives)*
EAB	3 meetings: M12, M24, M36	Physical meetings	Elected by EAB	Members EAB WP Leaders
PCT	M2, M6, M12, M18, M24, M30, M36, M42, M47	Physical or virtual meetings	Scientific Coordinator	WP Leaders and co-leaders
WP Meeting	Monthly basis	Virtual meeting	WP leader	WP Representatives
Task Meeting	To be planned	Virtual meeting	Task leader	Task Representatives

3.6 Project review meetings

As established in the Grant Agreement, there are two review meetings where the EASME representative and the external reviewers appointed by the EU Project Officer will evaluate the project execution and progress towards the objectives declared in the DoA (Description of the Action). The two reviews have been scheduled to take place in M15 (August 2017) and M33 (February 2019).

The Project Coordinator and the Scientific Coordinator (with the support of the PCT and all consortium members) will organise and prepare the review meetings, following the guidelines listed next:

- Using and providing templates for review presentations available in the project repository (projectplace).
- Prepare the agenda for the review meeting.
- Liaising with the PCT and make sure that advance registration for the review is complete.
- Present an overview of the project in the beginning of the review.
- WP leads present the work packages.
- Ensure the taking of minutes and providing the final version of the minutes.
- Sending all partners the review report from the EU.
- Following up all comments and recommendations from the reviewers and the Project Advisor.

3.7 Rules for publications

Some basic rules for publications must be followed (see table 6).

Table 6. Basic rules for publications

Publication type	Distribution list address
Non-scientific	Use SIM4NEXUS logo
	Use disclaimer
	Use EU logo
Scientific	Add the following sentence to the acknowledgement section: This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement NO 689150 SIM4NEXUS.

EU disclaimer: mandatory elements for acknowledgement texts are (mandatory in all kinds of publications): 'The work described in this <type of publication> has been conducted within the project SIM4NEXUS. This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement NO 689150 SIM4NEXUS. This <type of publication> and the content included in it do not represent the opinion of the European Union, and the European Union is not responsible for any use that might be made of its content'.

Logos are accessible in project place. Both SIM4NEXUS and EU logos are available in project place: Documents -> WP7 -> Task 7.6 Promotional material -> Logos -> SIM4NEXUS_logo_white_S.jpg (project logo) and EU_logo.jpg (EU logo).

3.8 Travelling to non-EU countries

Attendance to events, conferences, venues taking place in non-EU countries is in principle discouraged. Should you plan to attend an event in a non-EU country and to claim the associated travel costs to the EC in the corresponding financial statement, it must be notified in advance to the Scientific Coordinator for validation with the Project Adviser in EASME. Since the validation by EASME could take some time (and more details and clarifications about the trip could be required), it is advised that project partners communicate the details of the planned trip well in advance, to avoid purchasing air-line tickets, hotels, conference registration in vain. The following rules apply in this case:

- The following information should be provided by e-mail to the coordinator about the planned trip to non-EU countries, which will be forwarded to the Project Adviser (EASME):
- Destination country/city
- Trip dates
- Purpose of the trip (with sufficient detail to justify the trip: e.g. conference name, link, reason for attendance, title/abstract of the paper/presentation)
- Relation with SIM4NEXUS
- Foreseen costs
- Although the coordinator will speed up the process as much as possible, it remains the responsibility of project partners to decide when is exactly 'well in advance'.
- Costs that do not have the specific mail with the OK from the coordinator will not be accepted in cost statements.

4 Management of documents and impacts of outcomes

4.1 Completion of Deliverables

In order to submit deliverables that meet high quality standards, a review process and quality check is introduced. It is of utmost importance to have a clear Executive Summary; an introduction section which clearly outlines the purpose and scope of the deliverable, and a conclusions section.

4.1.1 Review process of deliverables

Templates for deliverables are available on Projectplace. See: Documents -> WP7 -> Task 7.6 Promotional material -> Templates -> S4N_deliverables.dotx. The entire review process of a deliverable could take a couple of weeks allowing for various feedback loops between the specific reviewers and the main author of the deliverable (and contributors). The schedule presented below is recommended and main authors of the deliverables are encouraged to adhere to it. However, the timing of the scientific review can be reduced (or extended) if previously agreed between the main author of the deliverable and the corresponding reviewers.

- Nominate an internal reviewer. The author of a deliverable could propose a reviewer, but it needs to be confirmed by the WP lead/co-lead.
- Draft of the deliverable is send to the internal reviewer. The review process starts three weeks before submission date.
- Approval of the draft of the deliverable, one week before submission date. Approval of the draft by the principal author of the deliverable and the internal reviewer.
- Quality check of the deliverable, during the last week before submission date. Approval by the scientific coordinator, following confirmation by the WP lead/co-lead the deliverable does comply with the Grant Agreement.
- Internal reviewer. Must not be a direct contributor to the deliverable under review. Must have a special interest in the topic covered by the deliverable (e.g. a related WP/task/case study/deliverable author, main role in a task that depends on the work presented in the deliverable).

It is the responsibility of the main author of a deliverable to make sure the draft is ready for starting peer review process by the corresponding date and therefore, to plan the previous writing (and interim draft versions) accordingly.

4.2 Key performance indicators (KPIs)

4.2.1 The rationale for KPIs is introduced in the GA

Key Performance Indicators (KPIs) enable to assess the extent objectives and expected impacts of SIM4NEXUS are reached. A tentative list of Key Performance Indicators is developed during the proposal writing and included in the Grant Agreement. KPIs are linked to the Objectives, as an example.

i. KPI 1: Number of end-users successfully adopting the Serious Game (WP6). Relevant for the exploitation plan (Objective 4).
ii. KPI 2: Degree of integration, regarding the Nexus and its main components for each application. Relevant for Objective 2.
iii. KPI 3: Percentage of low-carbon energy, for each case study, resulting from suggested policies. Relevant for Objective 1.
iv. KPI 4: A resource efficiency indicator on the ratio between the value of economic output and resource use. Such an indicator is relevant for Objective 1.

v. KPI 5: Number and diversity of policy makers involved in the development of each case study, a cost-benefit indicator of measures. Relevant for Objective 3.

vi. KPI 6: Number of scenarios (i.e., Shared Socioeconomic Pathways - SSPs) developed, described and run in Case Studies / Number of future assessments conducted using SIM4NEXUS tools. Relevant for Objective 3.

4.2.2 Updated list of KPIs

The original list of KPIs included in the Grant Agreement is reconsidered by the PCT during the second half of 2016. Some of them were beyond the accountability ceiling of SIM4NEXUS and therefore are adapted to make linkages to the objectives and impacts of SIM4NEXUS explicit. SIM4NEXUS will introduce a periodic monitoring towards achieving the KPIs. The contributions of individual work packages will be assessed and regularly updated (M12, M24, M36, M48). The KPIs will link to the impacts and objectives of the project.

Objective 1: To adopt existing knowledge and develop new expertise on the Nexus to support the goals of the EU 2020 vision for smart, sustainable and inclusive growth, including resource efficiency objectives and other water-related policy objectives in the EU, by testing improvements in resource efficiency and low-carbon energy use. Pathways for achieving the 2050 vision ('Living well within the borders of our planet') will be identified, while scientifically sound projections beyond 2050 are also made. The extent of reaching objectives and expected impacts will be assessed via the use of relevant Key Performance Indicators (KPIs).

Impact 1: Increased understanding of how water management, food, biodiversity and land use policies are linked together and to climate and sustainability goals.

Impact 2: Reduction of the uncertainties about the opportunities and limitations of low-carbon options, such as bioenergy technologies and resource efficiency measures, in view of relevant near-term policy initiatives.

Three Key Performance Indicators relate to the above objective and impacts:

- Key Performance Indicator KPI1 – How many pathways are developed in the 12 case studies in achieving the 2050 vision ('Living well within the borders of our planet') (Objective 1), climate and sustainability goals (Impact 1) and opportunities and limitations of low-carbon options in view of near-term policy initiatives (Impact 2). We judge that a higher number of pathways is better.
  Monitored by WP5: M12, M24, M36, M48
- Key Performance Indicator KPI2 - Number of papers by SIM4NEXUS partners submitted to peer reviewed journals that present the link between the Nexus and resource efficiency, pathways for the vision 'Living well within the borders of our planet' in 2050 and beyond (Objective 1), climate and sustainability goals (Impact 1) and opportunities and limitations of low-carbon options in view of near-term policy initiatives (Impact 2).
  Monitored by WP7: M12, M24, M36, M48
- Key Performance Indicator KPI3 - Number of tweets from @SIM4NEXUS (with 'likes', 'retweets' and 'views') that address the links between the Nexus and resource efficiency, pathways for the vision 'Living well within the borders of our planet' in 2050 and beyond (Objective 1), climate and sustainability goals (Impact 1) and opportunities and limitations of low-carbon options in view of near-term policy initiatives (Impact 2).
  Monitored by WP7: M12, M24, M36, M48

Objective 2. To use advanced integration methodologies based on Complexity Science approaches in order to bridge the knowledge gap related to the complex interactions among all

components in the water-land-food-energy-climate Nexus and to reduce uncertainties of how policies, governance and institutions affect complex changing environmental systems and what their impacts are on resources.

Three Key Performance Indicators relate to the above objective:

- Key Performance Indicator KPI4 – Are complexity science modelling tools operational for all case studies (Yes/No)? Present the number of cases that have
  Monitored by WP3 and WP4: M36, M48.
- Key Performance Indicator KPI5 - Percentage of respondents in the case studies who reply positive towards the question whether they have gained insights on the Nexus and Nexus-compliant practices. A survey will be organised by WP5.
  Monitored by WP5 in M36, M48.
- Key Performance Indicator KPI6 - Number of end-users who have adopted the Serious Game during the life-time of the SIM4NEXUS.
  Monitored by WP5 in M36, M48.

Objective 4. To implement a business plan in order to valorise the project outputs (Complexity Science Nexus integration tools, Serious Game, Knowledge Elicitation Engine) by creating project spinoffs. SIM4NEXUS aims to offer a long-lasting, economically sustainable exploitation of its results, including an Intellectual Property Rights (IPR) legal framework for the partners and a mechanism aimed at encouraging and accepting new partnerships in the years to come (e.g., via a European Economic Interest Grouping—EEIG).

One Key Performance Indicators relate to the above objective:

- Key Performance Indicator KPI7 – Is there a governance structure in place to maintain and further develop SIM4NEXUS Serious Game (e.g. new partnerships that result from SIM4NEXUS; number of users of the Serious Game who pay for its use)?
  Monitored by WP6 in M48

Objective 3. To showcase the implementation of the SIM4NEXUS methodology, by using a network of regional and national case studies in Europe as a test bed for achieving resource efficiency through successful policy initiatives. In this context, SIM4NEXUS aims to address the barriers of expanding the use of the Serious Game by end-users and policy-makers.

One Key Performance Indicator relates to the above objective and impact:

- Key Performance Indicator KPI8 – Number of contributions towards international policy events (UNFCCC – United Nations Framework Convention on Climate Change, CBD - Convention on Biological Diversity), European (e.g. CAP – Common Agricultural Policy, WFD – Water Framework Directive), national policy events and regional policy events.
  Monitored by WP7 in M24, M36, M48

5 Reporting (financial and activity)

5.1 Official reporting

Three reporting periods are included in Grant Agreement:

- RP1 is at M12 (M1 to M12)
- RP2 is at M30 (M13 to M30)
- RP3 is at M48 (M31 to M48)

These reports entail each partner's declaration of financial statements regarding costs and efforts spent in the period.

5.2 Periodic reports

The DoA establishes project reports, i.e. contractual documents that the SIM4NEXUS consortium will deliver. In addition to the deliverables and milestones, there is periodic reporting:

- Project Periodic report related to the first reporting period (1.6.2016 – 30.5.2017), due for submission within 60 days afterwards (i.e. end of July 2017).
- Project Periodic report related to the second reporting period (until 30.11.2018), due for submission within 60 days afterwards (e.g. end of January 2019).

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

Periodic technical report containing:

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

Periodic financial report containing:

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

WUR-LEI will be in charge to collect from all consortium partners the information required to fill in the Periodic Reports.

5.3 Final report

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

- A final publishable summary report covering results, conclusions and socio-economic impact of the project.
- A report covering the wider societal implications of the project, in the form of a questionnaire, including gender equality actions, ethical issues, efforts to involve other actors and to spread awareness, as well as the plan for the use and dissemination of foreground.

After the final payment is received from the EC, the following should be submitted:

- A report on the distribution of the Community financial contribution between beneficiaries. This report must be submitted 30 days after receipt of the final payment (not required for intermediate payments).

6 Risk management

The risk management has the objective to avoid or minimize impact of potentially possible but unforeseen or unlikely external or internal events that the likelihood to achieve the targeted outcome in projected time, quality or cost.

Based on the risks and contingencies plans outlined in the DoA (Part A, Table 1.3.5) the risk management process is repeated at regular intervals during the project execution to control risk factors. It implements mitigation wherever and whenever necessary. Not all events can be foreseen, but the on-going reporting (timely submission of deliverables and milestones) shall catch events that endanger the success of the project or the quality of the outcomes.

The PCT will monitor closely the risks and evaluate and update their likelihood when necessary. New risks may appear and some others might be discarded. This will be discussed in the PCT, who has intensified their schedule of meetings. Starting from early 2017, the PCT will meet virtually once every 6-8 weeks, discuss progress in deliverables and milestones, and critical implementation risks and mitigation actions.

7 IPR management

Intellectual Property Rights (IPR) will receive special attention from the beginning. All rules regarding management of knowledge and IPR will be governed by the Consortium Agreement (CA) that was signed by all beneficiaries before the project did start its activities. The DESCA H2020 model Consortium Agreement was used as basis for the CA. SIM4NEXUS will not act in contradiction with the rules laid down in Annex II of the Grant Agreement. The CA addresses background and foreground knowledge, ownership, protected third party components of the products, and protection, use and dissemination of results and access rights.

8 Conclusions

This deliverable compiles definitions and procedures of the project government bodies. It also summarizes the procedures to ensure a successful collaborative work within the project. Moreover, the deliverable describes the involved roles and tasks, the tools and instruments available, in order to conduct the work towards meeting the project objectives with the highest possible quality level. The document aims at being a project execution handbook and a reference for all project consortium members for the entire project duration.