SIM4NEXUS

Sustainable Integrated Management for the Nexus of water-land-food-energy-climate for a resource-efficient Europe

Number 689150, Research and Innovation

Deliverable number (relative in WP)	D8.1
Deliverable name:	Detailed work plan
WP / WP number:	WP8 – Project Management
Delivery due date:	Project month 2 (29/07/2016)
Actual date of submission:	29/07/2016
Dissemination level:	Public
Lead beneficiary:	WUR-LEI
Responsible scientist/administrator:	Floor Brouwer
Estimated effort (PM):	1 pm
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Estimated effort contributor(s) (PM):	2 pm
Internal reviewer:	George Beers (project coordinator)

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1. Changes with respect to the DoA

No changes with respect to the DoA. It is proposed to reschedule the first meeting of the External Advisory Board (EAB), which is currently scheduled for Month 6, and proposed to be rescheduled for M12. See presentation of WP8.

2. Dissemination and uptake

The current report is prepared by the leads of the workpackages, including Chrysi Laspidou (UTH) (WP1); Maria Witmer (PBL) and Janez Sušnik (UNESCO-IHE) (WP2); Lydia Vamvakeridou-Lyroudia (UNEXE) (WP3); Gabriel Anzaldi (EURECAT) and Marc Bonazountas (EPSILON) (WP4); Floor Brouwer (WUR-LEI), Maïté Fournier (ACT) and Pierre Strosser (ACT) (WP5); Alexandre Bredimas (SI), Katia Dahmani (SI) and Chengzi Chew (DHI) (WP6); WP7: Guido Schmidt (FT), Frank Wechsung (PIK) (WP7); Floor Brouwer (WUR-LEI) (WP8). Although the dissemination type is public, the deliverable is mainly relevant for use within the project.

3. Short Summary of results (<250 words)

Update of the work plan, presenting the interactions between the different work packages, mainly during the first six months of the project.

4. Evidence of accomplishment

The work into this deliverable is presented in a report.

5. Introduction

The report presents a detailed work plan, ensuring coherence and consistency of the work to be carried out in the work packages. It results from the introductions to the work packages, presented at the kick-off meeting of SIM4NEXUS (July 11 & 12, 2016), also addressing the links with the other work packages. The deliverable also clarifies where we are going in the coming half year, what is required, from whom and by when.

6. WP1 – Understanding and Assessing the Nexus in various contexts

The work undertaken in Work Package 1 has already started at June 1, 2016. There are preparations for a large deliverable that will compile all relevant science on the Nexus and create a repository for the whole project and it will create the scientific basis for the interlinkages of Nexus dimensions in all case studies. As a first step and in order to divide the work load, all person-months allocated to partners in WP1, where divided per Task, as shown in the Table 1. (Task leaders are marked in green, while WP lead and co-lead are marked in purple).

Table 1 – Number of person months by partner and task in WP1[1]

	T1.1	T1.2	T1.3	T1.4	T1.5	T1.6	T1.7	SUM
P1 - WUR-LEI	3	1			1	1	1	7
P2 – UTH	10	6	2	1	2	2	5	28
P3 - UNEXE	1		1	1		1	1	5
P4 - UNESCO-IHE	1		2					3
P5 – PIK	4							4
P6 – UPM	2		1	1	1	1		6
P8 – UNU	2							2
P9 – RU	2		2	5				9
P10 – KTH	2,5	1	1		5	4	2	15,5
P11 – UU	2							2
P12 - EURECAT		2				2		4
P13 - UNISS	0,5							0,5
P14 – ENKI	2							2
P15 – PBL	3							3
P18 – ACT		1,5			1,5	1		4
P19 - EPSILON		1				1		2
P20 – CE			2,5	1,5				4
P21 – SI				2				2
							TOTAL	103,0

[1] The contributions by P13 (UNISS) and P7 (UB) are partly subcontracted.

6.1. Task 1.1 – State of the art review – creating a scientific inventory on the Nexus

Skype meetings are held on a weekly basis with all involved partners and the flow of work is closely monitored with frequent e-mail exchanges that happen throughout the week. The Work Package leader has started introducing the use of the software "ProjectPlace" by all partners; partner WssTP provides the software to the consortium without charge. It allows easy management of the work, Task assignments, setting deadlines, sending out reminders, keeping record of all meetings, e-mails and "wall" messages that can be posted.

All partners are kept involved and descriptions of the interlinkages are being developed by the experts in the consortium. Once all interlinkages of the Nexus dimensions are developed, a secondary analysis will be done to add a second layer to the physical interlinkages by including *economy* and *society* in the analysis. Once this is done, the text will be enriched with references and will be linked to scientific evidence. This way, the produced document will have the qualities of a review paper on the Nexus. It is the intention of this WP to ultimately publish such a review paper shedding light on all interlinkages among the Nexus dimensions (Water-Energy-Food-Land Use-Climate) under Climate change. WP1 will also be very important for the development of the Nexus Assessment Framework of the case studies.

Our collaboration with WP5 is important since this is where we get feedback from the Case Studies on the interlinkages that are important for each case. Some of the interlinkages developed in WP1 might not even be obvious initially, but having conducted this analysis, we will be prepared to deal with critical interlinkages for each case study.

6.2. Task 1.3 – Review of Thematic Models in their capacity to address the Nexus and to cover relevant policy domains – Identify key gaps

For this Task, we will collaborate with WP3 in order to identify the gaps in the Thematic Models; these gaps are the interlinkages (identified in Task 1.1) that will not be quantifiable with the use of the Thematic Models. We are in contact with the responsible party in WP3 that will provide us with all the details about the Thematic Models that will enable us to identify key gaps and propose ways on how to deal with them.

7. WP2 – Policy analysis and the nexus

7.1. Task 2.1 – Identification of policy areas

WP2 will start in M3 (August 2016) with an inventory of the most important policy areas for the nexus and the relevant interactions, using the preliminary results of T1.1. This desk study will start with an inventory of the literature regarding critical nexus relevant policies at various scales and an inventory of the current goals, targets and policies for fresh water, land, agriculture, food, energy and climate at the global and European scale. With a selection of keywords we will search policy documents whether they explicitly refer to and take into account other policies within the nexus. Next, other relevant policy domains will be analysed that influence the socioeconomic drivers for the use of water and land, agricultural production, energy and food consumption, e.g. policies for investments, economy, industry, trade, innovation, regional development, cities. Do they recognise their influence on the nexus components or connections, are they coherent with the policies for the nexus domains, resource efficiency and low-carbon economy? Are some policy areas 'lagging behind' in their acknowledgement of nexus interactions? Besides policies from governmental institutions, also policies from private actors and private or public-private networks will be searched, e.g. multinationals, Round tables, Sustainable business networks. Examples of relevant conventions and policies are:

- Global: SDGs, UNFCCC, UNCCD, UNCBD, OECD Guidelines, policies by monetary funds and investment banks;
- EU: Water WFD, Floods directive, minimum quality for reuse; Energy & Climate Energy Union, 2020 Climate & Energy package, 2030 Climate & Energy framework, Agriculture & climate change, Climate change adaptation; Agriculture and Food CAP, Food waste, Round tables; Research & Innovation; Investment; Growth Circular Economy package; Regional funds.

It is absolutely necessary that in WP1 will be decided which interlinkages within the nexus are relevant to focus on. As there may be different priorities per scale and case, it is essential that we consider all scales and cases for this selection and ensure vertical coherence between the global, European, national and regional cases. The research in WP2 will go deeper into the relevant legislation for the selected focal interlinkages.

In T2.1 we will build a database of relevant passages from policy documents and directives, indicating their horizontal connections to other policy domains and vertical connections to policies at other scales. Also information about the foreseen policy processes will be added to this database, e.g. timing of reviews, new policies, legislation and implementation, to point out opportunities to influence policies. We will interview key stakeholders with different backgrounds and views to check our findings.

7.2. Task 2.2 – Review of nexus-relevant policies for each national and regional SIM4NEXUS case study

Implementation of policies usually is not an easy task. Every scale has its own consideration of interests and priorities, and sectoral policies may turn out to be conflicting when all implemented within a defined area. We assume that all cases will have defined the nexus interlinkages that they will focus on and made an inventory of the potential 'biophysical' trade-offs, synergies, interdependencies and conflicts, before T2.2 starts in M9, using the results of T1.1. With the database made in T2.1 as a starting point, all cases will analyse the translation of global and European policies into national and regional policies and investigate if these linkages are taken into account in the policy documents, legislation and measures. In T2.2, as well as studying nation level policy documents, the cases will also make an overview of relevant sectors, institutions, actors and networks connected to these linkages, with their interests and priorities. Using inquiries and interviews we will analyse how these linkages affect implementation in practice, how actors deal with them and what the outcome means for resource efficiency and low-carbon targets. Also we will ask for linkages experienced in practice that were not foreseen in the top-down analysis of policy papers.

Anticipating the policy analysis at national and regional scale in the case studies in T2.2, we plan to perform a pilot in one of the cases and make an inventory of the support needed in all the cases before T2.2 starts. T2.2 will start with developing a method for the policy analysis together with and approved of by the cases.

7.3. Meetings

WP2 will organise Skype meetings according to the needs. We will try out the tool 'Projectplace' for communication within the project. Physical meetings will be limited to what is absolutely necessary. As we foresee now, a representative of the WP2 lead will participate in a meeting of each national and regional case to discuss, support and inspire them for T2.2 and T2.3, gather ideas and views and get feedback. Also we foresee a meeting of the policy experts of all cases, the WP2 and the WP5 leads, to discuss and decide upon the methods for the national and regional policy analysis and success stories in M10. Later on we will decide if we need another meeting to share and discuss results in M23.

7.4. Coordination/synergies with relevant EU projects

WP2 is interested in the work of our sister project 'MAGIC': the use of narratives, their European network, their check of compatibility across directives regarding the nexus.

8. WP3 – Thematic models and integration

8.1. Updates for WP3

The main update regarding the work in WP3 is the decision to have one Case Study develop first and fast, as a Pilot Case Study, through all the stages in WP3 and WP4, up to feeding the Serious Game. Since there are many stages for the development of each Case Study, with perhaps unknown problems at each step, it is prudent to try the whole chain of work for one Pilot first, before replicating the work for all the other 11 Case Studies (CS).

Consequently the Case Study of Sardinia (a regional one) has been selected as the most appropriate for this exercise, as the SIM4NEXUS Pilot. UNISS/Simone Mereu who is responsible for this Case Study, has worked on a System Dynamics Model (SDM) in a previous project (WASSERMED), and some important factors of the Nexus for the Pilot are already known[1]. Moreover two other partners UNEXE (Lydia Vamvakeridou-Lyroudia) and UNESCO-IHE (Janez Susnik) were also involved. Admittedly, in the previous version of the SDM for Sardinia, energy was not covered. Also, detailed work had only been carried out only for only four out the 11 reservoirs. However, there is enough material to get the CS through the whole chain, even with some missing details. Also, this Pilot CS will be repeated properly within SIM4NEXUS, through WP5, in due course; the target here is not the detailed representation of the CS, but the trial of the procedures, mainly related to ICT.
So it was decided.

- There will be a task force of specific people who will be involved in this Pilot exercise.
- The objective is to cover fast all the steps of WP3/WP4, up to the serious game, without emphasis on detail, but with emphasis on the steps to follow, the interconnections between tasks and the structure of the whole process.
- The work will start with the application of one thematic model only. CAPRI (Maria Blanco-UPM) has been selected. The thematic model will run in a few only scenarios and feed its output to the SDM. (T3.3).
- There will be no specific downscaling for the climate/climate change scenario. We will use the scenario from the previous application. (T3.2).

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[1] Mereu S., Susnik, J., Trabucco, A., Daccache, A., Vamvakeridou-Lyroudia, L.S., Renoldi, S., Virdis, A., Savic, D.A., Assimacopoulos, D. (2015). Operational resilience of reservoirs to climate change, agricultural demand, and tourism: a case study from Sardinia, Journal Science of the Total Environment DOI:10.1016/j.scitotenv.2015.04.066

- The downscaling for the socio-economic scenario will be provided by UB (Roberto Roson and Martina Sartori), who were also involved in WASSERMED. Again, it will be mostly based on existing data. (T3.2)
- The qualitative (T3.4) and quantitative (T3.5) SDM will be developed by UNEXE (Lydia Vamvakeridou-Lyroudia), UNESCO-IHE (Janez Susnik) and UNISS (Simone Mereu), based largely on the existing previous one.
- We will include a simplified approach to uncertainty modelling, most probably with a simplified Monte Carlo approach, with the help of Janez Susnik (UNESCO-IHE) and Hector Pollitt (CE).
- Our main target is to sort out the structure of data exchange between WP3/WP4, i.e. how the data from WP3 will be fed to WP4. EURECAT (Gabriel Anzaldi and Xavier Domingo) will be the main persons responsible for this step, together with EPSILON (Marc Bonazountas and Anestis Tripitsidis) and UNEXE (Lydia Vamvakeridou-Lyroudia). (T3.1)
- The outputs from the scenarios in WP3, will be used as input for the Knowledge Elicitation Engine in WP4 (EURECAT), while some public geospatial data will also be added (EPSILON).
- Finally, the connection between the KEE (EURECAT) and the serious game (DHI-Chengzi Chew), will be tried, so as to make sure that we can reach the last step of data exchange without problems.

This early pilot is not part of the Grant Agreement. We do not wish to give a specific deadline for it, because the scope is to investigate any problems that may appear. Work will start at the beginning of September 2016 (after the summer break). We expect that in six months (perhaps less) we will have completed the Pilot Exercise, and we will be well informed of any problems and bottlenecks, especially regarding the structure of data exchange, well ahead of any major deliverables from either WP3 or WP4.

8.2. Meetings

WP3 will hold regular teleconferences on Wednesday afternoon, before or after the WP1 teleconferences. The teleconferences for WP3 will be in two parts. The first part will be about the Thematic Models, chaired by Maria Blanco (T3.3), while the second part will be chaired by Lydia Vamvakeridou-Lyroudia (UNEXE), and will cover the other tasks.

The frequency of the teleconferences is to be decided, according to the needs of the work. During the first weeks we expect them to be weekly, as we will need to work fast on the Pilot. Later it is expected to have fortnightly teleconferences. The teleconferences will start at the end of August 2016, after the summer break.

8.3. Synergies with relevant EU projects

It would be worthwhile to try to develop a common Case Study with the sister project MAGIC. The subject has already been discussed on June 22-23 2016, during the WSSTP Innovation Conference, between the two coordinators (SIM4NEXUS and MAGIC) and the SIM4NEXUS WP3 Leader. It is a practice that has been followed with previous clusters (e.g. CLIWASEC), with very good results, leading to publications in high impact journals. The main idea is that we will select on out of the 12 Case Studies in SIM4NEXUS, as well as a common target (i.e. what exactly will be the scope of this CS) with the

cooperation and agreement of MAGIC. For this common CS, each project will work with their own methodologies and approaches, comparing the results in the end. Based on previous experience, it would be advisable to wait until the second year before pursuing this matter, when both projects will be more advanced.

9. WP4 - Serious Game development and testing

This chapter will provide further information in regards of the execution of the Tasks and Deliverables, and of the attainment of Milestones, as an update of current information existing in the Description of Work for Work Package 4 in SIM4NEXUS.

9.1. Updates

This section focuses on clarifying, and extending when necessary, concrete aspects regarding the execution of WP4, taking as basis the Description of Work for WP4 in SIM4NEXUS.

The Description of Work of WP4 starts with the definition of the WP's objectives, with no updates required. Task 4.1 (Learning goals definition) should add at the end that "Inputs coming from WP5 and WP6's leaders and co-leaders will also be taken in consideration to define the learning goals". The same happens with Task 4.2 (Game Logic definition), T4.3 (Setting-up the project database and metadata ontology), and Task 4.4 (Development of the Knowledge Elicitation Engine), which list requirements coming from WP1, WP2, WP3 and WP5. These lists should add WP6 also on the three cases.

No particular updates have been identified for T4.5 (Development of the visualisation and interaction tool), Task 4.6 (Integration of all components), T4.7 (Testing of the system with hypothetical scenarios and actors), and Task 4.8 (Data Management).

With regard T4.8 and during the SIM4NEXUS kick off meeting it was agreed that we will

- investigate to include also Ethics within the Data Management plan
- have to report an updated version of the Data Management plan (even after the initial deadline-Month 6) at the end of each reporting period.

To summarise, Work Package 4 is very close related to inputs and feedback coming from WP1, WP2, WP3, WP5 and WP6. Hence, specific mention to frequent interactions among these WPs has been added. To assure on time interactions and decision, specific periodic meetings will be scheduled among involved parties. The meetings configuration can be checked in the following section.

9.2. Meetings

WP4 highly depends on inputs coming from WP1, WP2 and WP3. Also a close collaboration with WP5 is foreseen in regards of the WP4 outcomes feedback and validation in case studies (learning goals, game logic, and decision support). Finally, WP6 is close related in terms of exploitation impact.

For this reason, a series of meetings organised by WP4 leader and co-leader are going to be established. These meetings' frequency will adapt to project execution necessities, being more intense when needed.

Table 2 – Interaction within WP4 and with other work packages

Title	Participants	Description	Frequency
WP4 Follow up	• Partners involved in WP4 ongoing tasks • When needed, extra partners will be invited	• Update the current execution status of ongoing tasks • Update the current status of upcoming deliverables/milestones • Discuss needs from other partners • Discuss blocking issues • Describe expected actions and outcomes to be done/obtained in coming weeks	Every two weeks
WP4 Serious Game concept requirements	• Partners involved in WP4 tasks • WP1, WP2, WP3, WP5 and WP6 leads and co-leads • When needed, extra partners will be invited	• Knowledge Base requirements • Integration requirements • Decision support requirements • Learning goals and game logic requirements • Serious game requirements • Internal feedback and validation	Weekly at the beginning of WP4's activities Every two weeks once initial specifications are done
WP4 Serious Game validation	• Partners involved in WP4 tasks • WP5 and WP6 leads and co-leads • When needed, extra partners will be invited	• Prototypes, intermediate versions and releases validation and feedback collection	Every two weeks once first prototypes are available

9.3. Coordination/synergies with relevant EU projects

Title of the project	Components of the Nexus covered and at what scale	Relevance for SIM4NEXUS	Partner in charge
WIDEST (link)	Mainly Water, but indirectly climate and energy	WIDEST is an H2020 CSA, devoted to promote ICT technologies applied to the Water domain. In this context, WIDEST project, and the ICT4Water cluster promoted by WIDEST, can be used to disseminate actions and achievements done by SIM4NEXUS.	EURECAT

10. WP5 – Implementing Nexus-compliant practices

Work will focus for preparing the case study process and the following steps are defined by the WP leads to prepare D5.1, also raising awareness and start training:

• The case study views are assessed, including stock-taking of demands from Case Study Leads. Semi-structured interviews are organised with the Case Study Leads, and the outcomes are synthesized (August 2016). These bilateral Skype sessions will enable us to develop an advanced roadmap for

WP5, including interaction with the other work packages. Learning the expectations of the Case Studies will also have implications how other work packages (e.g. WP3 and WP4) will interact with the Case Studies. The posters presented at the kick-off meeting will be important input into the bilateral Skype sessions. See also in the WP5 folder of Projectplace (subfolder: 'Posters from kick-off meeting': https://service.projectplace.com/pp/pp.cgi/0/1064583176?op=wget#folder/1234561364)

- Case Study Road Map is drafted, including the SIM4NEXUS Case Study Process, also specifying the overall steps and their objectives and expected outputs (August 2016), and discussed in two Skype Sessions with the Case Study Leads and WP leads (early September).
- Guidance for the use of the tools (Thematic Models, complexity science modelling, Serious Game) will be developed and added as Annexes to the Case Study Road Map (September 2016)
- Two-days training workshop, on the us (October 2016), with due attention to the stakeholder processes to be put in place in individual case studies. This workshop will also focus on the use of Thematic Models, demonstration of the Serious Game - Aqua Republica, defining the learning goals, achievements in WP1 and WP2. Also it will be important to present what we do expect from the global and continental case studies. Finally, the workshop will identify steps to finalise Deliverable D5.1, due for M5, October 2016.

As part of the work for the coming half year, WP5 will also clarify the following steps:
- The focus of individual case studies (which NEXUS challenges to address) needs to be further discussed and clarified – including as part of the stakeholder process to be established in each case study. The poster session during the kick-off meeting, and follow-up discussions helped identifying potential priority issues for individual case studies. It also stressed possible links between case studies, be it because they address common NEXUS questions (e.g. Sweden and Latvia, or Sardinia and Greece) or because they could be "vertically integrated" (e.g. the global case study delivering a global socio-economic scenario that is used as input to the European case study that will deliver an EU socio-economic scenario that will be used as input to some national case studies…).
- The role of the Thematic Models, the Complexity Science Modeling and/or the Serious Game in the case studies will be clarified in the coming months, specifying in particular: (a) the goal of such application – informing, raising awareness, training, supporting decision, etc. in line with the possible uses identified under WP6; and (b) the steps that will be followed in case studies that are relevant to specific/other WPs (e.g. preparing the "basic information pack" for case study leaders – link to WP7; defining the assessment framework – link to WP1; analyzing policies in practice – link to WP2; applying models/the Serious Game – link to WP3 & WP4….).
- Preparatory activities before launching the stakeholder process in individual case studies are seen as key to its success. Suggestions for preparatory activities made by the group include: the preparation of a "communication pack" for case study leaders (including: a leaflet presenting SIM4NEXUS – translated into case study languages, a short presentation of each model, a short presentation note of what the serious game is expected to do, etc.); the organization of a training session for case study leaders on the different models/Serious game (using Aqua Republica as illustration) so case study leader understand the potential of these tools and can easily communicate about them; or, learning how to facilitate stakeholder processes/workshops.

While implementing Task T5.2 (Supporting decision making in 12 case studies), we will interact with WP3 (e.g. Thematic Models) to enable a scenario approach that is introduced at multiple scales (global, European, national and regional). This would enable users to learn about decision making at different scales and how they are interdependent. Using the SSP scenarios as a starting point and reference for the global and European case studies is very useful, and - most likely – these scenarios are also a good starting point for the regional and national case studies. WP5 will facilitate this interaction. The global and European case studies could be linked to the national case studies, largely in the context of the baseline scenario.

11. WP6 – Exploitation Impact and SIM4NEXUS Business Plan

Since M1 (June), to start working on T6.1 (market assessment), SI organised the work with DHI. SI and DHI took contact with the other work package leaders (WP1, WP3, WP4, WP5) in order to find the best ways to exploit SIM4NEXUS outputs and define the collaboration processes. Several outputs emerged from the talks and potential products from the project were better defined (Nexus and scientific knowledge, complexity science tools, maybe use of the KEE or the DSS and obviously the Serious Game itself). SI has developed a structured approach to valorise these outputs (training, impact and scenario assessments, communication, stakeholder engagement or campaigning) and have identified several end users.

The objective is to create project spinoff(s) to exploit the project outputs. Activities include a market study for all SIM4NEXUS outputs, the definition of the products and services that could be exploited from SIM4NEXUS, the creation and animation of the Ecosystem Group of SIM4NEXUS to facilitate the commercial deployment of SIM4NEXUS, the elaboration of the business cases for every proposed project spinoffs, and the creation of the validated spinoffs. A strategy to manage the legacy of outputs of general interest will be proposed at the end of the project, as well as an exploitation strategy for the outputs that could not be exploited by a project spinoff.

In the coming weeks (M2 to M3), SI, together with DHI and WP Leaders, will detail further the target profiles and start establishing a detailed list of targeted persons to contact for interviews. Preparatory desktop research will be carried out in M2 and M3 to collect general data on the identified markets and business model. The methodology for identifying and qualifying the usages and for quantifying the market will be defined. An initial input will be provided for WP4 on M4 as regards the game logic.

SI will prepare a questionnaire to spot, amongst other, problems/difficulties faced by stakeholders in order to maximize the added value of SIM4NEXUS. Interviews should start with case studies stakeholders and be extended later to external end-users. Interviews with case studies will have to be closely coordinated with WP5 to avoid confusing case studies stakeholders with too many interlocutors and soliciting them too often. Interviews with external stakeholders will rely on project partner's networks as much as possible. Contacts and interviews will be carried out from M4 to M7.

From M2, SI, EPSILON, DHI, ACT will start assessing competition and existing solutions by reviewing literature and exchanging with project partners and continue so until the submission of deliverable (M12).

Based on contacts made with stakeholders/end users, we intend to identify the most interested ones to set an "ecosystem group" known as SEG (SIM4NEXUS Ecosystem Group, maybe another name can be defined in collaboration with WP7). The aim of the SEG is to involve any interested identified users to follow up technical developments of the projects and to collect their feedbacks and advices. It could gather prospects, early adopters but it can be extended to potential developers and partners (academics, local consultancies). The idea would be to meet once or twice a year in order to test and review the latest products and services of SIM4NEXUS. This work will be done in close collaboration with WP7.

From M3 to M6, SI will provide inputs to WP4 to define learning goals and from M5 to M8, the game logic, based on the initial results from WP6 analyses and findings. As suggested during the meeting, it could be relevant to start a working group with one person from each WP concerned to start working on this topic. From M4 to M7, SI will carry out the interviews and review the literature. Intermediate results will be presented at the project meeting #2 in November 2016.

The results will be synthesised in M8 (January 2016) with complementary information researched as necessary. The report will be drafted in M9-10 and submitted for review in M11-12.

SI will try to organise a first SIM4NEXUS Ecosystem Group meeting at the PM#3 in Spring 2017, based on the contacts gathered during the market interviews. The SEG will be expanded, in close collaboration with WP7.

Task 6.3 will explore the potential spinoff options based on the intermediate market results. Consensus will be built first with bilateral talks with the concerned partners and then in group meetings. T6.3 will produce a short-list of spinoff option to investigate. T6.3 will help also frame the overall exploitation strategy for SIM4NEXUS by involving all partners.

Task 6.4 will prepare a detailed business plan for every short-listed option (expected max. 3-5). A Go/No Go decision will be taken on M36 and will be a major milestone in the project. T6.4 will then proceed, only if the go has been received. Task 6.5 will start at M45 and end at M48 and will be a wrap up task.

11.1. Management mode

The core team of WP6 involves the following partners. The core team carries most of the work in WP6, especially SI.

- SI as WP Leader and main contributor. SI brings its experience in startups to find and qualify business models for the potential creation of companies.

- DHI as co-leader. DHI brings its expertise in serious games and consulting. DHI will mainly focus on the market study for the serious games.
- ACT is leading Task 6.5 SIM4NEXUS Legacy and brings its expertise in stakeholder engagement for complex projects.
- EURECAT is to support in the technical definition of the serious games and knowledge elicitation engine
- EPSILON will support with its expertise in consulting for companies and institutional clients

The other partners are involved to provide support and information, as well as to validate the work achieved.
- WUR-LEI, UTH, UNEXE bring a support as regards the nexus science.
- CE will support with its expertise in consulting for institutions, in particular the Commission.
- All other partners are involved with a limited budget to brainstorm potential exploitation ideas and study the cases prepared by the contributors to WP6.

11.2. Meetings
The strategy for WP6 meetings is the following:
- Meetings will be organised in conjunction with project meetings (before or after), every 6 months to discuss the advances and status and prepare messages for the Project Assembly
- Monthly telcos with skype of 1h will be organised among the core team to discuss the advances and agree on the action plan for the next month
- Bilateral exchanges among partners will be done by skype or telephone.

WP6 is also to set up the SIM4NEXUS Ecosystem Group (SEG). The SEG meetings will be organised together with project meetings, in the form of workshops for 10-15 participants. Key advanesc from SIM4NEXUS will be presented, for instance by each WP Leader. The feedback from SEG participatns may take the form of brainstorming sessions or advice.

11.3. Coordination with other projects
SI participates in the H2020 project EPOS on industrial symbiosis and has started a PhD thesis on the business case of industrial symbiosis for which it can organise the links.
In any case, maximum coordination with other projects selected under the same topic as SIM4NEXUS and others will be sought to accelerate the market research and maximise the feedbacks.

12. WP7 – Dissemination and Communication

As regards the update for WP7, the following specific activities will be undertaken in the first months:

- The SIM4NEXUS **logo** has been prepared and refined during the KOM. A revised version will be made available to all project partners after the KOM.
- The project **website** www.sim4nexus.eu is being built up and is expected to be operational soon. The website will play an important role as repository for the projects outputs.
- **Templates** for SIM4NEXUS deliverables and outputs will be prepared based on the revised logo until 15 September 2016; for deliverables/reports, posters, presentations and briefing papers, as agreed at the KOM.
- The **Strategy** (D7.1) is being drafted by M5 as established in the Grant Agreement. In order to gather all relevant information about the communication tools that can target the different nexus sectors, all project partners will provide input via a survey which is being organised. The survey will also include requests on policy opportunities (also relevant for WP2), to define the timing of communications opportunities. The Strategy will also include an important operational aspect as to define the **workflows** for ensuring a good cooperation between the different WP leads.
- WP7 lead will also provide templates to **report** about communication impact, thus to gather the relevant information timely, and with appropriate quality.

Furthermore, it was agreed to develop short briefing papers on each of the models (incl. contact details) by November, to summarize the project approach. Lead will be at WP3 (Maria Blanco, UPM), jointly with WP7 (Linda Romanovska and Maria Berglund, both FT). Some of the case study leads (WP5) will later translate the briefs, and these translations will also be made available online.

Furthermore, briefs will also be developed for the project overall, and on serious gaming, with a focus on a demand-based approach driven by WP5.

No physical or online meeting is currently envisaged; however, the survey for the strategy requests information about planned meetings for research-community targeting research papers.
WP7 lead has contacted already with MAGIC-NEXUS, and the two leads for communications have agreed to have a next exchange in September-October, when both projects are drafting their communications strategies. We are already checking whether MAGIC-NEXUS will target also IPCC, in order to coordinate action as regards the papers for AR6.

13. WP8 – Project Management

The next meeting of the Project Coordination Team (PCT) will be held in Barcelona and Eurecat will be our host. It is proposed to to reschedule the meetings of the EAB. The first meeting will be held in M12 (instead of M6), and the other meetings of the EAB remain unchanged. The considers it better to have the first meeting of the EAB to be held in M12. By then, there are key deliverables available for

interaction with the EAB. Also, the recommendations from the EAB will be available for use during the review of SIM4NEXUS, which is scheduled for M15.