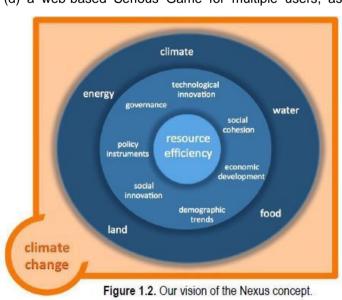
Ref no:	Project title		SIM4NEXUS: SUSTAINABLE INTEGRATED MANAGEMENT FOR THE NEXUS OF WATER-LAND-FOOD- ENERGY-CLIMATE FOR A RESOURCE-EFFICIENT EUROPE						
Name of legal entity	Country	Overall contract value (€)	Proportion carried out by legal entity (%)	No of staff provided	Name of client	Origin of funding	Dates (start/e nd)	Name of consortium members, if any	
Epsilon Maka Limited	Malta	7.895.65 7,50	4.99% (393.750,00	5	European Commission, ICT/PSP	European Commission ICT/PSP	06/2016 05/2020	www.sim4nexus.eu/index.php?wert=Partners	

Detailed description of project

Land, food, energy, water and climate are interconnected, comprising a coherent system (the 'Nexus'), dominated by complexity and feedback. The integrated management of the Nexus is critical to secure the efficient and sustainable use of resources. Barriers to a resource efficient Europe are policy inconsistencies and incoherence, knowledge gaps, especially regarding integration methodologies and tools for the Nexus, and knowledge and technology lock-ins. SIM4NEXUS will develop innovative methodologies to address these barriers, by building on well-known and scientifically established existing "thematic" models, simulating different components/"themes" of the Nexus and by developing:

(a) novel complexity science methodologies and approaches for integrating the outputs of the thematic models; (b) a Geoplatform for seamless integration of public domain data and metadata for decision and policy making; (c) a Knowledge Elicitation Engine for integrating strategies at different spatial and temporal scales with top down and bottom up learning process, discovering new and emergent knowledge, in the form of unknown relations between the Nexus components and policies/strategies; (d) a web-based Serious Game for multiple users, as an enhanced interactive visualisation tool,



providing an immersive experience to decision- and policy-makers. The Serious Game will assist the users (as players) in better understanding and visualising policies at various geo-/spatial scales and from a holistic point of view, towards a better scientific understanding of the Nexus. The Serious Game will validated (applied, tested, verified, and used) via ten Case Studies ranging from regional to national level. Two further Strategic Serious Games at European and Global levels will also be developed for demonstration, education and further exploitation purposes, accompanied by a robust business plan and IPR framework, for taking advantage of the post-project situation and business potential.

Type and scope of services provided

Epsilon is involved in the following SIM4NEXUS Work Packages:

WP3: Thematic Models and Integration

WP4: Serious Game development and testing

WP6: Exploitation Impact and SIM4NEXUS Business Plan

WP7: Dissemination and communication

WP8: Project Management

Epsilon tasks' in the different WP are linked with:

- Data management and organization regarding both input and output of the thematic models in order that a semantic repository can be built for the following assessment of the complexity science model (WP3).
- Contribution in the assessing of the data input needs for the game for each case study and the activity performed, as well as definition of the hardware and software requirements of the Serious Game tool (WP4).
- ✓ Database definition and the metadata ontology (semantic repository) in the context of a better NEXUS understanding; Database and semantic repository for the development of the Serious Game and the support of the Knowledge Elicitation Engine (WP4).
- ✓ Introduction of SIM4NEXUS to the Malta Environment Agency and the University of Malta, Department of Geology & Environment; Organization of training sessions in Malta; Cooperation with the Water Authority, Ministry of Agriculture; Exploitation with local engineering and consulting groups and establish a network; Publication of 10 newspaper articles on SIM4NEXUS (WP6 & WP7).
- ✓ Active involvement in the project management of the project regarding both the Coordination and the Quality Assurance procedure (WP8).