

LIFE GAIA Sense Newsletter #1

The smart farming journey begins

How can smart farming contribute to the conservation of natural resources and inputs in agriculture?
 Is smart farming an approach that can lead to the reduction of the environmental impact of agriculture?
 Can Circular Economy models be supported by a smart farming-based production management approach?
 These are some of the questions that the LIFE GAIA Sense project aims to address during the three years of its life time. The answers will come from the 18 demonstrators that the project will launch across Greece, Spain and Portugal covering 9 crops (olives, peaches, cotton, pistachio, potatoes, table tomatoes, industrial tomatoes, walnuts, kiwi) in various terrain and microclimatic conditions.
 The establishment of a large-scale Smart Farming (SF) infrastructure for data collection and analysis from the 18 demonstrators of the GAIA Sense SF solution along with the establishment of a network of scientists and professionals that will be engaged in adapting the SF services and models to the specific needs of each demonstrator and each crop.
 The project's results will be applied to the field and in order to measure the rate of decline of inputs on selected crops. A correlation between the GAIA Sense results and the targets set as policy by EU over the Circular Economy will also take place, in order to highlight the contribution of smart farming in complying with these policies.
Stay tuned for updates!

LIFE GAIA Sense gets social

It is really important for a project to get close to its stakeholders; in the case of the LIFE GAIA Sense project we refer to a wide audience consisting of individual farmers, agricultural cooperatives, agronomists, researchers and other actors of the agrifood value chain. In this context, 8 events have been organized in Greece and particularly **Alexandroupoli, Drama, Thessaloniki, Velventos, Lamia, Athens, Kiato and Heraklion, one event in Ourense (Spain) and one in Lisbon (Portugal)**.
 During these events, a wealth of information about the actors, the profile of the organizations as well as their needs and challenges has been obtained. Lean/co-creation approaches have been chosen as the most appropriate ones for raising awareness, retrieving information and establishing a common communication ground between the actors and the project. The participants of these events had the opportunity to get to know about the project, its objectives and ongoing work.

2nd Project Meeting in Athens

Following up on the project's Kick-Off meeting, the **2nd meeting of the LIFE GAIA Sense project** took place in Athens between **14-15 of January 2019**.
 For once more, all project partners were represented, leading to a participation of **16 people**.
 The aim of the meeting was to allow project partners to discuss about the ongoing work and next steps of the LIFE GAIA Sense project, focusing on the work that needed to be completed for M7-M12 (including the upcoming deliverables, approaching deadlines and clarification of responsibilities).
 What was special about the specific project meeting was the participation of the **Project's Monitor Mr. Theoharis Tziouvaras and Mr. Nejib Bensaïah from NEEMO**, the external monitoring team of LIFE Projects, who provided valuable guidance on the various aspects of the project and its management, such as the financial parts. Moreover, the participants had the opportunity to present the progress of the project and the plan for the upcoming six months to both Mr. Tziouvaras and Mr. Nejib Bensaïah from the **South East Europe regional team of NEEMO LIFE ENV**.



Participation in major Agrifood events in Greece

During the last months, the LIFE GAIA Sense project participated in two of the major international events of the agrifood sector in Greece:

Zootechnia 2019

LIFE GAIA Sense's project partners NEUROPUBLIC and GAIA EPICHEIREIN participated in Zootechnia, the only specialised event in Greece and the Balkans regarding livestock and poultry - which also attracts a high number of farmers, as farms in Greece tend to be mixed type (both crop and animal).
 This year, Zootechnia took place between **31st and 3rd** at the Thessaloniki International Exhibition Centre and it was the 11th event of this successful series. During the exhibition, the **LIFE GAIA Sense project** was promoted at the joint **NEUROPUBLIC and GAIA EPICHEIREIN** stand, where the visitors had the opportunity to learn about the aims and objectives of the project as well as its ongoing activities. Discussions with the participants focused on how smart farming can support their farms in a sustainable way, minimizing their impact on the environment.
 It should be mentioned that this year Zootechnia attracted **more than 70,000 visitors and almost 1,000 exhibitors**.



AgroThessaly 2019

AgroThessaly — the Pan-Hellenic Fair for Agriculture and Livestock - is one of the largest international events of the agricultural sector in Greece; this year, the 12th AgroThessaly attracted **more than 44,000 visitors and 700 exhibitors**.
NEUROPUBLIC participated in this year's AgroThessaly Fair, with a spacious booth. In the context of its participation, NEUROPUBLIC promoted the project among the AgroThessaly visitors, highlighting the contribution of smart farming not only in production but also on the environment.



Installation of the smart farming infrastructure in Portugal and Spain

Part I: Portugal

The LIFE GAIA Sense project builds on the **gaia sense smart farming system** which is designed and implemented by NEUROPUBLIC, the project's coordinator. The project aims to demonstrate the environmental benefits of the gaia sense smart farming services for various crops in three different EU countries (Greece, Portugal and Spain).
 One necessary component for enabling these services in the project's pilot sites is the installation of the gaia sense telemetric stations that are used for the recording of the atmospheric (e.g. relative humidity, temperature, precipitation, solar radiation, leaf wetness etc.) and soil parameters (such as soil moisture and temperature).
 This data is required by the smart farming services to operate and provide accurate information to agronomists and farmers.
 In this context, specialized team of agronomists of NEUROPUBLIC travelled to Portugal, where they completed the installation of 2 gaia sense telemetric stations in olive groves of CONFAGRI, one of the project partners, located at **Beja and Serpa**.



Part II: Spain

A few days later, the NEUROPUBLIC team met with project partner Vña Costera in Galicia, Spain and installed 2 gaia sense telemetric stations in selected vineyards at **Ourense**.
 In all cases, the team ensured that the stations were properly transmitting precise data to the gaia sense infrastructure before the installation was complete.



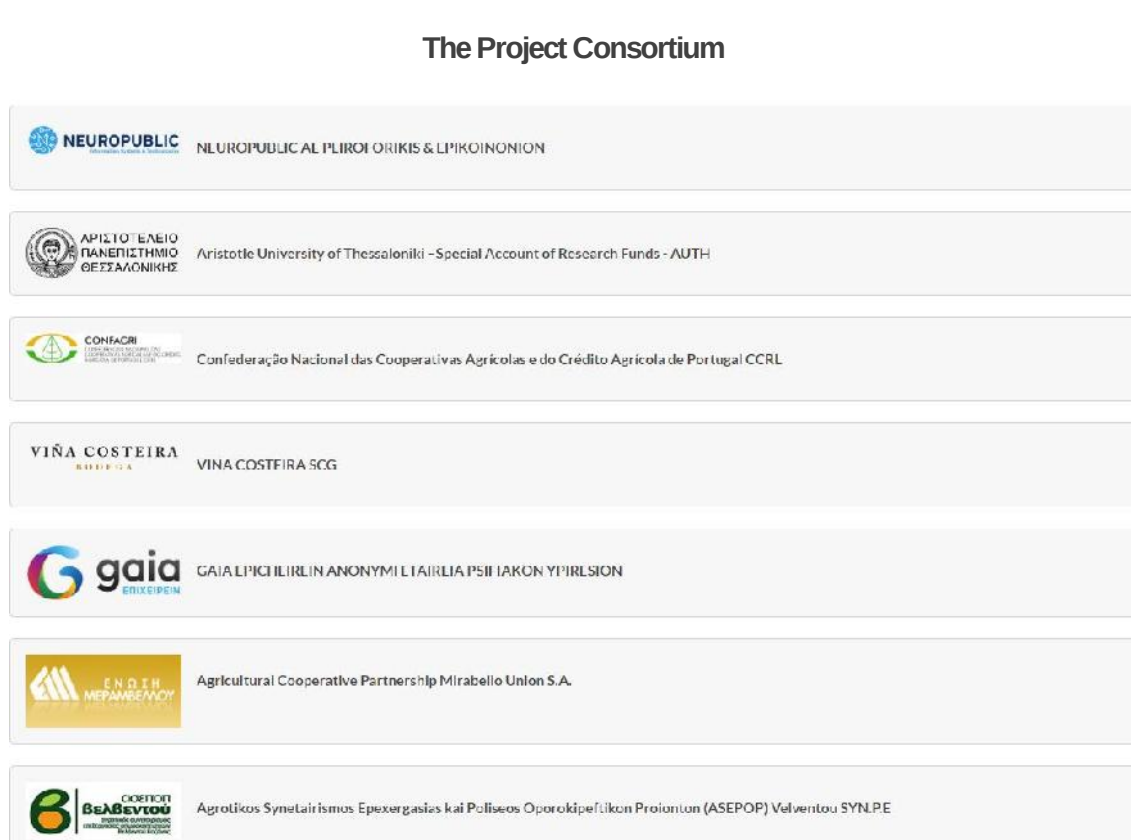
Ongoing network expansion

A number of demonstrators will take place in various areas of Greece. In this context, the NEUROPUBLIC team is working towards the installation of telemetric stations in selected fields, in collaboration with Greek agricultural cooperatives.
 After the installation of the smart farming infrastructure is complete, the atmospheric and soil data will be combined with data collected from other sources and will feed scientific models on fertilization, irrigation and crop protection.
 By the end of the project, the extension of the Smart Farming services (Fertilization advice, Irrigation advice, Automated irrigation and Hazard warnings) will cover 9 different crops (olives, peaches, cotton, pistachio, potatoes, table and industrial tomatoes, almonds, kiwi) with high regional value and a variety of terrain and microclimatic conditions, in these 3 EU countries.

About the project

The main objective of the LIFE GAIA Sense project is to **demonstrate GAIA Sense, an innovative Smart Farming solution** that aims at reducing the consumption of natural resources, as a way to protect the environment and support **Circular Economy (CE)** models. This project will demonstrate a method on how farmers will be able to decide either to use or avoid inputs (irrigation, fertilizers, pesticides etc.) in a most efficient way, without risking their annual production.
 The focus is on the **resource consumption reduction side of CE**, and the results will be both qualitatively and quantitatively, considering the resources' efficiency in agricultural sector.

The Project Consortium



Brief Project Info

Project acronym: LIFE GAIA Sense
 Project full title: Innovative Smart Farming services supporting Circular Economy in Agriculture
 Start date: 01/07/2018
 End date: 30/06/2022
 Project Coordinator: NEUROPUBLIC S.A. PIROFORIKIS & EPKOINONION

