## REDEFINING AGRICULTURAL INSURANCE SERVICES

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#### LIGHTHOUSE CUSTOMERS

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## INTERVIEW WITH MR. GEORGE KARAVIAS

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# BEACON

**NEWSLETTER #1** 

#### Boosting Agricultural Insurance based on Earth Observation data



## A new light in agroinsurance sector



Welcome to the first BEACON project newsletter! Have a tour and get to know more about the project, meet our project coordinator, and explore the opportunity to become part of the project Lighthouse Customers group!

Visit our recently launched BEACON project website! Follow

us on social media and stay updated about news and project development.



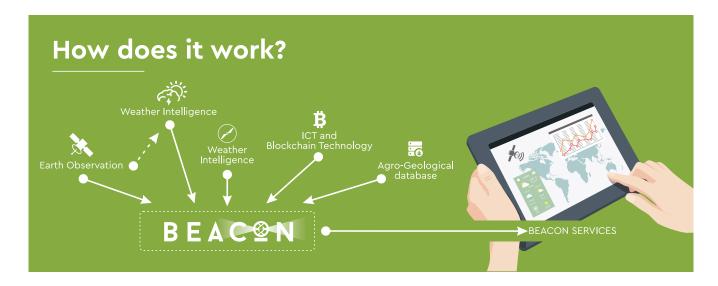


## Redefining Agricultural Insurance services

The BEACON project aspires to deliver a blockchain-fueled toolbox that couples cutting edge Earth Observation (EO) technology with weather intelligence to deliver cost-efficient and actionable insights for the agri-insurance industry. BEACON will enable insurance companies to exploit the untapped market potential of Agricultural Insurance (AgI), while contributing to the redefinition of existing AgI products and services.

BEACON will provide a ready-to-market commercial toolbox of services, co-designed and co-created with AgI providers, fit to address their sectoral needs. In particular, BEACON provides insurance companies with a robust and cost-efficient set of services allowing them to alleviate the effect of weather uncertainty when estimating risk of AgI products; reduce the number of on-site visits for claim verification; reduce operational and administrative costs for monitoring of insured indexes and contract handling; and design more accurate and personalized contracts.

Drawing up EO, meteorological and agro-geological data, BEACON provides services and products coupled with ICT and blockchain technology guaranteeing a high usability and functionality of the delivered services package, as well as paving the way for their market acceptance and uptake.



Specifically, BEACON scales-up EO data and Weather Intelligence Services components to deliver the required functions for Weather Risk Probability (Prediction and Assessment) and Smart Contracts as well as the specific services: the Crop Monitoring, which uses crop growth

models, along with EO and weather data and provides crop profiling and monitoring data together with yield estimations.

the Damage Assessment Calculator, which supports AgI companies in better accurately assess and calculate damages for proceeding with in-





demnity payouts of claims. It allows the estimation of crop losses (in quantitative and potentially monetary values) based on in season yield estimated using EO and climate data along with crop growth modeling;

the Anti-fraud Inspector, which allows AgIs to automatically check the legitimacy of a claim submitted (if actually an event and damage occurred in an insured parcel) and to remotely (using EO imagery) follow and verify adherence to certain contractual articles established during underwriting. An alert system will be activated notifying AgI providers its time that a potential

fraud is attempted.

the Damage Prevention/Prognosis - Early Warning, which provides forecasted weather events alerts to AgI providers enabling them to push notifications and predefined mitigation measures to their customers.

The BEACON project started on January 2019 and will have a duration of 37 months. It is funded by the H2020 programme DT Space 01 – EO; Copernicus market uptake.

Take a few minutes and watch our BEACON project explanatory video.

## Lighthouse Customers

Fitting BEACON with the needs of the AgI market

The BEACON
Lighthouse
Customers
group will
be the living
paradigm for
innovation
within Agl

It is of outmost importance our services to be fitting the needs of the Insurance and Agricultural Insurance sector. In our attempt to ensure that the project results match exactly the sectoral needs we blished a living and

have established a living and growing organism, entitled "BEACON Lighthouse customers" group. BEACON Lighthouse customers group is dynamically interacting with the BEACON development team at every step of services design, aiming to achieve optimum fit

REACON Lighthouse Customers - Building for the industry with the industry



Lighthouse Customer #1: Agroseguro, Spain

Agroseguro is responsible for the management of agricultural insurance in the name and on behalf of insurance companies that are part of the co-insurance pool.

Agroseguro main activities include managing and processing insurance policies, insurance and collection of receipts to and from policy-holders, as well as receiving claim statements from insured parties and carrying out adjustment procedures, assessment and payment of claims on behalf of the Co-insurers.

Agroseguro carries out additional work complementary to agricultural insurance, such as the assessment and verification of crops, crop damage due to causes other than those covered by the insurance, etc., commissioned by the Public Administration.

Agroseguro interacts dynamically with the BEACON scientific and technical team, providing insights and feedback on how to better fit BEACON services to an evolving and climate-impacted sector.

Learn more about Agroseguro: https://agroseguro.es/

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of BEACON tools to the real needs of the agricultural insurance industry. The "BEACON Lighthouse customers" group offers an unprecedented opportunity to the participating sector actors, to co-develop

and pilot the BEACON tool and services in their operational environment, allowing them to gain a first-hand experience of BEACON added value.

BEACON has already a number of Lighthouse customers





BEACON Lighthouse Customers - Building for the industry with the industry



Lighthouse Customer #2: TRIGLAV OSIGURANJE, Serbia

Triglav Osiguranje is a part of the Adria region – Triglav Group, one of the leading insurance groups in South-East Europe. Triglav Osiguranje is very active insurance company on the Serbian market (among the 5 biggest insurance companies) and active in provision of agri-insurance services for last couple of years. The company provides 2 types of agri-insurance: Crops & Fruit and Livestock Insurance.

Triglav Osiguranje offers a variety of crop insurance products to its clients: against the losses caused by the hail, fire and thunderstorm, storm wind, flood, spring and winter frost, insurance for trees & grapevine, etc. – constantly searching for improvements of agri-insurance services within the company.

Triglav Osiguranje recognizes the game-changing potential in BEACON to redefine the agri-insurance industry and expand its future portfolio of services and products. Moreover, novel technologies incorporated into BEACON offer the company the opportunity to expand the current client base with new target groups of customers directly responding to their needs. Thus, in co-production with BEACON technical & business team, Triglav Osiguranje is directly involved into BEACON Pilot activities, actively participating in the development of BEACON toolbox and creation of BEACON business model.

Learn more about Triglav Osiguranje: www.triglav.rs



members and has issued an open invitation – Expression of Interest – for Agl actors that wish to join and populate the group.







# Interview with the project coordinator Mr. George Karavias



Mr. George Karavias is the CEO of Karavias Underwriting Agency and the BEACON project Coordinator. Karavias Underwriting Agency was founded in May 2014, in Greece by George Karavias and an experienced team of account executives as the continuation of Karavias & Associates who has been handling Binder Agreements since 1992 for a variety of risks.

Mr. Karavias, what are the challenges AgI providers face in performing their business activity and how would they overcome them?

The primary sector and agricultural production have been, and still are, an important and vital part of the economy. At the same time, however, the dangers that threaten it remain high and make it vulnerable to natural and climatic phenomena, as well as to their side effects. Given the fact that climate change and its effects are accompanied by a constant increase in the incidences of extreme weather events,

crops, infrastructure and assets are at increased risk.

Agricultural insurance comes to support and protect the so important agricultural sector and the rural households against the escalating risks of climate change. Agricultural try is to strengthen its position against the challenges of climate change, but also to meet the needs and demands of rural business people by providing products and services tailored to their needs.

To this end, insurance provid-

The main purpose of the industry is to strengthen its position against the challenges of climate change, but also to meet the needs and demands of rural business people by providing products and services tailored to their needs.

insurance (and, by extension, industry) comes to contribute to the development of the rural economy, as well as to reducing the annual variation in farmers' income.

Given the expected and stronger impacts of climate change and its effects on agricultural production and farms, insurance organizations are looking for new tools, methods and know-how that will make both sectors less vulnerable (insurance and farming).

The main purpose of the indus-

ers are required to innovate and integrate into their business logic a wealth of new technologies and data that have been used in the past 3 years in precision farming applications such as remote sensing technologies and satellite data. In recent years, the use of remote sensing technologies in agriculture and other sectors of the economy (energy, civil protection, maritime transport, etc.) is increasingly common.





Similarly, satellite data are also entering the agricultural insurance industry, allowing operators to minimize operating costs while at the same time gaining access to more crucial information. Remote appraisal, timely information management, risk assessment, and others, are some of the functions that are served and speeded up by the use of satellite data and remote sensing technologies, bringing positive results.

#### What is BEACON bringing to the Agi service providers and how they will benefit?

BEACON is an H2020 funded project where satellite and agrometeorological data, as well as blockchain technology, combined to remove barriers in the development of insurance products, and improve the general functions of the agricultural insurance industry. "BEACON" will enable the agricultural insurance industry to eliminate uncertainty about future weather conditions, to better assess risk and damage. while reducing its operational and administrative costs for monitoring insurance indexes and insurance contracts management.

In particular the agricultural insurance industry from ex-

Fast remuneration process. The processing of satellite images allows for a timely assessment of the damage that

"BEACON" will enable the agricultural insurance industry to eliminate uncertainty about future weather conditions, to better assess risk and damage, while reducing its operational and administrative costs for monitoring insurance indexes and insurance contracts management.

ploiting new technologies and data through BEACON, will benefit by:

The creation of specialized insurance policies, based on the history and vulnerability of each specific field-crop.

Automate time-consuming processes such as pre-insurance or claims management. Timely weather forecasting and alerting for the insured farmers. The high-resolution weather forecast allows predicting future risks from extreme weather events and provides personalized warnings to each farmer / insured. Reduction of Insurance Costs through more detailed Underwriting.

crops suffer from extreme weather events. Creating a perfectly transparent framework between insurers and insureds in assessing the damage by offering a commonly accepted assessment.

With BEACON, we aim to innovate through the exploitation of the new technologies, to achieve the provision of modern services and agricultural insurance solutions. For the BEACON consortium this is a strategic choice which will lay the foundations for the establishment of an advanced system of Agricultural Insurance.



## Participation of BEACON in the 86th Agricultural Fair, in Novi Sad (Serbia), 11-17 May 2019

BEACON partners InoSens, participated in the 86th Agricultural Fair that took place in Novi Sad, Serbia 11-17 May 2019. This annual event gathers the biggest industry players from South East Europe with interest in the agricultural sector, presenting their products and services covering many areas across the whole value chain - agricultural production; food and beverage industry; agricultural machinery; food-processing industry equipment; chemical and protective substances; organic food; agri-insurance; as well as products and services in agribusiness.

This year, among the other events, an expert meeting on agri-insurance was organised gathering together the main Agi actors from Serbia and the whole Eastern EU region. Under the name of "AGRICULTURAL INSURANCE - COST OR INVESTMENT", the expert meeting brought together high-level officials from relevant ministries and local authorities, as well as agri-insurance companies rep-

resentatives from both Serbia and other countries, to discuss the main challenges and potential responses in the agri-insurance industry.

Based on the BEACON Serbian Market Analysis performed by InoSens, the BEACON Lighthouse Customer - Triglav Osiguranje, highlighted the main outcomes of the analysis also providing recommendations to contribute to the actual discussion on Agl prospects in the region. Namely, a very low percentage of the Serbian population buys agri-insurance, presenting an unlocked potential for this sector to

grow into a more profitable industry. Low uptake of agri-insurance is mostly related to the perception of clients/farmers - their lack of trust in agri-insurance and ignorance of the importance of it. On the other side, state agri-insurance subsidies are enforcing this sector through the 40-70% of premium coverage, highlighting the necessity of risk mitigation and increasing the need for crop protection.

Agri-insurance is no longer economically inaccessible, and it costs approximately 5% of the production. Moreover, as the Serbian economy is very







dependable on agriculture (4 - 7% of GDP), the export of agricultural goods is of a high importance for the country in general. As a part of the solution, such attractive growth opportunities for the agri-insurance sector could be additionally reinforced through better agri-insurance services and implementation of novel technologies.

Bearing in mind all of the above, BEACON's business modelling served as the best practise applied and accepted by the targeted (agri-insurance) industry.

In addition, InoSens through B2B meetings with relevant AgI players from the region,



presented BEACON to the participants, aiming to reinforce the growth of BEACON agri-Insurance business network for future collaborations.

Information (Serbian) and pho-

tos about the fair can be found at: https://sajam.net/en/calendar/spring-2019/86th-international-agricultural-fair

## Opportunities of Blockchain for Agriculture – 55th CTA Brussels Development Briefing, Brussels, Belgium 15 May 2019

On the 15th of May, the Technical Centre for Agricultural and Rural Co-operation – CTA in Brussels, in cooperation with European Commission/EuropeAid, the ACP Secretariat, Concord and BMZ, held the 55th Brussels Development Briefing, which focused on "Opportunities of blockchain for agriculture". The briefing aimed to provide an overview of the opportunities and challenges in adopting the blockchain technology in agriculture and the agri-food industry across several sectors and will look at best

practices and successful applications of the blockchain technology of interest to the ACP countries. The agenda largely covered current applications of the blockchain technology in the agri-food sector, including the use within agricultural Insurance. Relevant presentations and videos are available at: https://brussels-briefings.net/2019/04/26/next-brussels-briefing-n-55-opportunities-of-blockchain-for-agriculture/





## Upcoming events

#### Summer course on Big Data in the agri-food sector

Interested in the use of big data in the agri-food sector? A dedicated summer course on «Big Data in the agri-food sector. Fundamentals and applications» is taking place 22–24 of July 2019 in Madrid, Spain. Do not miss the opportunity to attend the session on Data Analytics in agricultural Risk Management, in which our BEACON representative from the Polytechnical University of Madrid will present insights of the BEACON project.

Find the full program and information to register for the course at: <a href="https://cursodever-ano.agrowingdata.com/">https://cursodever-ano.agrowingdata.com/</a>

#### 2nd BEACON Project progress meeting 10-11 July 2019, Belgrade, Serbia

The 2nd BEACON Project progress meeting is taking place 10–11 June 2019 in Belgrade (Serbia). All project partners will meet to discuss about all the activities implemented within the first semester of the project implementation, review the project developments and plan the activities for the next semester. Stay tuned for more information!

#### Other events

#### Earth Observation φ-week

9–13 September 2019, Rome, Italy

#### Insurance 3.0

3 October 2019, London, United Kingdom

# 35th International Association of Agricultural Production Insurers Congress

6-9 October 2019, Bordeaux, France

InsureTech Rising International o8 October 2019, Paris, France

International Conference on Risk Management and Crop Insurance

9–10 December 2019, London, United Kingdom

## http://beacon-h2020.com

Project Partners



















