



Newsletter/ October 2019—Issue 1

## SECONDO

# a Security ECONomics service platform for smart security investments and cyber insurance pricing in the beyond 2020

## networking era

### PROJECT COORDINATION

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### PROJECT DETAILS

Project number: 823997

Project Website: [secondo-h2020.eu](http://secondo-h2020.eu)

Project start: 1st January 2019

Duration: 48 Months

Total cost: EUR 1 600 800

EC Contribution: EUR 1 600 800

Currently, the SECONDO consortium is working on these work packages since their deliverables will be submitted on December 2019 and on June 2020. For the work package “Requirements, Business Cases and Architecture” the researchers will collect, select and assemble detailed information from user groups (mainly existing customers) to define users, usage, and business requirements of the SECONDO platform. The business cases will cover specific aspects of the project, such as risk modelling, cyber security investment decisions and cyber insurance in organisations of different sizes or types. Emphasis will be given on the specification of requirements that are derived from existing limitations of current risk analysis methodologies that deteriorate the decisions on optimal investments in cyber security and cyber insurance. Finally, they will provide the reference architecture of SECONDO platform.

For the work package “Quantitative Risk Analysis and Data Analytics”, the researchers focus on the valuation of digital assets that might be categorized as both tangible and intangible. Its outcome will feed the Econometrics Module. The objective for the tangible assets is to provide precise point estimates on valuations that can be used to directly value insurance claims in a standard actuary framework. For intangible assets, we intend to use cross sectional analysis of large numbers of organisations to construct upper and lower bounds on the value of the intangible.



## NEWS AND EVENTS

- ♦ SECONDO Secondment at UBITECH in Cyprus. <https://bit.ly/32G5DZu>
- ♦ SECONDO Secondment at LSTECH in Spain. <https://bit.ly/32QfcF8>
- ♦ NEW SECONSO Secondment at LSTECH in Spain <https://bit.ly/2MVCSSi>
- ♦ SECONDO Secondment at CROMAR in Greece. <https://bit.ly/2oe1qx7>



European  
Commission

Horizon 2020  
European Union funding  
for Research & Innovation

This project has received funding from the  
European Union's H2020-MSCA-RISE-2018  
programme under grant agreement No 823997.



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- ♦ SECONDO Secondment at CROMAR in Greece <https://bit.ly/2WlcWmQ>
- ♦ SECONDO Secondment at Cyprus University of Technology <https://bit.ly/2pbL34K>
- ♦ NEW SECONCO Secondment at LSTECH in Spain <https://bit.ly/2pol2ht>
- ♦ Celebrating Researchers' Night in Athens <https://bit.ly/31VdqRK>
- ♦ SECONDO and European Cyber Security Challenge 2019 <https://bit.ly/36c3RkI>



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## LIMITATIONS THAT WILL BE ADDRESSED

**Asset interdependencies:** the interdependencies of security vulnerabilities and the multidisciplinary nature of cyber threats is a problem not only with technological dimensions. It has to be carefully studied, analysed and understood from societal, organisation, regulatory and economic points of view.

**Quantifying cyber risks:** the lack of verified and standardised risk management methodologies that employ commonly agreed metrics and risk aggregators aiming to provide quantitative results that apply to both tangible (e.g. property) and intangible (e.g. reputation) assets and methods to price them.

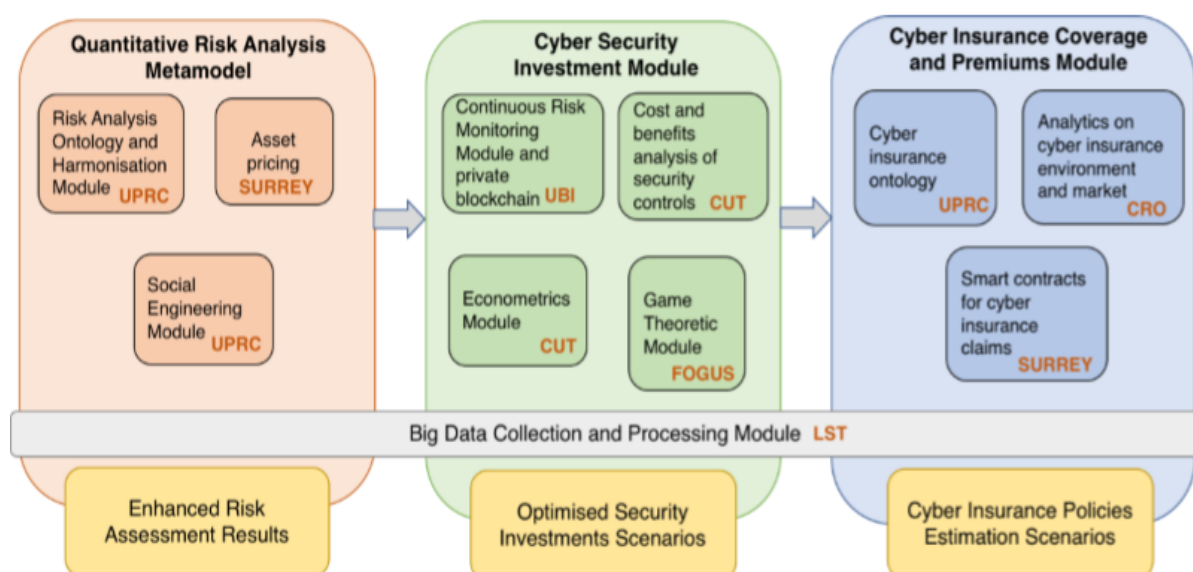
**Growing attack surface:** technological inventions and modern paradigms that bring a new range of threats to both tangible and intangible assets. Most of these assets are not covered by established insurance policies, leaving organisations exposed to serious impacts of cyber risks;

**Security economics:** the absence of effective applied econometric models that: a) guide and estimate the optimal investment in cyber security solutions and controls to mitigate the estimated risks; and b) compute optimal thresholds of residual risks that must be outsourced to a cyber insurer.

**Knowing the actual losses:** the currently limited availability of established methods that can quantify the economic value of an insured organisation's information loss and the general unwillingness on the part of companies to share such information.

**More inclusive cyber insurance:** the role of an insurer as someone that merely protects is not the case anymore, given that clients demand preventative solutions to stop cyber incidents before damage is inflicted and they also ask for support during a crisis to avoid the paralysation of their businesses.

The architecture of the SECONDO is shown in the below figure.



- ◆ Sakshyam Panda, Daniel W Woods, Aron Laszka, Andrew Fielder, Emmanouil Panaousis, Post-incident audits on cyber insurance discounts, *Computers & Security*, Volume 87, 2019.
- ◆ Laszka A., Panaousis E., Grossklags J. (2018) Cyber-Insurance as a Signaling Game: Self-reporting and External Security Audits. In: Bushnell L., Poovendran R., Başar T. (eds) *Decision and Game Theory for Security. GameSec 2018. Lecture Notes in Computer Science*, vol 11199. Springer, Cham.



- ◆ **Public Talks.**
- ◆ **Brochure, January, 2020.**
- ◆ **Video-clip, September, 2020.**

- ♦ **SECONDO Newsletter Issue 1.**
- ♦ **SECONDO Banner.**



## UPCOMING DELIVERABLES

D1.2 First Year Management and Technical Activity Report

D2.1 Technical Requirements, Business Cases and Reference Architecture

D7.1 Dissemination and Standardisation Plan

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