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# Security ECONomics service platform for smart security investments and cyber insurance pricing in the beyonD 2020 netwOrking era

SECONDO

## WP1 – Project Management and Coordination
## Deliverable D1.2 "Progress Report 1"

| | |
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| UBITECH ubiquitous solutions | UBITECH LIMITED | Cyprus |
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| CROMAR INSURANCE BROKERS LTD | Cromar Insurance Brokers LTD | Greece |
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## Executive Summary

The purpose of this report, as part of the WP1, is to summarize all the administrative and technical activities performed during the first year of the SECONDO project.

The main administrative activities include the coordination and management bodies of the project such as organizing the different meetings, receiving and distributing the pre-financing etc. Moreover, this document presents the SECONDO architecture overview and corresponding use cases and requirements specification.

This document is organized as follows. Section 1 provides an overview of the project. Section 2 describes the main achievements in terms of administrative management. Section 3 provides useful information on the work conducted during the first year of the project in each Work Package (WP). Section 4 includes information on the secondments implemented in the first year, while Section 5 describes the deviation occurred during the first year of the project. Finally, Section 6 concludes the document.

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# Abbreviations

Table 1 Abbreviations

| Abbreviation | Meaning |
|---|---|
| WP | Work Package |
| RO | Research Objective |
| TO | Technical Objective |
| BO | Business Objective |
| CA | Consortium Agreement |
| DoA | Description of the Action |
| ToK | Transfer of Knowledge |
| ERs | Experienced Researchers |
| ESRs | Early Stage Researchers |
| EU | European Union |
| EC | European Commission |
| QRAM | Quantitative Risk Analysis Metamodel |
| RAOHM | Risk Analysis Ontology and Harmonisation Module |
| SEAM | Social Engineering Assessment Module |
| BDCPM | Big Data Collection and Processing Module |
| CSIM | Cyber Security Investment Module |
| GTM | Game Theoretic Module |
| ECM | Econometrics Module |
| CRMM | Continuous Risk Monitoring Module |
| CICPM | Cyber Insurance Coverage and Premiums Module |

# 1 Introduction

SECONDO addresses the question “How can decisions about cyber security investments and cyber insurance pricing be optimised?” SECONDO will support professionals who seek cyber security investments, developed to support human decision making, and a complete well-founded security strategy. This is a timely research problem, as the rapid growth of cyber-attacks is expected to continue its upwards trajectory.

SECONDO aims to have impact on the operation of European Union (EU) businesses who often: (i) have a limited cyber security budget; and (ii) ignore the importance of cyber insurance. Cyber insurance can play a critical role in the mitigation of cyber risk. This can be done by imposing a cost on firms' cyber risk through a premium that they have to pay and the potential for paying a smaller premium should they reduce their current cyber security risk.

SECONDO has a cross-disciplinary nature, combining mathematical and engineering insights to empower innovative software. To achieve this, the four industrial project partners i) lead the part of the project where industrial needs will be inserted as input to the requirements collection phase, and, ii) provide their innovative software for risk assessment.

## 1.1 General Objectives

The General objectives of the SECONDO project are the following:

- To enhance and promote the industry-academia cooperation and foster long-term cooperation among partners, towards devising a decision support platform for cyber security investments and cyber insurance.
- To organise secondments of Experienced Researchers (ERs) and Early Stage Researchers (ESRs) having as their main objective to foster exchange of knowledge and strengthen the collaboration among academia and industry, as well as to put in place mechanisms to take advantage of the acquired know-how.
- To conduct top-notch research complemented by practical experimentations and measurements, as well as to pursue research excellence at national, European and international levels.
- To develop a high-quality knowledge sharing and career plans that are personalised to the needs of ERs and ESRs, and they are in agreement with the short- and long-term objectives of the RISE programme.
- To offer to each seconded researcher top-level knowledge-sharing programmes, equipment, facilities, and real-life experimentation platforms aiming to reinforce their own background and to complement it with the active participation in a multi-disciplinary programme between industry and academia.
- To organise networking activities to foster sharing of knowledge among the participants of the project, as well as disseminating the results of SECONDO to the widest possible scientific

and industrial communities.

To address the above general objectives the following actions will be put in place:

- To promote industry-academia cooperation through well-coordinated exchanges of ERs and ESRs among industrial and academic beneficiaries. The exchanges will be based on well-defined research and knowledge sharing activities, which require high-qualified experts.

- To take full advantage of the secondments envisaged by the RISE programme, each beneficiary will define clear in-built return mechanisms to benefit from the know-how acquired by each seconded scientist. It is expected that both sending and hosting organisations will acquire new knowledge.

- To ensure that secondments are as effective as possible, and that the seconded ERs/ESRs work in a synergic way towards the realisation of the objectives of the project, they will be supervised by a main advisor in the host institution and a co-advisor during the period of secondments at the beneficiaries.

- Focusing on high-level research quality, top-level researchers from academic and industrial beneficiaries will be involved in SECONDO. To ensure that the secondments and all decision-making/supervision processes are fair in terms of gender, nationality, race and quality of the candidate, SECONDO will adopt the European Charter for Researchers and the Code of Conduct for the Recruitment of Researchers.

- Each seconded person will be involved in various cutting-edge research topics. Although ERs and ESRs will be fully committed to research activities in 1-2 topics, all ERs and ESRs will be aware of the long-term project objectives. This will be instrumental to set up meaningful collaborations among all staff involved in SECONDO.

- To enable effective transfer of knowledge (ToK), all beneficiaries will be fully involved in research activities, and make available innovative software and scientific knowledge within the investigated fields. The research goals of SECONDO will be achieved via the long-term collaboration of beneficiaries, who are exposed at the forefront of research to decision support for security and privacy from both theoretical and practical perspectives. The well-established background of the consortium beneficiaries along with their available facilities/equipment for research, development and training ensure the high-quality and success of the envisaged knowledge sharing.

- Frequent meetings and opportunities for collaborations will be fostered in the project to provide the means for sharing of knowledge. To strengthen the collaboration among institutions and seconded researchers, frequent opportunities to open discussions and interactions will be planned.

- To ensure that all beneficiaries and seconded ERs and ESRs will work in a synergic way, a website with a secured intranet has been developed. This allows the exchange of draft papers,

simulators, real-life use case information and other. Also, the website serves as an enabler to advertise the main results/achievements of the project.

## 1.2 Research Objectives

The Research Objectives of the SECONDO project are the following:

- **RO1: To design and develop an extended risk analysis metamodel.**

  *One of the key contributions of the SECONDO programme in the area will be the design, analysis and implementation of a Quantitative Risk Analysis Metamodel (QRAM) that will utilise advanced security metrics to quantitatively estimate the exposed cyber risks, taking into account important parameters not currently considered by existing risk analysis tools. SECONDO will also define advanced methodologies for digital asset identification and valuation. Qualitative and quantitative methods derived both from Business Impact Analysis and insurance pricing models will be investigated in order to calculate the relative and intrinsic value of an organisation’s digital assets. To implement the desired functionalities the following Secondo modules will be implemented: (a) the Risk Analysis Ontology and Harmonisation Module(RAOHM) that receives the outcomes of the existing risk analysis tools and harmonises them using a common vocabulary with straightforward definition in order to be used by QRAM;(b) the Social Engineering Assessment Module (SEAM) that interacts with users to devise their behaviour using penetration testing approaches and it provides specific numeric results on risky actions, (i.e. percentage of users that open suspect files or execute Trojans, etc.).; and c) the intelligent Big Data Collection and Processing Module (BDCPM) that uses specialised crawlers to acquire risk-related data either from internal organisation sources, e.g. network infrastructure or external sources such as social media and other internet based sources, including Darknet.*

- **RO2: To design and develop a scenario-based risk management module that facilitates in both cost-effective risk management and optimised security investments.**

  *To address this objective, the Cyber Security Investment Module (CSIM) will be designed and implemented. CSIM will be empowered by a game-theoretic approach, which is used to model defending-attacking scenarios and derive optimal defence strategies in presence of attackers that aim to cause maximum damage. Costs for attacking and defending will be investigated and they will be given as an input to CSIM. The latter will take as inputs: (a) the outcome of the provided extended and QRAM, and (b) the results of BDCPM that provides analytics on Internet sources regarding state-of-the-art security solutions as well as their cost. These inputs are enhanced with the output of three complementary modules: (a) the Game Theoretic Module (GTM) that models all possible attacking scenarios and defensive strategies, (i.e. available security controls), by employing attack graphs; (b) the Econometrics Module (ECM) that provides estimates of all kinds of costs of potential attacks and it takes into account costs, (i.e. purchase, installation, execution, etc.), of each possible security control using a set of existing econometric models; and (c) the Continuous Risk Monitoring Module (CRMM) that assesses on a continuous basis the performance of the implemented risk-reducing cyber*

*security controls allowing the adaptation of the cyber insurance contract to the changing IT environment and the evolving cyber threat landscape. All these inputs are modelled and processed by CSIM providing recommendations for optimal investments in cyber security. To take into account cyber insurance (as addressed by RO3), CSIM will provide decision support for organisations that seek an optimal equilibrium point (i.e. balance) between spending on cyber security investment and cyber insurance fees.*

- **RO3: To design and develop a cyber insurance module that estimates cyber insurance exposure and derives coverage and premiums.**

  To address this objective, the Cyber Insurance Coverage and Premiums Module (CICPM) will compute premium curves and coverages as a function of the organisation’s security level. These can be used by clients to determine desirable levels of cyber security investment prior to any cyber insurance contract agreement. CICPM will follow a standardised logic, which enables underwriters to incorporate their own strategy, as required by a competitive market; and, on the other hand, minimises the information asymmetry between insurer and insured. To achieve its goals, the proposed insurance calculation tool will take input from: a) the proposed QRAM; b) the defending policies selected to be applied in order to provide optimal protection strategies as well as the results of the related econometric parameters that justify the cost effectiveness of the considered security investments; c) analytics on cyber insurance environment and market; and d) the underwriter’s strategy. In order to provide a standardized and verifiable insurance calculation model, an innovative cyber insurance ontology will be designed and developed. Last, CICPM will communicate with CRMM for monitoring the conditions that violate cyber insurance contract agreements toward resolving conflicts.

- **RO4: Use smart contracts and a blockchain to empower cyber insurance claim.**

  *To address this objective, SECONDO will deploy a blockchain, which is a distributed decentralised database that maintains continuously growing blocks of data records, in which all blocks are tightly chained together against information tampering. SECONDO will use a private ledger, which provides secure access control on data records, to hold an inventory of assets and information regarding security and privacy risk measurable indicators of an organisation (cyber insurance client). Thus, risk is efficiently ceded or retroceded through smart contracts embedded in the distributed ledger specifically designed to process agreements and will notify parties when the agreement is bound and it then process premium and commission payments. The ledger will be updated based on information received from CRMM. Due to the immutability of the ledger, the organisation cannot modify a declaration, which has been already stored in the ledger, to earn more credit on insurance claim. By using smart contracts, the traditional physical-based paper process and endorsement will be turned to digital formats that brings convenience on data management; the claim process is triggered by smart contracts automatically, but also is accelerated becoming decentralised with widely witnessed evidence. As a result, fraud is restricted as only valid claims are recognised. Last, privacy-preserving techniques will be used in data storage and smart contract to protect clients’ privacy.*

### 1.3 Technical Objectives

The Technical Objectives of the SECONDO project are the following:

- **TO1: To integrate all SECONDO modules, test the platform and develop a user-friendly interface.**

  *The functionalities of the various tools developed in RO1-RO4 will be integrated into the final SECONDO platform. Each developed module will be offered along with augmented support for optimal presentation of information to both cyber insurers and their clients (i.e. end users). This will be achieved through the appropriate visualisations and widgets that will be developed for the purposes of the project, incorporating multiple adaptive visualisation and widgets tailored to the needs of the end users’ personal preferences and roles.*

- **TO2: To assess the functionality, effectiveness and efficiency of the SECONDO platform in real-life scenarios.**

  *The objective here is to conduct extensive tests, led by the industrial partners, which have long experience on security platforms that will provide useful conclusions on how the proposed platform copes with various levels of cyber security risks and available client budgets. Industrial key partners will lead the creation of real-life use cases for the platform assessment. Implementation documentation will be reported to complement the release of a prototype.*

### 1.4 Business Objective

The Business Objectives of the SECONDO project is the following:

- **BO1: To design an innovative business model and conduct a techno-economic analysis to strengthen the role of cyber insurance and cyber security industry in the global market.**

  *Exploitation is one of the most important goals of SECONDO. The principle aim of the project is to strengthen the role of European cyber insurance domain in the global market. The related industry has exhibited significant growth lately, with major players coming from a variety of developed markets. SECONDO targets to provide EU cyber insurance industry the necessary innovation capacity to increase its leading role in the world business field. The duration of 48 months is a great balance between the time to implement the proposed modules and the need to prepare its market adoption to maximise the timeliness of its innovation potential. SECOND will seek exploitation opportunities of its results by identifying potential market sectors. Finally, efforts to standardise its modules and push recommendations to legislative bodies are*

  expected to contribute prominently toward achieving this objective.

## 2 Administrative Management

### 2.1 Consortium Agreement (CA)

Consortium Agreement (CA) signed after the acceptance of the final signed version of project on January 2019. It defined the important points needed to achieve the best possible management

(financial conditions, planning). The unified consortium agreement is used as a reference. The CA identified background of each beneficiary that may be used to better achieve the objectives of the project. The aim of this agreement is to determine the responsibilities of the consortium towards the European Commission (EC). Various aspects covered by CA including: confidentiality, ownership of results, commercial exploitation, obligation for use and dissemination of knowledge.

## 2.2 Pre-Financing

Table 2 Pre-Financing Plan

| Partner | Total Funding | Pre-financing |
|---|---|---|
| UPRC | 276 000.00 € | 185 760.00 € |
| SURREY | 276 000.00 € | 153 000.00 € |
| CUT | 276 000.00 € | 153 000.00 € |
| UBI | 276 000.00 € | 153 000.00 € |
| LST | 165 600.00 € | 91 800.00 € |
| CRO | 220 800.00 € | 122 400.00 € |
| FOGUS | 110 400.00 € | 101 520.00 € |
| **Total consortium** | **1 600 800.00 €** | **960 480.00 €** |

# 3 Explanation of work carried out per WP

The project has successfully completed its first year, fulfilling all the targets defined in the Description of the Action (DoA) for this period. The technical work according to the planned methodology, all the promised ToK per beneficiary have been delivered, and adequate number of secondments from the beneficiaries has started. More precisely:

Regarding the technical work, the achievements so far are summarized in the following list:

- Identify the current challenges.
- Definition of Use Cases.
- Definition of Business Requirements.
- Definition of Technological Requirements.
- Design of the SECONDO reference platform architecture.
- Define the candidate technologies.
- Thorough analysis of the SECONDO platform.
- Analysis of methods for pricing tangible and intangible digital assets.

For the related technical WPs (WP2-WP6) it holds that:

- WP2 was completed successfully in M12.
- WP3 started in M7.

The following Figure describes the SECONDO workplan.

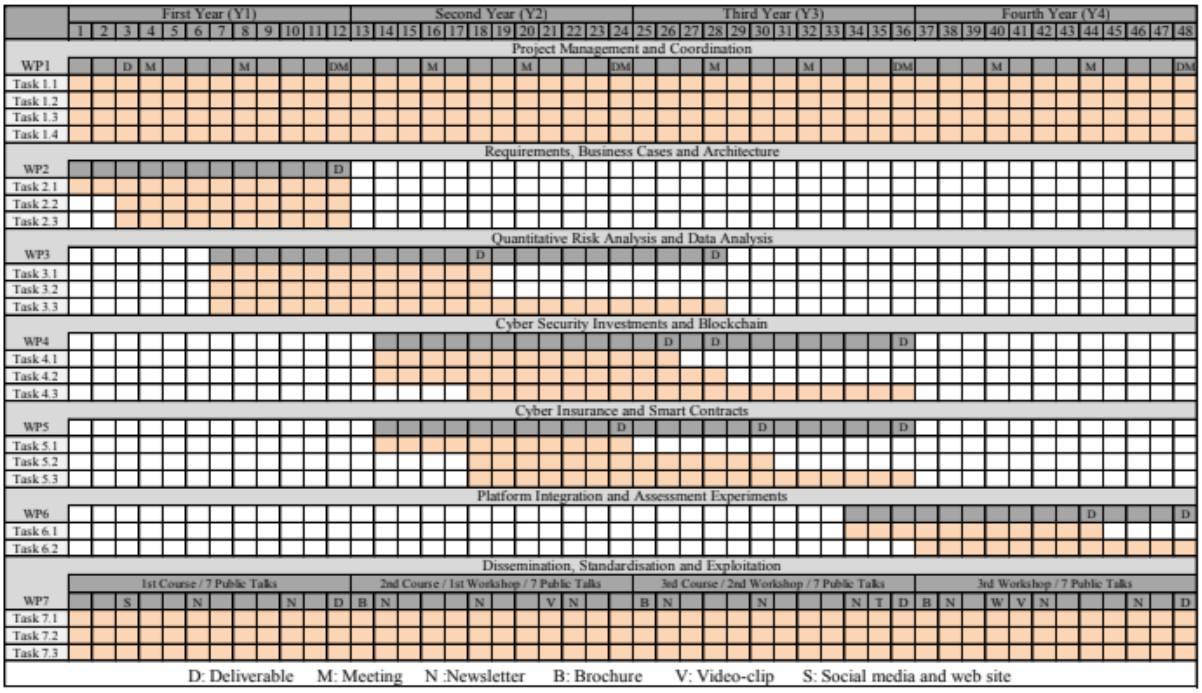


Figure 1 SECONDO workplan

The detailed work carried out in the project during the reporting period is provided in the subsections bellow. The content is organised per WP, and for each WP that was active during the reporting period the contribution of each beneficiary is described, as well as the involvement of each seconded fellow is indicated.

## 3.1 Work Package 1 – Project Management and Coordination

### 3.1.1 Objectives

Provide the overall project coordination as well as the administrative and technical management for the SECONDO project.

### 3.1.2 Description of work conducted during the first year of the project

During the first year of the project this WP carries out activities related to:

- Rigorous monitoring of project tasks and milestones.
- Organization of project tasks and training events.
    - SECONDO was presented in six (6) open and private events.
    - One training event for the consortium was organized. UPRC organized the 1st course on “Ethical Legal and Social Issues” on 20/12/2019.
- Management of the available funding and sources.
- Supervision of the beneficiaries for executing secondments and submitting deliverables in time.

### 3.1.3 Website, Communication and File repository

One of the first actions of the SECONDO consortium was the creation of the project website (www.secondo-h2020.eu). The website is maintained by the UPRC. Currently the website has 487 new users.

Day-to-day communication is based on e-mails. To facilitate rapid e-mailing and ensure the correct inclusion of those involved, the following mailing list has been created: **secondo-list@ssl-unipi.gr** which is a general list for all involved in the project. The mailing list is set up and maintained by UPRC. Additional lists may be set up upon request.

Skype [1] and GoToMeeting [2] are tools that are used widely by the consortium in order to schedule and carry out conference calls. It offers several useful features such as screen sharing and recording of the conference call.

Regarding H2020 programme guidelines on FAIR Data Management in Horizon2020 [3], all data collected during SECONDO research are publicly available and are freely used for the purposes of the project. SECONDO is hosting a GitLab server (**https://secondogit.ds.unipi.gr/users/sign_in**). It provides a safe, secure, and compliant file synchronization and sharing solution. It allows to share one/more file(s) and synchronize them. It includes different clients for different devices and platforms. Users can locally create branches, in order to handle a specific issue without affecting the main branch of work and they can merge in the end to be available for the rest of the members. When the user wishes to share its work with the other project member it has to push the modified/added files on the server.

Furthermore, Google Drive [4] and DropBox [5] are used for providing many users with online editing file.

Zenodo [6] is used as the project Data and publication repository and is linked to the SECONDO project-site at OpenAIRE [7]. Zenodo is a simple and innovative service that enables researchers, scientists, EU projects and institutions to share and showcase multidisciplinary research results (Data and publications) that are not part of existing institutional or subject-based repositories.

### 3.1.4 Consortium Meetings

The project has organized two meetings during the first year of the project, including both technical and administrative discussions:

Table 3 SECONDO Meetings

| Meeting | Date | Place | Organizer |
|---|---|---|---|
| Kick-off | 16/01/2019 | Brussels, Belgium | UPRC |
| 2nd plenary meeting | 20/12/2019 | Piraeus, Greece | UPRC |

- **Kick-off meeting – UPRC, Brussels, Belgium**

During the kick-off meeting managerial, theoretical and cost categories issues were discussed. Moreover, each partner had the opportunity to present his expertise.

Table 4 Agenda – Kick-off Meeting

| Item | Time | Topic | Leader |
|---|---|---|---|
| Day 1, 16.01.2019 | | | |
| | 8:30-9:00 | **Arrival of meeting participants** | |
| **1** | 9:00-9:30 | **Welcome, agenda approval and project overview** | UPRC |
| **2** | 9:30-10:30 | **Project management** (RISE framework, implementation, secondments, reporting, financial issues) | UPRC |
| | 10:30-11:00 | **Coffee break** | |
| **3** | 11:00-12:30 | **Discussion with the PO** (Q&A, best practices, obligations, etc.) | ALL, PO |
| | 12:30-13:30 | **Lunch break** | |
| **4** | 13:30-15:15 | **Partners presentation (15' each)** (profile, role, experience, tools, technical approach) | ALL |
| | 15:15-15:30 | **Coffee break** | |
| **5** | 15:30-17:00 | **Project implementation / Action points / Discussion** | ALL |

- **2nd Plenary Meeting – UPRC, Piraeus, Greece**

The second plenary meeting was organized by UPRC in Greece during M12. In this meeting almost all the partners where physically represented. Those who couldn't physically attend to participated in the meeting through GoToMeeting link. During that meeting, managerial and technical issues were discussed. All partners promised to follow the new secondment plan and to disseminate more often the SECONDO project. Also, issues about the ethics were discussed and the consortium decided to effectively proceed in order to finalize the ethics issues about the deliverables of ethics requirements. Furthermore, the consortium decided how to finalize the deliverable D2.1 and the candidate technologies which will be used by the partners in order to achieve the final integrated version of the SECONDO platform.

Table 5 Agenda – 2nd Plenary Meeting

| Item | Time | Topic | Leader (Contributors) |
|---|---|---|---|
| Day 1, 20.12.2019 | | | |
| | 12.00-13.00 | Arrival of meeting participants | |

| | | | |
|---|---|---|---|
| 1 | 13.00-13.15 | Welcome, agenda approval | UPRC |
| 2 | 13:15-13.30 | WP1:<br>• Project management issues | UPRC |
| 3 | 13.30-14.00 | WP8:<br>Ethics Deliverables | LST |
| 4 | 14.00-14.30 | Approval of Secondments:<br>• Secondment plan<br>• Secondment execution | UPRC<br>ALL |
| 5 | 14.30-15.15 | WP2:<br>Approval of<br>• SECONDO architecture<br>• Business Cases<br>• Modules<br>• Requirements | UPRC<br>ALL |
| 6 | 15.15-15.30 | WP7:<br>Dissemination Activities | UPRC<br>ALL |
| 7 | 15.30-16.00 | Mid-Term Review Meeting Progress | UPRC<br>ALL |

### 3.1.5 Consortium Reconstructing

UPRC which is the Project Coordinator of the SECONDO project performed actions regarding the consortium reconstructing by adding the University of Greenwich (UOG) as a new partner. UOG in London, UK is the new employer of Dr. Emmanouil Panaousis, SURREY's Primary Instigator for SECONDO project. To keep Dr. Emmanouil Panaousis in the SECONDO project and not lose his experience and know-how on the tasks that have been already allocated to SURREY, UOG joined the SECONDO consortium. Almost all tasks, responsibilities and budget (including PMs) of partner SURREY will be transferred to the new project partner UOG. This will not have any impact on the overall budget, nor the tasks of other project partners. The required amendment was requested and granted, adding UOG to the consortium officially from 01/01/2020.

### 3.1.6 Contribution per beneficiary

In this section we will briefly analyse the contribution of each beneficiary:

- **UPRC**: UPRC is the project coordinator and coordinated all activities related to the active WPs and the corresponding tasks.
- **SURREY, UOG, CRO, LST, CUT, FOUS**: All the other partners contributed to the project management by responding efficiently to the requests from the PC and by fulfilling their obligations as described in the DoA and the GA

### 3.1.7 Deliverables

This WP contains four (4) deliverables, the following table demonstrates the current status of the deliverables.

Table 6 WP1 Deliverables

| No. | Title | Due Date | Status |
|---|---|---|---|
| D1.1 | Quality Assurance Plan | 31/03/2019 | Submitted |
| D1.2 | Progress Report 1 | 31/01/2020 | Submitted |
| D1.3 | Progress Report 2 | 31/01/2022 | In Progress |
| D1.4 | Mid-term meeting | 30/06/2020 | In Progress |

## 3.2 Work Package 2 - Requirements, Business Cases and Architecture

### 3.2.1 Objectives

This WP aims at defining the SECONDO business cases according to the interests and the capacity of the industrial beneficiaries. Based on that, industrial partners defined the platform requirements as the potential customers and uses of the businesses involved. Secondly, the technical requirements of the SECONDO platform together with the overall system architecture and interfaces between modules were thoroughly explained.

### 3.2.2 Description of work conducted during the first year of the project

During the months of January of 2019 (M1) to December of 2019 (M12), the modules of the architecture and the corresponding use cases were described in the deliverable D2.1 “Technical Requirements, Business Cases and Reference Architecture”. This used to effectively communicate the architectural vision to all partners. Also, this was used to assign responsibilities to the partners with a fine granularity focusing on the first year's description of work and according to the assigned funded effort. Furthermore, initial actions were made to define methods for pricing assets and risk modeling.

- **Task 2.1: Business cases and specifications (completed):** The design process of SECONDO was initiated by eliciting requirements via an analysis of complementary use cases. These use cases are described in SECONDO proposal and demonstrate the core functionalities of the SECONDO. The four use cases considered are the following: a) Human susceptibility to cybersecurity breaches in IoT-enabled; b) Optimal Patching of Airport Cyber Infrastructures; c) Cyber insurance for Innovative SME and d) Cyber Risk Transfer in Maritime Industry. The use cases take almost all the functionalities that will be provided by the SECONDO platform into consideration. More details regarding the business cases can be found in D2.1
- **Task 2.2: Technical Requirements (completed):** In this task the technical and non-technical requirements are defined by the consortium. The business requirements defined in the previous task (Task 2.1) were analyzed in depth. Outcomes are included in Deliverable D2.1.
- **Task 2.3: Reference platform architecture (completed):** In this task the SECONDO architecture was designed. This architecture serves the business cases and complies with the technical and non-technical requirements of SECONDO. The SECONDO platform consists of the following modules: QRAM, CRMM, CSIM and CICPM. Furthermore, in this task the

candidate technologies were defined. These are the technologies which will be utilized by the secondees in order to achieve the SECONDO goals for the future tasks. Outcomes are included in Deliverable D2.1.

### 3.2.3 Contributions per beneficiary

In this section we will briefly analyse the contribution of each beneficiary:

- **UPRC (Lead beneficiary)**: UPRC being the work package leader and editor of the D2.1 provided extensive support to all tasks. Being more specific, UPRC provided details state-of-the-art about Quantitative Risk *Analysis Metamodel and Cyber Insurance* and *Smart Contracts.* Moreover, UPRC researchers contributed on the architecture design.
- **LST (Leader of Task 2.1):** LST led the definition on the SECONDO business cases. Also, LST provided the experience in business environment in order to assist other partners in defining the business cases.
- **CUT (Leader of Task 2.2):** CUT specified the technical requirements of the SECONDO platform.
- **UBI (Leader of Task 2.3):** UBI being a company with experienced personnel and important clients provided experience for defining the use cases, Furthermore, UBI together with UPRC designed the SECONDO architecture and chose the technologies which will be utilized in order to provide the final integrated SECONDO platform being able to serve the use cases.
- **CRO:** CRO effectively contributed defining the use cases and especially the 4$^{th}$ use case which is about “Cyber Risk Transfer in Maritime Industry”. CRO provided its experience in the insurance environment being a broker insurance.
- **FOGUS:** FOGUS being an innovative SME provided the experience in business environment in order to assist other partners in defining the business cases.
- **UOG/SURREY:** UOG together with SURREY provided an extensive state of the art about the “Optimal Investments in Cyber Security Blockchain”. They, also, assisted in the definition of architecture and the candidate technologies.

### 3.2.4 Deliverables

This WP contains one (1) deliverable, the following table demonstrates the current status of the deliverable.

**Table 7 WP2 Deliverable**

| No. | Title | Due Date | Status |
|---|---|---|---|
| D2.1 | Technical Requirements, Business Cases and Reference Architecture | 15/01/2020 | Submitted |

## 3.3 Work package 3 – Quantitative Risk Analysis and Data Analytics

### 3.3.1 Objectives

This WP aims at: a) devising methods for pricing assets facilitating risk assessment; (b) designing and implementing all SECONDO modules related to risk modelling and develop QRAM and c) designing and implementing the Big Data Collection and Processing Module to support risk assessment.

### 3.3.2 Description of work conducted during the first year of the project

During the July 2019 (M7) and December 2019 (M12) the WP3 started successfully, while the tasks 3.1 and 3.2 started. The deliverable D3.1 will be submitted at the end of M18 (June, 2020). Currently the table of content has been declared and the tasks for each partner have been assigned.

- **Task 3.1: Methods for pricing tangible and intangible digital assets (In progress)**: This task will provide methods about the valuation of tangible and intangible digital assets.
- **Task 3.2: Risk modelling (In progress)**: This task will provide the QRAM that quantitatively estimates the exposed cyber risks. It aims to design the RAOHM. The output of existing risk analysis tools and of the SEAM will be given as inputs to RAOHM, which then harmonises them using a common vocabulary.
- **Task 3.3: Big data collection and processing (In progress)**: This task will design and implement the BDCPM that acquires risk related data from internal and external sources.

### 3.3.3 Contribution per beneficiary

In this section we will briefly analyse the contribution of each beneficiary:

- **UOG/SURREY (Leader Task 3.1)**: UOG together with SURREY will provide the methods for pricing tangible and intangible digital assets.
- **UPRC (Leader Task 3.2)/UBI**: UPRC together with UBI will provide the RAOM that will collect data from existing Risk Analysis and SEAM tools.
- **LST (Leader Task 3.3)/CUT:** LST leads the implementation of BDCPM while the CUT will assist them. Also, CUT will also contribute to the Task 3.1.
- **FOGUS/CRO:** FOGUS and CRO will effectively contribute on the Task 3.1 with their experience with important clients in order to assist SECONDO platform obtains an effective method for pricing assets.

### 3.3.4 Deliverables

This WP contains two (2) deliverables, the following table demonstrates the current status of each deliverable.

Table 8 WP3 Deliverables

| No. | Title | Due Date | Status |
|---|---|---|---|
| D3.1 | Pricing Methods and Risk Modelling | 30/06/2020 | In progress |
| D3.2 | Big Data Collection and Processing | 30/04/2021 | In progress |

## 3.4 Work Package 7 - Dissemination, Standardisation and Exploitation

### 3.4.1 Objectives

The aim of WP7 is to coordinate the activities related to the dissemination of the results, to define strategies to ensure visibility into standardisation groups and to enable the exploitation of the new solutions.

### 3.4.2 Description of work conducted during the first year of the project

- **Task 7.1: Dissemination Activity (In Progress):** This task will coordinate all activities related to the scientific dissemination of the project results. SECONDO consortium created accounts on the following social media: a) Facebook (@SecondoH2020); b) Twitter (@H2020Secondo) and c) LinkedIn (@Secondo Project). Through the social media, SECONDO consortium achieves to promote the latest dissemination activities, the project progress and to disseminate the project goals and impact.

  SECONDO project was presented in the following public talks:

  - Researchers’ Night in Athens. (09/2019)
  - European Cyber Security Challenge 2019 in Athens. (09/2019)
  - .ευ event in Athens. (11/2019)
  - 6th meeting of the European Security & Defence College. (11/2019)
  - Hacking Democracy. (12/2019)
  - Mastering Enterprise Risk management. (12/2019)

  Furthermore, SECONDO project released two e-newsletters, a poster, two leaflets and a banner, these are used in public events and are the following:

  - 1st Issue – (06/2019)
  - 2nd Issue – (10/2019)
  - SECONDO leaflet long (01/2020)
  - SECONDO leaflet short (01/2020)
  - SECONDO poster (01/2020)
  - SECONDO banner (09/2019)

  Moreover, there are three (3) scientific publication which are published in well-known journal and conferences. Through these publications, the SECONDO project achieves to promote and disseminate its impact and goals. The publications are the following:

  - 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.
  - Nikolaos Koutroumpouchos, Georgios Lavdanis, Eleni Veroni, Christoforos Ntantogian, and Christos Xenakis. 2019. ObjectMap: Detecting Insecure Object Deserialization. In 23rd Pan Hellenic Conference on Informatics (PCI ’19), November 28–30, 2019, Nicosia, Cyprus. ACM, New York, NY, USA, 6 pages. https://doi.org/10.1145/3368640.3368680

- **Task 7.2: Standardisation (In Progress):** This task aims to put in place adequate actions to ensure the visibility of the project in standardisation bodies, and, if possible, to enable the inclusion of the proposed solutions in future standards and policies for economics of security.
- **Task 7.3: Business model, market opportunities, and exploitation Plan (In Progress):** The aim of this task is to analyze the results of the project from a business point of view, and to identify a set of business cases for the exploitation of the results.

### 3.4.3 Contribution per beneficiary

All the beneficiaries have contributed to the activities of this WP so far. Major effort has been allocated to the dissemination and communication of the project to public audience and all the seconded researchers were involved in this task, actively.

### 3.4.4 Deliverables

This WP contains two (2) deliverables, the following table demonstrates the current status of each deliverable.

**Table 9 WP7 Deliverables**

| No. | Title | Due Date | Status |
|---|---|---|---|
| D7.1 | Dissemination and Standardisation Plan and Activities (midterm) | 31/12/2020 | In Progress |
| D7.2 | Dissemination and Standardisation Activities, Market Analysis and Exploitation Plan | 31/12/2022 | In Progress |

## 3.5 Work package 8 - Ethics requirements

### 3.5.1 Objectives

This WP sets out the “ethics requirements: that the project must comply with.

### 3.5.2 Description of work conducted during the first year of the project

SECONDO consortium appointed Mrs. Dimitra Markopoulou as the SECONDO Ethics Advisor who will monitor the ethics issues involved in the project and how they are handled. Also, she will consult the project management and the consortium on the WP 3,4,5,7 and she will submit a report at the end of each reporting period. Each partner in collaboration with its DPO reassured its Project Manager and the PC that the organization comply with the national laws of its country and the GDPR about the processing of sensitive data.

### 3.5.3 Contribution per beneficiary

All the beneficiaries have contributed to the activities of this WP so far. Major effort has been allocated to the understanding and implementation of GDPR and the legislation of each country. Each together with their DPO aim to comply with the GDPR and their national laws.

### 3.5.4 Deliverables

This WP contains seven (7) deliverables, the following table demonstrates the current status of each deliverable.

**Table 10 WP8 Deliverables**

| No. | Title | Due Date | Status |
|---|---|---|---|

| | | | |
|---|---|---|---|
| D8.1 | GEN - Requirement No. 2 | 31/01/2019 | Revision in Progress |
| D8.2 | POPD - Requirement No. 3 | 30/04/2019 | Revision in Progress |
| D8.3 | POPD - Requirement No. 4 | 30/04/2019 | Revision submitted |
| D8.4 | POPD - Requirement No. 11 | 30/04/2019 | Revision in Progress |
| D8.5 | M - Requirement No. 12 | 31/12/2019 | Submitted |
| D8.6 | M - Requirement No. 13 | 30/04/2019 | Submitted |
| D8.7 | POPD - Requirement No. 6 | 20/04/2019 | Submitted |

Deliverables 8.1-8.4 were asked to be revised, a procedure that is currently ongoing.

# 4 Impact

The performed and planned secondments are depicted in the following Figure. By now, ten (10) seconded fellows have completed 29.94 PMs almost 8% of the total PMs. The following table presents the secondees and information about their secondments (ID, Name, Home Partner, Hosting Partner, Start Date, End Date, Duration, Involvement).

| Staff ID / Ref. to A form | [ER/ ESR] | Las Name | Fellow ID | Hosting Institution | Active in WP | Start month | Total PM until now | First Year (Y1) | Second Year (Y2) | Third Year (Y3) | Fourth Year (Y4) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | 1 2 3 4 5 6 7 8 9 10 11 12 | 13 14 15 16 17 18 19 20 21 22 23 24 | 25 26 27 28 29 30 31 32 33 34 35 36 | 37 38 39 40 41 42 43 44 45 46 47 48 |
| | | | | | | | | START | | | END |
| UPRC RESEARCHERS | | | | | | | | | | | |
| 1 | ER/ESR | Farnaz Mohammadi | 5 | UBI | 2,5,6 | 7 | 3 | 2 2 2 | | 4 4 4 5 5 5 | 6 6 6 |
| 2 | ER/ESR | New Researcher | | UBI | 3, 6 | | | | 3 3 3 3 3 3 | | 6 6 6 6 6 6 |
| 3 | ER/ESR | New Researcher | | UBI | 3, 6 | | | | 3 3 3 3 3 3 3 3 3 3 3 3 | | |
| 4 | ER/ESR | New Researcher | | UBI | 3,8 | | | | | | 6 6 6 6 6 6 6 6 6 6 6 6 |
| 5 | ER/ESR | New Researcher | | UBI | 5 | | | | | 5 5 5 5 5 5 5 5 5 5 5 5 | |
| Technologiko Panepistimio Kyprou RESEARCHERS | | | | | | | | | | | |
| 6 | ER/ESR | Michael Sirivianos | 1 | LSTCH | 2,3,4,5,6,7 | 7 | 2.07 | 2 2 | 3 3 | | |
| 7 | ER/ESR | Michael Pingos | 2 | LSTCH | 2 | 11 | 1 | 2 | | | |
| 8 | ER/ESR | Spyridonas Loizou | 3 | LSTCH | 2 | 11 | 1 | 2 | | | |
| 9 | ER/ESR | Nikolaos Salamanos | 6 | LSTCH | 2,3 | 8 | 6 | 2 2 2 2 2 | 3 | | |
| 10 | ER/ESR | New Researcher | | LSTCH | 3 | | | | 3 3 3 3 3 3 3 3 3 | | 6 6 6 |
| 11 | ER/ESR | New Researcher | | CRO | 4,6 | | | | 3 3 | 3 4 4 4 4 4 4 5 5 | 6 6 |
| 12 | ER/ESR | New Researcher | | FOGUS | 4 | | | | | 3 3 4 4 4 4 4 4 4 4 4 4 | |
| LSTCH RESEARCHERS | | | | | | | | | | | |
| 13 | ER/ESR | Dimitrianos Savva | 7 | CUT | 2 | 8 | 5 | 2 2 2 2 2 | | 3 3 3 3 3 3 3 | |
| 14 | ER/ESR | George Kalatzantonakis | 8 | CUT | 2,3 | 8 | 6 | 2 2 2 2 2 3 | | 3 3 3 3 3 3 | |
| 15 | ER/ESR | New Researcher | | CUT | | | | | | 4 4 5 5 5 5 | 6 6 6 6 6 6 |
| FOGUS RESEARCHERS | | | | | | | | | | | |
| 16 | ER/ESR | Nikolaos Episkopos | 2,3 | CUT | 2,3 | 6 | 6.97 | 2 2 3 3 3 3 | 3 3 3 3 3 3 | | |
| 17 | ER/ESR | New Researcher | | SUR | 4 | | | | 4 4 4 4 4 4 | | 6 6 6 6 6 6 |
| CROMAR RESEARCHERS | | | | | | | | | | | |
| 18 | ER/ESR | New Researcher | | SUR | 5 | | | | 5 5 5 5 5 5 5 5 5 5 5 5 | | |
| 19 | ER/ESR | New Researcher | | SUR | 5 | | | | | 5 5 5 5 5 5 5 5 5 5 5 5 | |
| 20 | ER/ESR | New Researcher | | SUR | 3,5 | | | | 3 3 | 5 5 5 5 5 5 | 4 4 4 4 |
| 21 | ER/ESR | New Researcher | | CUT | 4 | | | | 4 4 4 4 4 4 4 4 4 4 4 4 | | |
| UNIVERSITY OF SURREY RESEARCHERS | | | | | | | | | | | |
| 22 | ER/ESR | Emmanouil Panaousis | 9 | CRO | 1,2,3,7 | 7 | 1 | 2 | | | |
| 23 | ER/ESR | Sakshyam Panda | 10 | CRO | 2,3 | 7 | 1 | 2 | 3 3 | | |
| UBITECH | | | | | | | | | | | |
| 24 | ER/ESR | New Researcher | | UPRC | 2,3,6 | | | | 3 3 3 3 3 3 | 5 5 | 6 6 6 6 |
| 25 | ER/ESR | New Researcher | | UPRC | 2,3,6 | | | | 3 3 3 3 3 3 | | 6 6 6 6 6 6 |
| 26 | ER/ESR | New Researcher | | SUR | 4 | | | | 4 4 4 4 4 4 4 4 4 4 4 4 | | |
| 27 | ER/ESR | New Researcher | | UPRC | 3 | | | | 3 3 3 3 3 3 3 3 3 3 3 3 | | |
| 28 | ER/ESR | New Researcher | | UPRC | 6 | | | | | | 6 6 6 6 6 6 6 6 6 6 6 6 |
| UNIVERSITY OF GREENWICH RESEARCHERS | | | | | | | | | | | |
| 29 | ER/ESR | New Researcher | | CRO | 2,3,6 | | | | 4 4 4 | 4 4 4 | 6 6 6 |
| 30 | ER/ESR | New Researcher | | CRO | 3 | | | | | 4 4 4 4 4 4 5 5 5 5 5 5 | |
| 31 | ER/ESR | New Researcher | | CRO | 4,5 | | | | 3 3 3 3 4 4 4 4 4 4 | | |
| 32 | ER/ESR | New Researcher | | UBI | 5,6 | | | | | 5 5 5 5 5 5 6 6 6 6 6 6 | |
| 33 | ER/ESR | New Researcher | | CRO | 5 | | | | | 5 5 5 5 5 5 5 5 5 5 5 5 | |

* Numbers inside the duration of secondments indicate the involvement in specific workpackages

**Figure 2 Actual and planned secondments plan**

Table 11 SECONDO Researchers

| No. | Name | Home partner | Hosting partner | Start Date | End Date | Duration up to 31/12/2019 | Involvement |
|---|---|---|---|---|---|---|---|
| 1 | Michael Sirivianos | CUT | LST | 12-07-2019<br>27-07-2019 | 21-07-2019<br>17-09-2019 | 2.07 | Definition of use cases, technical and non-technical requirements of the SECONDO platform, initial design of the BDCPM and the pricing methods for digital assets. |
| 2 | Michael Pingos | CUT | LST | 18-11-2019 | 17-12-2019 | 1 | Definition of the operational needs of the SECONDO platform |
| 3 | Spyridonas Loizou | CUT | LST | 18-11-2019 | 17-12-2019 | 1 | Definition of the technical requirements of the SECONDO platform |
| 4 | Nikolaos Episkopos | FOGUS | CUT | 20-06-2019 | Open | 6 | Definition of the technical requirements, initial design of the RAOHM and BDCPM |
| 5 | Farnaz Mohammadi | UPRC | UBI | 01-07-2019<br>18-09-2019 | 15-09-2019<br>02-10-2019 | 3 | Definition of use cases and the platform architecture |
| 6 | Nikolaos Salamanos | CUT | LST | 02-08-2019<br>18-10-2019 | 15-10-2019<br>Open | 5 | Definition of the technical requirements, initial design of the BDCPM, design of the assets pricing module. |
| 7 | Dimitrianos Savva | LST | CUT | 02-08-2019 | 31-12-2019 | 5 | Definition of the use cases |
| 8 | George Kalatzantonakis | LST | CUT | 01-08-2019<br>20-11-2019 | 18-11-2019<br>31-01-2020 | 5 | Definition of use cases, initial design of the BDCPM |
| 9 | Emmanouil Panaousis | SURREY | CRO | 29-07-2019 | 23-08-2019 | 0.87 | Definition of the use cases, state-of-the-art, initial design of the assets pricing module |
| 10 | Sakshyam Panda | SURREY | CRO | 22-07-2019 | 21-08-2019 | 1 | Definition of the use cases, state-of-the-art, initial design of the assets pricing module |
| **Total PMs** | | | | | | **29.94** | |

# 5 Deviations

## 5.1 Deliverable Submission

SECONDO consortium asked to change the submission deadline of deliverable D2.1 “Technical Requirements, Business Cases and Reference Architecture”. The new deadline was on 15/01/2020. Until the new deadline, the consortium achieved to improve the use case, the SECONDO platform requirements and the design of the SECONDO platform architecture. Currently, the use cases are business oriented and depict the real challenges which the brokers and insurance companies have to face, also, the use cases present totally the SECONO platform benefits and how-the insurance ecosystem will integrate it and benefit from the final and integrated SECONO platform.

## 5.2 Secondments Plan

There were also deviations from the proposed secondments plan. The deviations led to the execution of 29.94 PMs. The deviations occurred due to various reasons:

- Emmanouil Panaousis from the University of Surrey moved to the University of Greenwich. The consortium decided to accept to maintain SURREY but also add UOG as part of the consortium.
- Some people with central role in the project were reserved to other activities (professors), averting them from being secondees aboard for a long period of time.

This consortium amendment led to secondment plan change. The first secondment plan is depicted in the following figure.

| Staff ID / Ref. to A form | [ER/ ESR] | Hosting Institution | Active in WP | Start month | Total PM | First Year (Y1) | | | | | | | | | | | | Second Year (Y2) | | | | | | | | | | | | Third Year (Y3) | | | | | | | | | | | | Fourth Year (Y4) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 |
| | | | | | | START | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | END |
| UPRC RESEARCHERS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | UPRC-1-ER>10 | UBI | WP2/4/5/6 | 7 | 12 | | | | | | | 2 | 2 | 2 | | | | | | | | | | | | | | | | | | | 4 | 4 | 4 | | | | | 5 | 5 | 5 | | | | | | | | | | 6 | 6 | 6 |
| 2 | UPRC-2-ER<10 | UBI | WP3/6 | 7 | 12 | | | | | | | 3 | 3 | 3 | 3 | 3 | 3 | | | | | | | | | | | | | | | | | | | | | | | | | 6 | 6 | 6 | 6 | 6 | 6 | | | | | | | |
| 3 | UPRC-3-ER<10 | UBI | WP3 | 7 | 12 | | | | | | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | UPRC-4-ER<10 | UBI | WP6 | 37 | 12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| 5 | UPRC-5-ESR | UBI | WP5 | 25 | 12 | | | | | | | | | | | | | | | | | | | | | | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | | | | | | | | | | | | |
| SURREY RESEARCHERS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | SURREY-1-ER>10 | CRO | WP2/4/6 | 7 | 12 | | | | | | | 2 | 2 | 2 | | | | | | | | | 4 | 4 | 4 | | | | | | | | | 4 | 4 | 4 | | | | | | | | | | | 6 | 6 | 6 | | | |
| 7 | SURREY-2-ER<10 | CRO | WP3 | 7 | 12 | | | | | | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | SURREY-3-ER<10 | CRO | WP4,5 | 25 | 12 | | | | | | | | | | | | | | | | | | | | | | | | | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | | | | | | | | | | | |
| 9 | SURREY-4-ER<10 | UBI | WP5/6 | 31 | 12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | | | | | |
| 10 | SURREY-5-ESR | CRO | WP5 | 25 | 12 | | | | | | | | | | | | | | | | | | | | | | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | | | | | | | | | | | | |
| CUT RESEARCHERS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | CUT-1-ER1>10 | LST | WP2/3/6 | 7 | 12 | | | | | | | 2 | 2 | 2 | 2 | | | | | | | | | | | | | 3 | 3 | 3 | 3 | 3 | | | | | | | | | | | | | 6 | 6 | 6 | | | |
| 12 | CUT-2-ER1<10 | LST | WP2/3 | 7 | 12 | | | | | | | 2 | 2 | 2 | 2 | 2 | 2 | | | | | | | | | | 3 | 3 | 3 | 3 | 3 | 3 | | | | | | | | | | | | | | | | | | | |
| 13 | CUT-3-ER1<10 | LST | WP3/6 | 17 | 12 | | | | | | | | | | | | | | | | | 3 | 3 | 3 | 3 | 3 | 3 | | | | | | | | | | | | | | | 6 | 6 | 6 | 6 | 6 | 6 | | | | | |
| 14 | CUT-4-ER1<10 | CRO | WP4/6 | 23 | 12 | | | | | | | | | | | | | | | | | | | | | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | | | | | | | | | | | | 6 | 6 | 6 | 6 |
| 15 | CUT-5-ESR | FOGUS | WP4 | 25 | 12 | | | | | | | | | | | | | | | | | | | | | | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | | | | | | | | | | | |
| UBI RESEARCHERS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | UBI-1-ER1>10 | UPRC | WP2/6 | 7 | 12 | | | | | | | 2 | 2 | 2 | 2 | 2 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | 6 | 6 | 6 | 6 | 6 | 6 | | | | | |
| 17 | UBI-2-ER1<10 | UPRC | WP2/6 | 7 | 12 | | | | | | | 2 | 2 | 2 | 2 | 2 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | 6 | 6 | 6 | 6 | 6 | 6 | | | | | |
| 18 | UBI-3-ER1<10 | SURREY | WP4 | 13 | 12 | | | | | | | | | | | | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | | | | | | | | | | | | | | | | | | | | | | |
| 19 | UBI-4-ER1<10 | UPRC | WP3 | 17 | 12 | | | | | | | | | | | | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | | | | | | | | | | | | | | | | | | | | | | |
| 20 | UBI-5-ESR | UPRC | WP6 | 37 | 12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| CRO RESEARCHERS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 21 | CRO-1-ER>10 | SURREY | WP5 | 14 | 12 | | | | | | | | | | | | | | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | | | | | | | | | | | | | | | | | | | | | | | |
| 22 | CRO-2-ER<10 | SURREY | WP5 | 25 | 12 | | | | | | | | | | | | | | | | | | | | | | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | | | | | | | | | | | | |
| 23 | CRO-3-ER<10 | SURREY | WP3/5 | 13 | 12 | | | | | | | | | | | | | 3 | 3 | 3 | 3 | 3 | 3 | | | | | | | | | | | | | 5 | 5 | 5 | 5 | 5 | 5 | | | | | | | | | | | |
| 24 | CRO-4-ESR | CUT | WP4 | 19 | 12 | | | | | | | | | | | | | | | | | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | | | | | | | | | | | | | |
| LST RESEARCHERS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 25 | LST-1-ER>10 | CUT | WP2/3 | 7 | 12 | | | | | | | 2 | 2 | 2 | 2 | 2 | 2 | | | | | | | | | | | 3 | 3 | 3 | 3 | 3 | 3 | | | | | | | | | | | | | | | | | | | |
| 26 | LST-2-ER<10 | CUT | WP2/3 | 9 | 12 | | | | | | | | | 2 | 2 | 2 | 2 | | | | | | | | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | | | | | | | | | | | | | | | | | | |
| 27 | LST-3-ER<10 | CUT | WP5/6 | 31 | 12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 5 | 5 | 5 | 5 | 5 | 5 | | | | | | | 6 | 6 | 6 | 6 | 6 | 6 |
| FOGUS RESEARCHERS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 28 | FOGUS-1-ER<10 | SURREY | WP4/6 | 18 | 12 | | | | | | | | | | | | | | | | | | 4 | 4 | 4 | 4 | 4 | 4 | | | | | | | | | | | | | | | | | | | | | 6 | 6 | 6 | 6 | 6 | 6 |
| 29 | FOGUS-2-ER<10 | CUT | WP4 | 25 | 12 | | | | | | | | | | | | | | | | | | | | | | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | | | | | | | | | | | |
| * Numbers inside the duration of secondments indicate the involvement in specific workpackages | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

**Figure 3 Initial Secondment Plan**

The secondment plan after the amendment is depicted in the following Figure:

| Staff ID / Ref. to A form | [ER/ ESR] | Hosting Institution | Active in WP | Start month | Total PM | First Year (Y1) | | | | | | | | | | | | Second Year (Y2) | | | | | | | | | | | | Third Year (Y3) | | | | | | | | | | | | Fourth Year (Y4) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 |
| | | | | | | START | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | END |
| UPRC RESEARCHERS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | UPRC-1-ER>10 | UBI | WP2/4/5/6 | 7 | 12 | | | | | | | 2 | 2 | 2 | | | | | | | | | | | | | | | | | | | 4 | 4 | 4 | | | | | 5 | 5 | 5 | | | | | | | | | | 6 | 6 | 6 |
| 2 | UPRC-2-ER<10 | UBI | WP3/6 | 7 | 12 | | | | | | | 3 | 3 | 3 | 3 | 3 | 3 | | | | | | | | | | | | | | | | | | | | | | | | | 6 | 6 | 6 | 6 | 6 | 6 | | | | | | | |
| 3 | UPRC-3-ER<10 | UBI | WP3 | 7 | 12 | | | | | | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | UPRC-4-ER<10 | UBI | WP6 | 37 | 12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| 5 | UPRC-5-ESR | UBI | WP5 | 25 | 12 | | | | | | | | | | | | | | | | | | | | | | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | | | | | | | | | | | | |
| SURREY RESEARCHERS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | SURREY-1-ER>10 | CRO | WP2 | 7 | 1 | | | | | | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | SURREY-2-ER<10 | CRO | WP3 | 7 | 3 | | | | | | | 3 | | | | | | | 3 | | | | | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| UOG RESEARCHERS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | UOG-1-ER>10 | CRO | WP4/6 | 18 | 9 | | | | | | | | | | | | | | | | | | 4 | 4 | 4 | | | | | | | | | 4 | 4 | 4 | | | | | | | | | | | 6 | 6 | 6 | | | |
| 9 | UOG-2-ER<10 | CRO | WP3 | 25 | 12 | | | | | | | | | | | | | | | | | | | | | | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | | | | | | | | | | | |
| 10 | UOG-3-ESR | CRO | WP4,5 | 25 | 11 | | | | | | | | | | | | | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | UOG-4-ER<10 | UBI | WP5/6 | 31 | 12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | | | | | |
| 12 | UOG-5-ESR | CRO | WP5 | 25 | 12 | | | | | | | | | | | | | | | | | | | | | | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | | | | | | | | | | | | |
| CUT RESEARCHERS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | CUT-1-ER1>10 | LST | WP2/3/6 | 7 | 12 | | | | | | | 2 | 2 | 2 | 2 | | | | | | | | | | | | | 3 | 3 | 3 | 3 | 3 | | | | | | | | | | | | | 6 | 6 | 6 | | | |
| 14 | CUT-2-ER1<10 | LST | WP2/3 | 8 | 12 | | | | | | | 2 | 2 | 2 | 2 | 2 | 2 | | | | | | | | | | 3 | 3 | 3 | 3 | 3 | 3 | | | | | | | | | | | | | | | | | | | |
| 15 | CUT-3-ER1<10 | LST | WP3 | 15 | 12 | | | | | | | | | | | | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | CUT-4-ER1<10 | CRO | WP4/6 | 19 | 12 | | | | | | | | | | | | | | | | | 4 | 4 | | | | | | | 4 | 4 | 4 | 4 | 4 | 4 | | | | | | | | | | | 6 | 6 | 6 | 6 | | |
| 17 | CUT-5-ESR | FOGUS | WP4 | 18 | 12 | | | | | | | | | | | | | | | | | 4 | | | | | | | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | | | | | | | | | | | |
| UBI RESEARCHERS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 18 | UBI-1-ER1>10 | UPRC | WP2/3/6 | 10 | 12 | | | | | | | 2 | 2 | 2 | 3 | 3 | 3 | | | | | | | | | | | | | | | | | | | | | | | | | 6 | 6 | 6 | 6 | 6 | 6 | | | | | |
| 19 | UBI-2-ER1<10 | UPRC | WP2/3/6 | 10 | 12 | | | | | | | 2 | 2 | 2 | 3 | 3 | 3 | | | | | | | | | | | | | | | | | | | | | | | | | 6 | 6 | 6 | 6 | 6 | 6 | | | | | |
| 20 | UBI-3-ER1<10 | SURREY | WP4 | 13 | 12 | | | | | | | | | | | | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | | | | | | | | | | | | | | | | | | | | | | |
| 21 | UBI-4-ER1<10 | UPRC | WP3 | 17 | 12 | | | | | | | | | | | | | | | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | | | | | | | | | | | | | | | | | | | | | | |
| 22 | UBI-5-ESR | UPRC | WP6 | 37 | 12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| CRO RESEARCHERS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 23 | CRO-1-ER>10 | SURREY | WP5 | 14 | 12 | | | | | | | | | | | | | | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | | | | | | | | | | | | | | | | | | | | | | | |
| 24 | CRO-2-ER<10 | SURREY | WP5 | 25 | 12 | | | | | | | | | | | | | | | | | | | | | | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | | | | | | | | | | | | |
| 25 | CRO-3-ER<10 | SURREY | WP3/5 | 13 | 12 | | | | | | | | | | | | | 3 | 3 | 3 | 3 | 3 | 3 | | | | | | | | | | | | | 5 | 5 | 5 | 5 | 5 | 5 | | | | | | | | | | | |
| 26 | CRO-4-ESR | CUT | WP4 | 19 | 12 | | | | | | | | | | | | | | | | | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | | | | | | | | | | | | | |
| LST RESEARCHERS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 27 | LST-1-ER>10 | CUT | WP2/3 | 7 | 12 | | | | | | | 2 | 2 | 2 | 2 | 2 | 2 | | | | | | | | | | | 3 | 3 | 3 | 3 | 3 | 3 | | | | | | | | | | | | | | | | | | | |
| 28 | LST-2-ER<10 | CUT | WP2/3 | 9 | 12 | | | | | | | | | 2 | 2 | 2 | 2 | | | | | | | | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | | | | | | | | | | | | | | | | | | |
| 29 | LST-3-ER<10 | CUT | WP5/6 | 31 | 12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 5 | 5 | 5 | 5 | 5 | 5 | | | | | | | 6 | 6 | 6 | 6 | 6 | 6 |
| FOGUS RESEARCHERS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 30 | FOGUS-1-ER<10 | SURREY | WP4/6 | 18 | 12 | | | | | | | | | | | | | | | | | | 4 | 4 | 4 | 4 | 4 | 4 | | | | | | | | | | | | | | | | | | | | | 6 | 6 | 6 | 6 | 6 | 6 |
| 31 | FOGUS-2-ER<10 | CUT | WP2/4 | 6 | 12 | | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 4 | 4 | 4 | 4 | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

**Figure 4 Secondment Plan after the amendment**

The actual and foreseen secondment plan is depicted in the next Figure.

| Staff ID / Ref. to A form | [ER/ ESR] | Las Name | Fellow ID | Hosting Institution | Active in WP | Start month | Total PM until now | First Year (Y1) | | | | | | | | | | | | Second Year (Y2) | | | | | | | | | | | | Third Year (Y3) | | | | | | | | | | | | Fourth Year (Y4) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 |
| | | | | | | | | START | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | END | | | | | | | | | | | |
| UPRC RESEARCHERS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | ER/ESR | Farnaz Mohammadi | 5 | UBI | 2,5,6 | 7 | 3 | | | | | | | 2 | 2 | 2 | | | | | | | | | | | | | | | | | | 4 | 4 | 4 | | | | 5 | 5 | 5 | | | | | | | | | | 6 | 6 | 6 |
| 2 | ER/ESR | New Researcher | | UBI | 3, 6 | | | | | | | | | | | | | | | 3 | 3 | 3 | | 3 | 3 | 3 | | | | | | | | | | | | | | | | | | 6 | 6 | 6 | 6 | 6 | 6 | | | | | | |
| 3 | ER/ESR | New Researcher | | UBI | 3, 6 | | | | | | | | | | | | | | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | ER/ESR | New Researcher | | UBI | 3,8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| 5 | ER/ESR | New Researcher | | UBI | 5 | | | | | | | | | | | | | | | | | | | | | | | | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | | | | | | | | | | | |
| Technologiko Panepistimio Kyprou RESEARCHERS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | ER/ESR | Michael Sirivianos | 1 | LSTCH | 2,3,4,5,6,7 | 7 | 2.07 | | | | | | | 2 | 2 | | | | | | | | | | 3 | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | ER/ESR | Michael Pingos | 2 | LSTCH | 2 | 11 | 1 | | | | | | | | | | | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | ER/ESR | Spyridonas Loizou | 3 | LSTCH | 2 | 11 | 1 | | | | | | | | | | | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | ER/ESR | Nikolaos Salamanos | 6 | LSTCH | 2,3 | 8 | 6 | | | | | | | | 2 | 2 | 2 | 2 | 2 | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | ER/ESR | New Researcher | | LSTCH | 3 | | | | | | | | | | | | | | | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | ER/ESR | New Researcher | | CRO | 4,6 | | | | | | | | | | | | | | | | | | | | | | | | | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | | | | 5 | 5 | | | | | | | | | | 6 | 6 |
| 12 | ER/ESR | New Researcher | | FOGUS | 4 | | | | | | | | | | | | | | | | | | | | | | | | | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | | | | | | | | | | |
| LSTCH RESEARCHERS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | ER/ESR | Dimitrianos Savva | 7 | CUT | 2 | 8 | 5 | | | | | | | | 2 | 2 | 2 | 2 | 2 | | | | | | | | | | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | | | | | | | | | | | | | | | | |
| 14 | ER/ESR | George Kalatzantonakis | 8 | CUT | 2,3 | 8 | 6 | | | | | | | | 2 | 2 | 2 | 2 | 2 | 3 | | | | | | | | | | 3 | 3 | 3 | 3 | 3 | 3 | | | | | | | | | | | | | | | | | |
| 15 | ER/ESR | New Researcher | | CUT | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 4 | 4 | 5 | 5 | 5 | 5 | | | | | | | | | | 6 | 6 | 6 | 6 | 6 | 6 |
| FOGUS RESEARCHERS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | ER/ESR | Nikolaos Episkopos | 2,3 | CUT | 2,3 | 6 | 6.97 | | | | | | | | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 17 | ER/ESR | New Researcher | | SUR | 4 | | | | | | | | | | | | | | | | | | | | 4 | 4 | 4 | 4 | 4 | 4 | | | | | | | | | | | | | | | | | | | | | | 6 | 6 | 6 | 6 | 6 | 6 |
| CROMAR RESEARCHERS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 18 | ER/ESR | New Researcher | | SUR | 5 | | | | | | | | | | | | | | | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | | | | | | | | | | | | | | | | | | | | | | | |
| 19 | ER/ESR | New Researcher | | SUR | 5 | | | | | | | | | | | | | | | | | | | | | | | | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | | | | | | | | | | |
| 20 | ER/ESR | New Researcher | | SUR | 3,5 | | | | | | | | | | | | | | | 3 | 3 | | | | | | | | | | | | | | | | 5 | 5 | 5 | 5 | 5 | 5 | | | | | | | | | | 4 | 4 | 4 | 4 |
| 21 | ER/ESR | New Researcher | | CUT | 4 | | | | | | | | | | | | | | | | | | | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | | | | | | | | | | | | | | | |
| UNIVERSITY OF SURREY RESEARCHERS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 22 | ER/ESR | Emmanouil Panaousis | 9 | CRO | 1,2,3,7 | 7 | 1 | | | | | | | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 23 | ER/ESR | Sakshyam Panda | 10 | CRO | 2,3 | 7 | 1 | | | | | | | | 2 | | | | | | 3 | | | | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| UBITECH | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 24 | ER/ESR | New Researcher | | UPRC | 2,3,6 | | | | | | | | | | | | | | | | 3 | 3 | 3 | 3 | 3 | 3 | | | | | | | | | | | | | | | | | | 5 | 5 | | 6 | 6 | 6 | 6 | | | | | |
| 25 | ER/ESR | New Researcher | | UPRC | 2,3,6 | | | | | | | | | | | | | | | | 3 | 3 | 3 | 3 | 3 | 3 | | | | | | | | | | | | | | | | | | | 6 | 6 | 6 | 6 | 6 | 6 | | | | | |
| 26 | ER/ESR | New Researcher | | SUR | 4 | | | | | | | | | | | | | | | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | | | | | | | | | | | | | | | | | | | | | | |
| 27 | ER/ESR | New Researcher | | UPRC | 3 | | | | | | | | | | | | | | | | | | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | | | | | | | | | | | | | | | |
| 28 | ER/ESR | New Researcher | | UPRC | 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| UNIVERSITY OF GREENWICH RESEARCHERS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 29 | ER/ESR | New Researcher | | CRO | 2,3,6 | | | | | | | | | | | | | | | | | | | | 4 | 4 | 4 | | | | | | | | 4 | 4 | 4 | | | | | | | | | | 6 | 6 | 6 | | | | | |
| 30 | ER/ESR | New Researcher | | CRO | 3 | | | | | | | | | | | | | | | | | | | | | | | | | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | | | | | | | | | | | |
| 31 | ER/ESR | New Researcher | | CRO | 4,5 | | | | | | | | | | | | | | | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | | | | | | | | | | | | | | | | | | | | | | | |
| 32 | ER/ESR | New Researcher | | UBI | 5,6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | | | | | |
| 33 | ER/ESR | New Researcher | | CRO | 5 | | | | | | | | | | | | | | | | | | | | | | | | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | | | | | | | | | | | |

* Numbers inside the duration of secondments indicate the involvement in specific workpackages

**Figure 5 Actual and Future secondment plan – Deviation**

## 5.3 New Partners

University of Greenwich (UOG) was included as a new partner as described in section 3.1.5.

# 6 Conclusions

During its first year, the project progressed with a few minor deviations. The administrative and technical management procedures have been set up according to the SECONDO proposal, and the collaboration among partners is flawless and efficient. SECONDO consortium aims to continue the close collaboration in order to achieve the SECONDO goals and implement the final platform that will contain all the SECODNO modules which result from the WPs.

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