



JANUARY 2023

# 4<sup>th</sup> Newsletter

## H2020 FISHY

### WELCOME

In September 2022, we started our last year of the project, excited that FISHY is taking shape, but knowing that all the energy of the consortium will have to be put into making one last effort to successfully complete the FISHY platform.

All this effort will have its fruit in the FISHY participation in the Cybersecurity Congress 2023 in Barcelona; where jointly with other six H2020 projects we will present FISHY as well as will develop the FISHY demo day.

From the technical point of view, in this last eight months from our last Newsletter, we have been focused on working on the second iteration of the project. Especial effort has been developed in tasks of integration, hardly working in the FISHY Reference Framework (FRF); as well as tasks related to the deployment of FISHY in each of the use cases.

It is also worth to remark the excellent work done in exploitation, whose fruit has been the HRB Business Plan Development.

This is the 4th FISHY Newsletter. Stay tuned to our website, [fishy-project.eu](http://fishy-project.eu), LinkedIn @FISHY Project and Twitter @H2020Fishy, for periodic updated releases of the FISHY Newsletter that will be published periodically throughout the life of the project, intended to disseminate key project results and achievements.

**KER 1: FISHY PLATFORM**

Platform designed to support the specific needs inherent to the heterogeneous and diverse supply chain scenario also supporting the hybrid model FISHY is envisioned to support.

- CYBERSEC INFORMATION READINESS**  
Offers enhanced security and real time monitoring of all elements of IT chain, providing security from blockchain-oriented threats with interledger components
- AUTOMATION OF CYBERSEC PIPELINES**  
Guaranteeing data security in a manufacturing context, ensuring data sharing with external entities and cybersecurity of IoT devices, as well as edge and cloud infrastructures.
- FLEXIBLE AND RESOURCEFUL FRAMEWORK**  
The FISHY framework considers all the supply chain components, from the IoT ecosystem to the infrastructure connecting them, addressing security and privacy functionalities related to risks and vulnerabilities management, accountability, and mitigation strategies as well as security metrics and evidence-based security assurance.

**INNOVATION:** Frontend designed to support the specific needs inherent to the heterogeneous and diverse supply chain scenario also supporting the hybrid model FISHY is envisioned to support.

**PROBLEM:** Different actors use IT systems of different providers and technologies which makes difficult the protection of the whole IT chain. There is no end-to-end solution appropriately addressing the cybersecurity of supply chains.

**SOLUTION:** Easing FISHY platform usability, making the whole system user-friendly and ready to be used for different users according to their expected profile and their permitted functionalities.

**VALUE:** Enhanced customer experience. Easy access to the supply chain cybersecurity in a single window with meaningful and useful output.

- FARM 2 FORK**  
In the F2F use case, the FISHY platform needs to support the administrators of the IT systems of the three type of actors of the F2F chain to monitor the security of the IoT solution they operate in a feasible and credible way, supporting also blockchain-relevant trust/security management.
- SMART FACTORIES**  
The FISHY Platform should centralize the management of users, including different user profiles, and support system's administrators in their responsibility of monitoring the security of the IoT devices and systems they operate.
- CONNECTED AUTOMOTIVE**  
The FISHY Platform will be an entry point for users and will centralise certain security aspects of the supply chain of software versions of IoT devices embedded in vehicles. It will also enable the management of in-vehicle user identities and facial identities. The platform is expected to have appropriate forms for the management of this data.

[fishy-project.eu](http://fishy-project.eu) @H2020Fishy @FISHY Project @FISHY R2020 @FISHY R2020

### FISHY TECHNICAL ACTIVITIES

One of the main achievements of FISHY in the last months has been the final design of the FISHY architecture for the second iteration of the project. This updated architecture has been materialized in the deliverable D2.4, to be released in February 2023. The whole use case requirements and functionalities of FISHY have been considered in this





JANUARY 2023

updated architecture, which in some cases has implied the inclusion of new tools, and in other a new location of the tools in the FISHY workflow.

- Another important task has been done in the scope of integration. The FISHY Reference Framework (FRF) is the mean utilized for integrating all the different modules and functionalities of FISHY independently of the specific deployment for each use case. The purpose of the FRF is to provide a virtual environment capable of supporting the execution of FISHY components and other relevant functions, such as VNFs developed during the project lifetime.

In the last months of 2022 we had our second Horizon Results Booster coaching programme, focusing on the business plan development of the FISHY Platform, its unique value proposition in the context of the selected target markets, and how it hosts the different Key Exploitable Results, already exposed through the Horizon Results Platform, the Cyberwatching.eu Marketplace, and the new KER page in our website at <https://fishy-project.eu/key-exploitable-results> (complemented by a series of pitch materials for each of the seven KERs).

## FISHY EXPOSURE

The main dissemination activities during this period to reach out and engage the FISHY community have been conducted across events and publication venues, as well as communication activities, such as blog entries and a project video.

### EVENTS

- FISHY general assembly from October 18 to 19 in Sevilla (Spain). It was our first face to face meeting in the whole project. We were able to progress especially in the areas of integration and deployment in the use cases.
- ETSI ISG PDL plenary (November 18-30 2022, online) Diego López (TID) did a presentation of the FISHY goals, use cases and potential collaboration with ISG PDL, remarking two main aspects
  - The relevance of supply chain security and the important role of distributed ledgers there
  - The possible interest of our use cases as Proofs-of-Concept (PoC) to be reported in ISG PDL
  - As a result of the discussion, we have produced a proposal for a new work-item in ISG PDL, focused on supply chain security.
- Open-Source MANO (OSM) 14 meeting in Madrid (Spain): Luis F. Gonzalez (UC3M) showcased a live demonstration about the functionality of the L2S-M component from SIA, allowing the OSM community to see the advances of this component and move forward the discussion of the feature to be introduced in its source code. The



FISHY project was explicitly mentioned during this event, mentioning that this component is used in the project.

- Layer123 World Congress in London, UK: Diego López (TID) gave a talk (8-12-22) on “The Impact of Quantum-resistant technologies on network infrastructure & services”, where the L2S component of SIA and the SADE use case were mentioned, with an explicit acknowledgement to FISHY.



- Preparation of the Cybersecurity Congress with other six H2020 projects, creating the European Research Innovation for Cybersecurity (ERICyb) cluster, to be held in Barcelona, January 31<sup>st</sup>- February 2<sup>nd</sup>. The agenda for this event will include use case video presentations and more technical presentation of some FISHY components; as well as a general FISHY presentation describing the defined Key Exploitable Results (KERs):

○ January 31st morning: Technical presentation-SIA/FRF
○ January 31st afternoon: F2F use case video
○ February 1st morning: Technical presentation-TIM
○ February 1st afternoon: WBP use case
○ February 2nd morning: FISHY general presentation and KERs
○ February 2nd afternoon: SADE use case

The event will also serve to develop our FISHY demo day. Apart of the mentioned presentations in our agenda, also use case demos and specific component demos are being prepared to demonstrate the FISHY potential to the event attendees.

### PUBLICATIONS

Following our bi-monthly scheduled plan of blog entries, in these last months we have produced 4 new blog entries:

- ***Intent-based Resilience Orchestration in Supply Chains***<sup>1</sup>, Mounir Bensalem

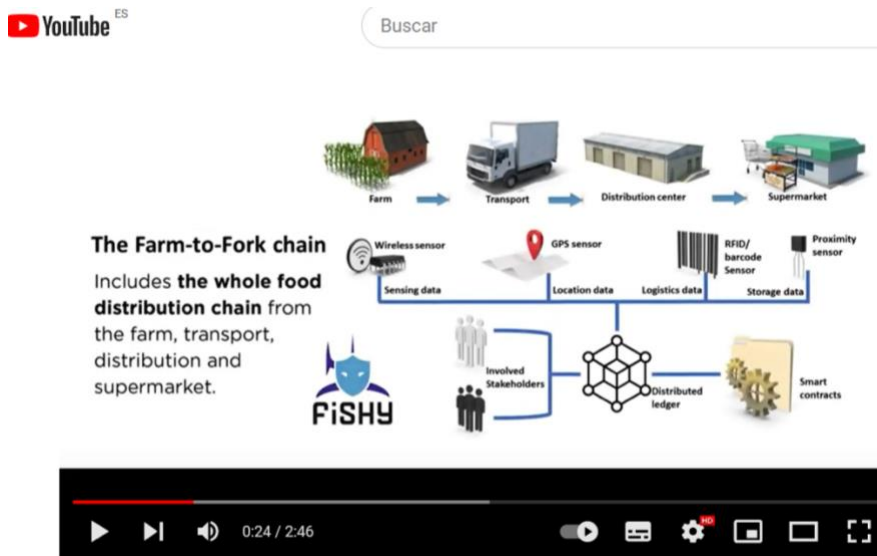
<sup>1</sup> <https://fishy-project.eu/blog/intent-based-resilience-orchestration-supply-chains>

(TUBS)

- **Experiences from validation of FISHY in the Farm-to-Fork use case<sup>2</sup>**, Antony Gonos (ENTERSOFT) and Nelly Leligou (SYNELIXIS).
- **The role of Security Assurance Certification Module on a Supply Chain<sup>3</sup>**, Kalogiannis Grigorios (STS).
- **Security and Privacy Data Space Infrastructure<sup>4</sup>**, André da Silva Oliveira, Henrique Santos (UMINHO)

To complement the infographics already uploaded in the FISHY website for each one of our use cases<sup>5 6 7</sup>, 3 new videos have been published in our YouTube channel describing the benefits of FISHY in each one of the use cases:

- SADE use case<sup>8</sup>: presenting the use of face recognition in FISHY.
- F2F use case<sup>9</sup>: showing FISHY in a food distribution chain.
- WBP Trust use case<sup>10</sup>: showing FISHY in a 4.0 Industry environment.



<sup>2</sup> <https://fishy-project.eu/blog/experiences-validation-fishy-farm-fork-use-case>

<sup>3</sup> <https://fishy-project.eu/blog/role-security-assurance-certification-module-supply-chain>

<sup>4</sup> <https://fishy-project.eu/blog/security-and-privacy-data-space-infrastructure>

<sup>5</sup> [https://fishy-project.eu/sites/fishy/files/public/content-files/2021/FISHY-Securing%20Autonomous%20Driving%20Function%20at%20the%20Edge\\_updated\\_logo-2.pdf](https://fishy-project.eu/sites/fishy/files/public/content-files/2021/FISHY-Securing%20Autonomous%20Driving%20Function%20at%20the%20Edge_updated_logo-2.pdf)

<sup>6</sup> <https://fishy-project.eu/promotional-material/h2020-fishy-infographic-wood-based-panels-trusted-value-chain>

<sup>7</sup> [https://fishy-project.eu/sites/fishy/files/public/content-files/2021/F2F\\_Infographic\\_F2F.jpg](https://fishy-project.eu/sites/fishy/files/public/content-files/2021/F2F_Infographic_F2F.jpg)

<sup>8</sup> [https://www.youtube.com/watch?v=y3Lr5\\_EvM0w&t=1s](https://www.youtube.com/watch?v=y3Lr5_EvM0w&t=1s)

<sup>9</sup> <https://www.youtube.com/watch?v=gImAd1KDLd4>

<sup>10</sup> <https://www.youtube.com/watch?v=5sGB-RL14m8>



JANUARY 2023

From the point of view of the scientific publications, FISHY efforts have successfully produced one journal, and three conference papers. Check out all our scientific

- publications in <https://fishy-project.eu/publications>:
  - ***BenchFaaS: Benchmarking Serverless Functions in an Edge Computing Network Testbed***, by Francisco Carpio, Marc Michalke and Admela Jukan in IEEE Network, September 2022.
  - ***Benchmarking Various ML Solutions in Complex Intent-Based Network Management Systems***, by Mounir Bensalem, Jasenka Dizdarević and Admela Jukan in MIPRO 2022.
  - ***A model of capabilities of Network Security Functions*** by Cataldo Basile, Daniele Canavese, Leonardo Regano, Ignazio Pedone and Antonio Lioy in NetSoft 2022.
  - ***Incident Handling for Healthcare Organizations and Supply-Chains*** by Eftychia Lakka; George Hatzivasilis; Stylianos Karagiannis; Andreas Alexopoulos; Manos Athanatos; Sotiris Ioannidis; Manolis Chatzimpyrro, Grigoris Kalogiannis and George Spanoudakis in ISCC2022.

#### MORE INFO



[fishy-project.eu/](https://fishy-project.eu/)



[@H2020 FISHY](https://twitter.com/H2020_FISHY)



[@ FISHY Project](https://www.linkedin.com/company/fishy-project)



[@FISHY H2020](https://www.youtube.com/channel/UCFISHY_H2020)



[H2020-FISHY](https://github.com/H2020-FISHY)



[FISHY H2020 project](https://zenodo.org/record/5844441)

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