



Cisco and Barcelona City Council will test IRIS cybersecurity platform to protect EU cities and communities

In close collaboration with a consortium formed by 19 entities throughout Europe, the pilot use case will resemble a real-world smart city environment attacked by cybercriminals

Barcelona, February 1, 2022. – In Europe, IoT connexions will account for almost 60% (3.6 billion) of all networked devices by 2023¹. As smart cities continue to expand their IoT and AI-enabled platforms, new cyberattacks emerge. Identifying, responding, and sharing data related to attack vectors among security practitioners is getting more complex.

The [H2020 IRIS](#) project aims to deliver a framework that will support European CERT and CSIRT networks detecting, sharing, responding, and recovering from cybersecurity threats and vulnerabilities of IoT and AI-driven ICT systems, in order to minimize the impact of cybersecurity and privacy risks.

The city of Barcelona is one of the three European smart cities -among Helsinki and Tallinn- selected to demonstrate and validate the cybersecurity platform. Cisco, along with the consortium, will provide the technical solutions and expertise for this pilot throughout Barcelona City Council's urban IoT network, along with national CERTs, CSIRTs and cybersecurity authorities.

Real-world environment attack

In Barcelona, the platform will be tested during the last 18 months of a 3-year project over several connected tramway stations linked to the City Council's IoT urban network. [Cisco Cyber Vision](#) solution - which combines protocol analysis, intrusion detection, and behavioral analysis- will use AI technology to detect, monitor and report the cyberattacks to the IRIS platform in real-time.

The pilot use case aims to secure the smart city's IoT and control systems against confidentiality and integrity breaches, taking into consideration human and organisational factors. The City of Barcelona has implemented a multi-faceted IoT edge-cloud infrastructure combining and collecting telemetry from a vast array of existing devices and systems (e.g., lampposts, parking, traffic, energy consumption and ambient sensors).

Federated threat intelligence

The IRIS concept is proposed as a federated threat intelligence architecture that instates three core technological and human components into the threat intelligence ecosystem: The Collaborative Threat Intelligence module; The Automated Threat Analytics module; and the Cloud-based Virtual Cyber Range.

Consisting of 19 partners from 12 European countriesⁱⁱ, the IRIS EU project officially launched its activities with its consortium kick-off meeting held virtually in September 2021. The IRIS platform will be made available, free of charge, to the European CERT and CSIRTs, by the end of the project.

"IRIS is uniquely positioned to provide a high impact solution to support the operations of European CERTs and CSIRTs for coordinated response to large-scale cross-border cybersecurity incidents and crises," mentions **Mr Nelson Escravana from INOV, the Project Coordination Team.**

"The complexity for detecting and reporting attack vectors is further aggravated by a larger IoT and AI smart cities surface," says **Xavier Azemar, Head of Barcelona Innovation Center and Cisco Innovation**



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement no 101021727. Content reflects only the authors' view and European Commission is not responsible for any use that may be made of the information it contains.



Labs at Cisco Spain. *“We are delighted to being part of this co-innovation project aimed to perform autonomous response and self-recovery procedures.”*

“Barcelona is one of Europe's leading smart cities, using innovative technologies during the last decade to improve the daily lives of its residents,” states **Michael Donaldson, General Manager of BIT Habitat Foundation at Barcelona City Council.** *“Now Barcelona is developing an Urban Lab in the area of 22@ neighbourhood that will be the test bed for different projects and companies. We are going to use all this area for testing de different use cases of IRIS project in a real urban space that, is the perfect stage to test this innovative platform to help protect European communities.”*

About Cisco

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For more information:

Project Coordinator

INOV - Instituto de Engenharia de Sistemas e Computadores, Inovação, (INOV), Portugal
coordinator@iris-h2020.eu

Cisco Spain

Ariadna Hernández
ariahern@cisco.com

ⁱ [Cisco Annual Internet Report 2020](#), including Western, Central, and Eastern Europe data.

ⁱⁱ The IRIS consortium comprises of public organizations, SMEs with cutting-edge cyber technologies, large industries as service providers as well as research and academic partners with significant achievements to cybersecurity and privacy technologies.

