

CONNEXIONS Newsletter

InterCONnected NEXt-Generated Immersive IoT Platform of Crime and Terrorism

DetectiON, PrediciON, InvestigatiON, and PreventiON Services

Issue 4, November 2021



EDITORIAL

As we currently walking through the last semester of 2021, only one month away from 2022, we are still experiencing the COVID-19 pandemic, but we have managed to adapt to this new era and continue our fruitful work. During the summer, the project's second (technical) review took place and the progress as well as the project results were presented. Our plans for the future are to continue our hard work until the completion of the project and to implement the many activities that we have already planned.

PROJECT PROGRESS

The summer period was a busy one for the CONNEXIONS project. CONNEXIONS managed to complete another successful review by the European Commission (EC) that took place on the 3rd of June 2021. The progress of the project was reported in detail to the EC and the current status of the expected outcomes were discussed. The EC representatives welcomed the achievements of the project so far and encouraged the consortium members to keep up their hard work towards the last months of the project.

Moreover, during the previous period, the 2nd version (second prototype) of the CONNEXIONS platform was successfully prepared by the members of the consortium. This iteration included the integration and update of different components and tools in the CONNEXIONS platform, related to multimodal data extraction, understanding, integration, correlation, retrieval, and delivery services; (ii) immersive environments for improving situational awareness, investigation, and training capabilities; and (iii) the Operation Command Centre for real-time management of LEA operations.

In order to validate the CONNEXIONS second prototype, the 2nd iteration of the CONNEXIONS Pilot Use Cases (PUCs) was concluded as well during the summer. This iteration of the PUCs was completed successfully, satisfying all the technical requirements and expectations in terms of functionalities of the platform which was in turn tested under different scenarios.

The consortium members are currently working in the third development cycle of the project towards the preparation of the final CONNEXIONS system until the completion of the project with the main aim of fulfilling all user requirements and providing a set of next generation prevention, investigation, and mitigation services in the fight against crime and terrorism.



CONNEXIONS Pilot Use Cases

CONNEXIONS PUC1

The second iteration of **PUC1 pilot test on “Counter-terrorism security in large scale public events”** was organised by the **Center for Security Studies (KEMEA)** and took place in Athens, on May 25th, 2021. The simulated scenario was about an outdoor **large scale public event** supposed to be attended by **state dignitaries and civilians**. Particularly important was the **interest of Hellenic Police** to participate to the on-site tests and validation of the platform tools. Due to the COVID-19 pandemic, technical partners participated remotely and were available online to offer their guidance and assistance in case of need.

The pilot demonstration took place at KEMEA premises in Athens. Due to the COVID-19 pandemic situation, special measures were put in place to ensure the safety of all pilot participants. KEMEA personnel and Hellenic Police officers participated in the pilot **tests for the execution, validation, and evaluation of CONNEXIONS technologies**. All functionalities of **CONNEXIONS platform** were tested and evaluated as planned, while, upon the completion of the demonstration, KEMEA personnel and Hellenic Police officers, who acted as platform operators, provided their feedback by filling in a questionnaire.

The **2nd iteration of PUC1** was successfully completed and all functionalities were tested according to the plan. Hellenic Police officers **were impressed by the capabilities of CONNEXIONS platform tools**, and they **recognised the potential of these tools to improve the performance of their operations and reduce time and effort**.



(Hellenic Police Officers during the PUC1 implementation at KEMEA premises)



CONNEXIONS PUC2

The second iteration of the pilot test for **PUC2 “Human trafficking investigations and mitigation”** took place on June 23rd, 2021 at **Policia Judiciária** premises. This pilot aimed to provide and validate a proof-of-concept tool that will support future **human trafficking investigations and modern-day slavery across Europe**, dealing with the sexual exploitation of victims by organised crime groups.

The technology provided by the **CONNEXIONS platform** allowed to assist officers during the preparation phase in implementing the best security measures for investigating a location involved in a human trafficking case through the **use of a Virtual Reality (VR)** application. In addition, in the operational phase, it allowed officers and those commanding them to get an overall idea of the situation through the **use of Body-Worn Cameras (BWC) and Augmented Reality (AR) glasses** and allow to mobilise teams in real time.



(Police officers from Policia Judiciária during PUC2 implementation)

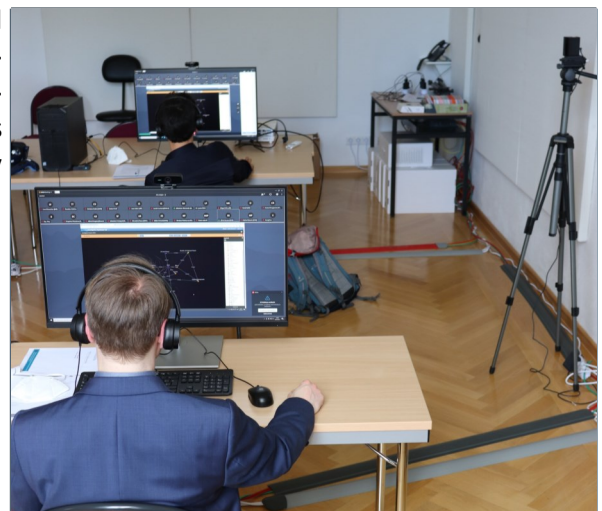
CONNEXIONS PUC3

PUC3 concerns **“Crime investigation and training through 3D reconstruction”** and aims at testing and validating the use of **3D reconstruction scans** through **Virtual Reality** applications. This is vital to ensure that investigations by law enforcement agencies can be properly carried out in the sense of **collecting the available evidence quickly** (before it gets lost). Accordingly, tools have been developed within the framework of **CONNEXIONS** to preserve evidence through **3D reconstruction scans**, which can be re-visited with the help of **Virtual Reality** applications. Moreover, one feature of the **CONNEXIONS** platform supports the analysis of **hypotheses about criminal activities** that might have occurred at the to-be-studied scene.

The pilot was organised by partner **University of Applied Sciences for Public Services in Bavaria – Department of Policing (BHP)** with the support of the **Munich Police Department (MPD)** and was held on May 20, 2021 at BHP’s premises. A preceding training session took place the day before, on May 19, 2021.

Due to the COVID-19 pandemic the pilot only included a limited number of participants that gathered in person, while other participants, as well as technical partners, joined the pilot online. The efficient communication between the pilot organisers and fellow consortium members ensured that the pilot could be carried out smoothly.

Participant feedback was substantially positive and encouraging, which indicates that the development of the above-mentioned technical tools, made an impressive progress; some suggestions for further improvements were also provided.



(Crime scene experts from the Munich Police Department and the University of Applied Sciences for Public Services in Bavaria - Department of Policing during the implementation of PUC3)



CONNEXIONS – DISSEMINATION & COMMUNICATION ACTIVITIES

During the summer only a few major events were planned. However, the **CONNEXIONS project partners** participated in a total number of **four events**, both online and physical. Further, **three more** publications were published, counting until now **twenty-one** publications in total! On the CONNEXIONS website, readers can find [here](#) all available publications and read them online.

The project's **social media** pages are highly active and every dissemination activity is communicated through them. Finally, we are extremely proud as our project is among the top trends of one of our consortium partners official website.

CONNEXIONS Project Next Steps

The **CONNEXIONS project** is actively continuing its planned activities walking through its final steps of implementation. Currently we are organising **three online** webinars each one linked with one of our Pilot Use Cases. In these webinars, we will further explain each Pilot Use Case and present the results and outcomes through them. We will **disseminate our activities through our social media** pages and related material will be published at the CONNEXIONS website.



Finally, it is always a pleasure to participate in **online events and collaborating with other EU projects**.

Stay tuned with the **CONNEXIONS project** by following our social media and frequently visiting our website!



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