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AUGUSI ZUZ







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Budget

€ 7 Million 100% EU-funded



Consortium

**14 Partners** 7 countries



Duration

**36 Months** 07/2020 - 06/2023

# EXTRACT FORENSIC INFORMATION

for Law Enforcement Agencies from Encrypted Smartphones



## Message from the Coordination Team

The intention of this Newsletter is to open a new communication channel in order to provide news on the project progress and to discuss ongoing topics relevant to EXFILES for internal and external project partners, stakeholders and all other interested bodies. For more detailed information about the project, we invite you to visit our project website, which is constantly updated with the latest project related news: www.exfiles.eu. The project has successfully started with a virtual kick-off meeting on 8<sup>th</sup>-9<sup>th</sup> July

2020. The event was coordinated by TECHNIKON, with the main purpose of getting to know each other and to strengthen further collaborations. Hence, part of the agenda was the introduction of all the partners involved. In addition, the work packages, including technical discussions and the planning of the next steps, took place. Since the kick-off, the consortium has been virtually meeting on a regular basis and working relentlessly toward achieving the project objectives.





## The EXFILES Consortium

The EXFILES consortium consists of fourteen partners from seven different Countries:



More information about the consortium can be found on the <u>project website</u>.

## **Main Project Information**

Technological advances and development of sophisticated functions in mobile devices has led to new usages and dependencies. Mobile phones are often a key factor in criminal cases, intrusions, intellectual property theft, security threats, and more. The data stored in these devices may contain critical evidence associated with the above-mentioned crimes. The latest generation of devices incorporate new security features and encryption schemes to "protect" the device and its associated user data. The problem with this occurs when rapid processing of critical evidence by various information retrieval techniques is slowed down, or even made impossible. The mobile device forensics field is a challenging area for forensic analysts particularly given the increasing number of data encryption mechanisms.

The EXFILES project aims to provide law enforcement agencies (LEAs) with new tools to extract data and associated evidence from these devices in strict legal contexts. A unique consortium of five LEAs, universities and cyber security companies from the EU have joined forces to address these challenges. Together, they defined three areas of work on technical data extraction techniques, namely software exploitation, hardware methods and combined methods. In addition, tools and methods inspired by other areas of information security (e.g. security assessments based on common criteria) will lead to new judicial methods of accessing data for lawful investigations. Another unique dimension of EXFILES is the clear focus on the ethical and legal aspects of research and exploitation as well as dissemination and training activities for the next generation of forensic experts. The main objective of EXFILES is to improve Law Enforcement Agencies' techniques and methods, to extract digital evidence from modern encrypted smartphones used by criminals based on holistic approach (both software and hardware).



## **EXFILES Objectives**

Categorize smartphones used by criminals

Advance and update existing tools to improve reverse engineering of specific mobile devices

Combine software and hardware techniques to produce advanced solutions

Make evidence extraction from modern encrypted smartphones affordable and practical

Improve LEAs capabilities regarding encryption and increase information sharing

Provide guidelines and recommendations for lawmakers and LEAs

Evaluate the results against real use cases

## **EXFILES at a Glance**

EXFILES provides mobile forensic technologies to Law Enforcement Agencies (LEAs) to enable them to effectively fight against crime and terrorism by empowering them to extract digital evidence from modern encrypted smartphones.

## EXFILES generates rich interaction between European LEAs, research teams and testing laboratories to share forensic knowledge, resulting in:

- Combining the heterogeneous expertise of the partners (hardware, software and cryptography) to create novel solutions
- Adapting usual techniques of Common Criteria cybersecurity testing laboratories to address challenges LEAs face
- Providing tools and guidelines for fast and reliable mobile forensic analysis
- Setting up a collaborative platform to share these methods for European LEAs

EU is lagging behind in mobile devices forensic technology. EXFILES develops the technology and the expertise to ensure that the European Union minimizes the dependency on external providers. EXFILES benchmarks its innovative solutions against two forensic pilots.

## **EXFILES Media**



### Podcast: EXFILES E01

#### Europe Fights Against Crime and Terrorism

We speak with the technical lead from EXFILES, Assia Tria. She joins us from CEA, a technological research organization and project partner based in France.

Listen now!



### Podcast: EXFILES E02

**Europe Fights Against Crime and Terrorism** We speak with the Nico from one of the world's leading forensic laboratories...the Netherlands Forensic Institute.

Listen now!



## Podcast: Ethics & Technology E04

### Ethics and Technology – a Prerequisite for European Research: Engineering and Technology

Today Marcel Moritz joins our ethics conversation. He manages Legal, Ethical and Societal Issues in a EU funded project which addresses complex forensic tools for law enforcement agencies.

Listen now!



### Video: EXFILES

Extract Forensic Evidence for Law Enforcement Agencies from Encrypted Smartphones Watch now!



### **Past Events**

**Kickoff meeting** 08<sup>th</sup> - 09<sup>th</sup> July 2020 @Virtual event

Secure Societies "project to policy kick off seminar" 22<sup>nd</sup> - 23<sup>rd</sup> March 2021 @Virtual event

Technikon's financial webinar for H2020 projects 24<sup>th</sup> March 2021 @Virtual event

IMB-CNM Talks: Presentation of the European project EXFILES 04<sup>th</sup> June 2021 @Virtual event

All past and upcoming events can be found on the EXFILES official webpage:

exfiles.eu/events