

Principal Objective

The principal objective of INSPECTr will be to develop a shared intelligent platform and a novel process for gathering, analysing, prioritising and presenting key data to help in the prediction, detection and management of crime in support of multiple agencies at local, national and international level.

Data

This data will originate from the outputs of free and commercial digital forensic tools complemented by online resource gathering. Using both structured and unstructured data as input the developed platform will facilitate the ingestion and homogenisation of this data with increased levels of automisation, allowing for interoperability between outputs from multiple data formats.

Knowledge Discovery

Using various knowledge discovery techniques, the investigator will be allowed to visualise and bookmark important evidential material and export it to an investigative report.

In addition to providing basic

and advanced cross-correlation analysis with existing case data this technique will aim to improve knowledge discovery across exhibit analysis within a case, between separate cases and ultimately between interjurisdictional investigations.

INSPECTr will employ big data analytics, cognitive machine learning and blockchain approaches to significantly improve digital and forensics capabilities for pan-European LEAs.

INSPECTr intends to reduce the complexity and the costs in law enforcement agencies and related actors to use leading edge analytical tools proportionally and in line with relevant legislation.

The final developed platform will be freely available to all LEAs.

Ethics and Societal Impact

The INSPECTr project seeks to increase the security of the EU, while complying with the tenets of Responsible Research and Innovation and national and European research ethics requirements in a manner that that respects and preserves civil liberties.



FEBRUARY 2023

Project Management for the Successful Completion of Deliverables to Schedule within Budget.

Compliance with European Societal Values, Fundamental Rights and Applicable Legislation.

User Friendly Investigative Interfaces for Case Management and the Analysis of Big Data.

LEA Capacity Building Programme, Adoption Actions and Policy Recommendations.

LEA Connect – Ingest – Query Toolset in Compliance with the WP2 Reference Framework.



A Unified Open Platform with Backend Investigative Intelligence Capabilities.

LEA Living Labs
Network. Iterative Testing and
Platform Refinement Using
LEA Designed
Scenarios.



A Reference Framework for Standardisation of Evidence Representation and Exchange Between INSPECTr Nodes.

SEPTEMBER 2019
PROJECT WORK PACKAGES

PROJECT GOALS

Research

Leveraging and integrating existing research outputs that are currently attempting to address the main challenges of modern digital forensics, INSPECTr will develop a multi-jurisdictional platform for digital forensics and intelligence gathering.

Technology

Utilising a high-tech approach to solving high-tech crime with a final developed platform made freely available to all LEAs, a platform that supports digital forensics evidence capture and unified federated analysis at both national and international level, iteratively designed and tested under guidance from LEA partners.

Privacy and Ethics

The platform will incorporate privacy and ethics by design principles and take into consideration national and international legislation.

Reduced Complexity

INSPECTr intends to reduce the complexity and the costs in law enforcement agencies by providing cutting-edge analytical tools, proportionally and in line with relevant legislation (including fundamental rights). The platform will provide extended options for multi-level and cross-border collaboration, facilitating reactive and preventive policing through the detection and prediction of cybercrime operations/trends.

Innovative Ideas

The EU funded INSPECTr project will integrate a range of high-tech approaches including Big Data analytics, cognitive machine learning and blockchain technologies into a shared intelligence platform improving digital and forensic capabilities whilst reducing complexity and cost of cross-border collaboration.

TECHNICAL INNOVATIONS



ingestion from commercial and open source forensic tools

standardisation of evidence representation



suites of new tools for online investigations, triage and digital forensics

cognitive computing applications for investigators



full case management with automated analysis

crime detection and forecasting



detection of linked cases in other jurisdictions

exchange of evidence with other jurisdictions.





blockchain as an auditing tool for evidential integrity

LEA ENGAGEMENT

The needs of LEAs will be met through constant consultation with LEA partners and external agencies. Our living labs approach to user-centric design and iterative experimentation, will ensure that LEA consortium partners' needs are met. However the adoption of the platform will be dependent on general acceptance, so external stakeholders will also be consulted.

Use Case Development

This task is currently under way, and includes the development of three, highly complex, 3-part use cases. The themes chosen by the LEA developers are Financial Fraud, CSAM and Terrorism and mocked evidence is generated to be used during testing of the platform.

Iterative Feedback and Testing Cycles

LEA will investigate the mocked cases at various stages in the project, as technology is made available. They will report on the usability, accuracy and functionality of the platform and offer suggestions on improvements to meet their needs.

Impact Assessment

LEAs have helped define the Key Performance Indicators of the project, through partner consultations and external stakeholder workshops. The partner LEAs will ultimately test the mature platform on closed-case investigations, to measure the effectiveness of the platform by comparison to the original investigation. The impact of the project outputs will also be validated by feedback from the wider LEA community, following mocked investigations during workshops and webinars.



PROJECT PARTNERS18 partners, including 9 LEAs



























Consiglio Nazionale delle Ricerche













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