How to navigate the EU R&D landscape

Perspectives from a Project Coordinator

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Workshop – Cyber Security Opportunities in Horizon Europe

10th June, 2021

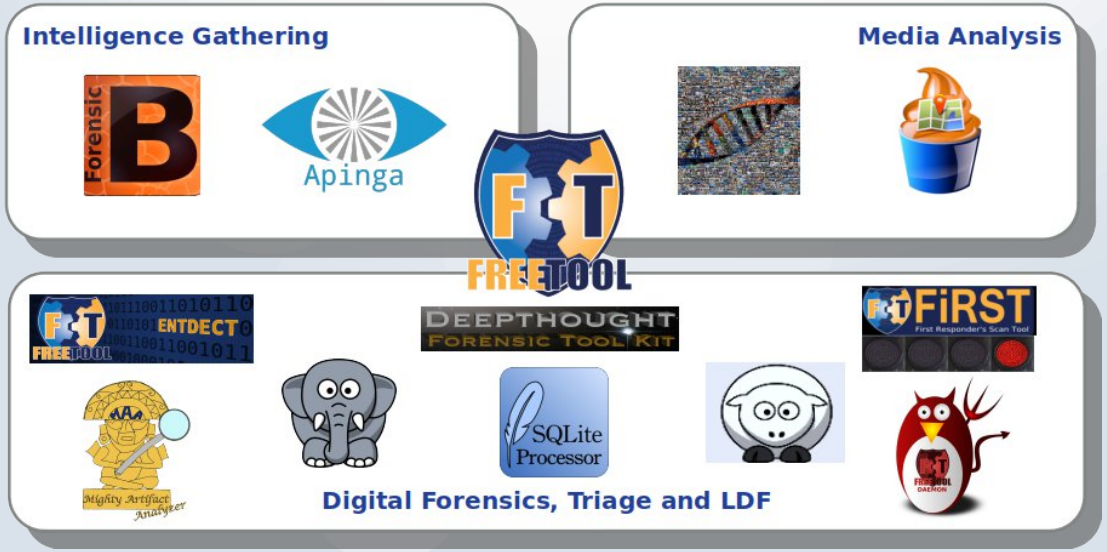
Don't wait for a project call to decide to do something
Consortium building and proposal writing takes time
Some preparatory work can be done

START WITH AN IDEA

Our idea

Enhancing the FREETOOL Project

FREETOOL
Free Reliable Tools for Investigating Cybercrime



Improvements

- interface (web/remote)
- enhanced tools
- easy deployment
- analytics
- reporting
- interoperability?

Stakeholder Engagement
Market Observation
European Priorities and Successful Proposals
Potential Consortium Partners/Coordinators

PRIOR RESEARCH

Our Research

Stakeholder/Markets

- reliance on commercial tools
- budgetary constraints
- challenges with media processing
- backlogs prevalent
- lack of proactive policing
- obstacles to collaboration
- obstacles to evidence exchange

Repeating EU Priorities

Crimes Against Children

- Directive 2011/93/EU

Terrorism

- Directive 2017/541

EU Cybersecurity Strategy

- Drastically reducing cyber crime
- Building operational capacity to prevent, deter and respond

Inproving our Idea

Improvements

- interface (web/remote)
- enhanced tools
- easy deployment
- analytics
- reporting
- interoperability?
- common data format
- affordable pathway
- crime detection/prediction
- AI/ML tools for media processing
- remote correlation of evidence
- transfer of evidence

Required Expertise

- LEAs
- Digital Forensics
- Intelligence
- Data Storage and Analysis
- Security
- Legal
- Ethical
- Machine Learning / AI
- Training Development

Answer the funding call’s objectives
Review your research and identify gaps
Engage with your national contact point for support
Build or join a strong consortium
Emphasise Innovation, Exploitation, Ethics and Dissemination

PREPARING A SUCCESSFUL PROPOSAL

SU-FCT02-2018

Secure societies - Protecting freedom and security of Europe and its citizens

Technologies to enhance the fight against crime and terrorism

Scope:

There is a growing need to focus on technology opportunities provided by new and emerging technologies. To this end, it is necessary to identify new knowledge and targeted technologies for fighting old, new and evolving forms of **criminal and terrorist behaviour** supported by advanced technologies. Challenges are numerous. In conventional investigations, **rapid and near real-time forensics** is often crucial for preventing subsequent attacks or crimes. A consequence of the increasing digitisation of society and ever increasing adoption levels is that virtually any type of crime has a digital forensics component, which is a challenge in itself. Money-flow tracking represents yet another challenge. **The issues of location and jurisdiction need to be addressed, taking into account highly probable cross-border nature of such crimes**.

SU-FCT02-2018

Sub-topic 2: Digital Forensics in the context of criminal investigations

New forensic tools, techniques and methodologies are needed, based on **common practices, standards, protocols and/or interoperability requirements** that allow for **rapid retrieval, storage, analysis and validation of digital evidence** (including the one stored in the cloud) that upholds in court, and enables investigations to identify perpetrators as well as victims, **in particular in cases of child sexual abuses**. They should **focus on data gathering, data exploitation, and speedy exchange of information**. All types of crime, terrorist activities and propaganda, and malicious acts by foreign-state perpetrators are concerned. Research in this domain should take into account new and emerging trends (for instance, abuse of encryption for criminal or terrorist purposes), **while fully respecting fundamental rights such as the right to privacy and the right to protection of personal data**.

The INSPECTr Project

inspectr-project.eu

- a shared intelligence platform and a novel process for gathering, analysing, prioritising and presenting key data
- help in the prediction, detection and management of crime
- outputs of free and commercial digital forensic tools complemented by online resource gathering.
- big data analytics, cognitive machine learning and blockchain approaches
- cross-correlation analysis to improve knowledge discovery across a case, between separate cases and ultimately between interjurisdictional investigations
- Technical solution to the transfer of evidence

INSPECTr

Intelligence
Network &
Secure
Platform for
Evidence
Correlation &
Transfer

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 833276.

INSPECTr Consortium

AGS Ireland	UCD-CCI Ireland	IGPR Romania	LSP Latvia	PSNI Northern Ireland	GN France
BFP Belgium	CNR Italy	ILS Belgium	MoJN Netherlands	RUG Netherlands	PHS Norway
EPBG Estonia	TRI UK	UNIL Switzerland	EBOS Cyprus	SIREN Ireland	VLTN Belgium

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INSPECTr Consortium

Law Enforcement Agencies

Field Experience,
End-users,
Testing,
R&D,
etc.

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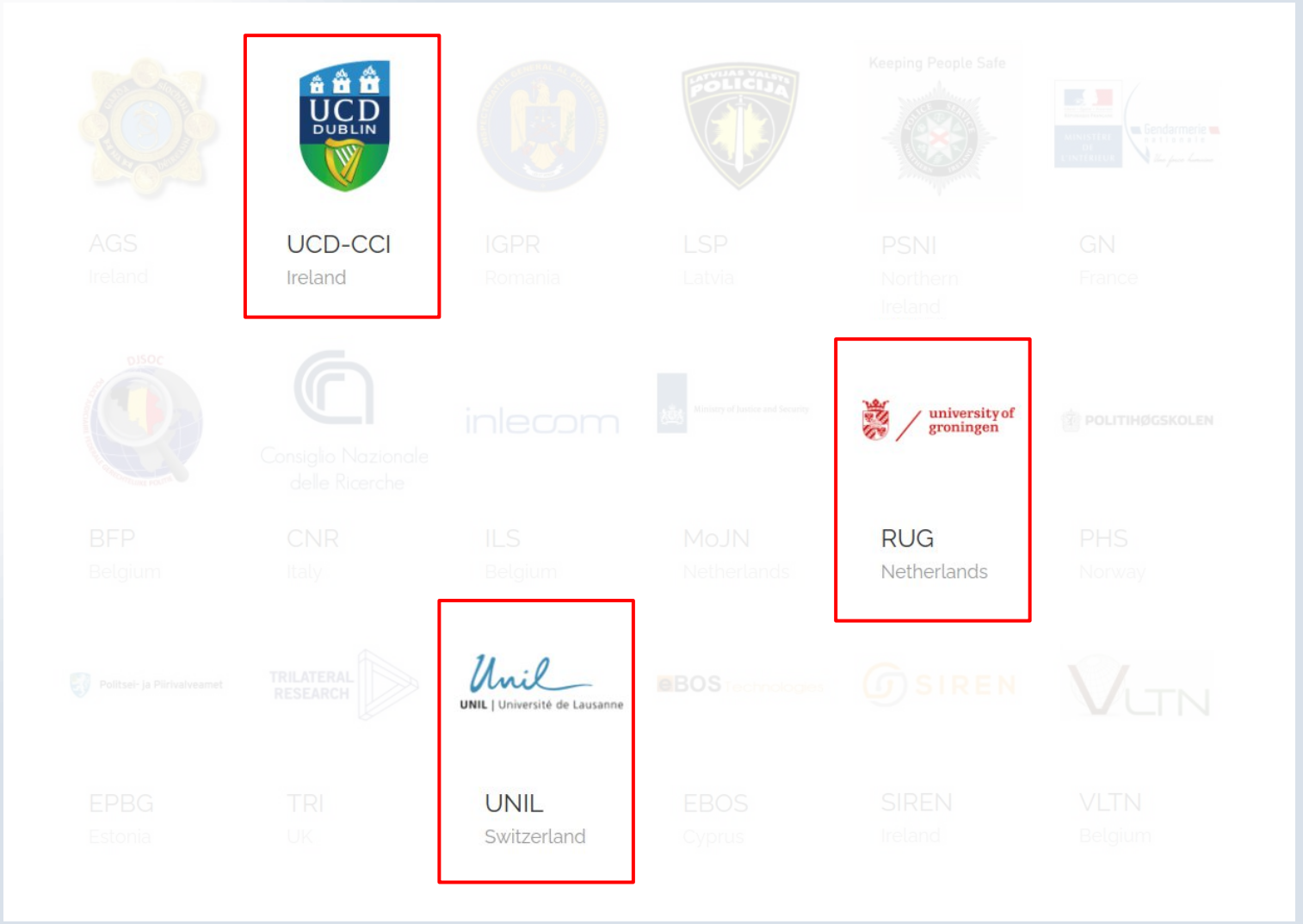
INSPECTr Consortium

Academia

Research and Development,
Standardisation Expertise,
Project experience,
Legal Expertise,
etc.



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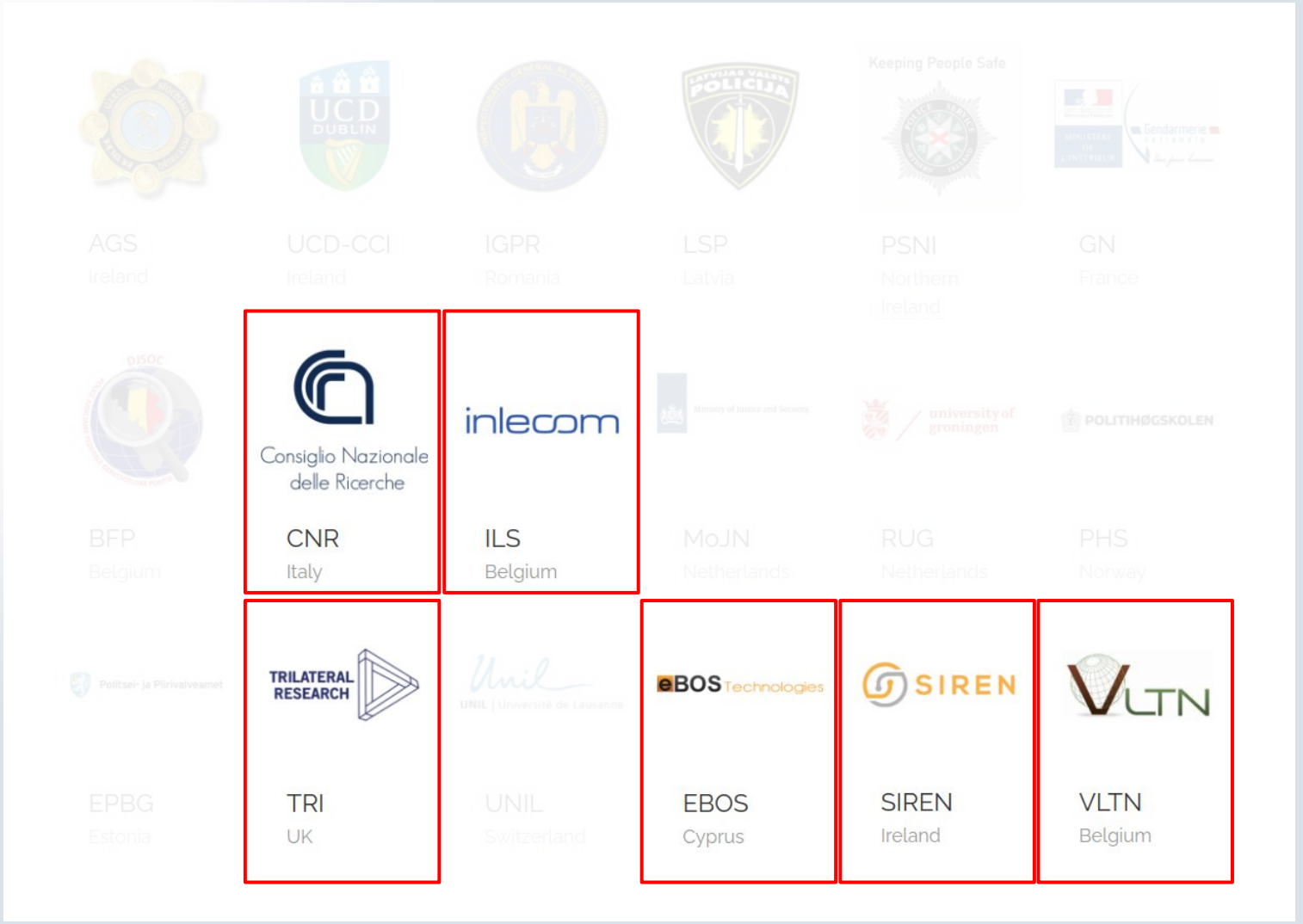
INSPECTr Consortium

Industry Partners

Research and Development,
Standardisation expertise,
Project experience,
Legal, ethical expertise,
etc.



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Start at the proposal stage
Consider your available resources and commitments
Make sure you are aware of the tasks and deliverables (avoid future pandemics!)

PROJECT ENGAGEMENT

INSPECTr's Work Package 5

WP Number	WP 5											Start Date					8	End Date	42
WP Title	Investigative Analyst Interfaces																		
Participant No	P1	P2	P3	P4	P6	P7	P9	P10	P11	P12	P13	P14	P15	P16	P17	P18	P19	P20	
Short Name of Participant	CCI			EBOS						PHS				SIREN					
Person/Months	10			14						14				24					

Objectives

Due to the data-driven nature of the platform and the subjective interpretation of evidence, INSPECTr's front-end user interface needs to provide two main functions; (a) create complex analysis and processing workflows utilising existing tools (i.e.WP4 tools for automated processing), and (b) allow investigators to explore the data in a user friendly and coherent manner. The interfaces will use the backend capabilities developed in WP3 and WP4, and will be designed for each of the project's use cases (section 1.2) and can be

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INSPECTr Task 5.1
Description of Work

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T5.1 Generic reusable, embeddable lightweight interactive investigative widgets. (m8-m42) Input to: T5.2 Leader: EBOS Participants: SIREN, CCI Investigate and result a lightweight manner to enrich existing software environments (E.g. existing LEA portals, applications, webpages) with simple yet lightweight smart widgets powered by the backend created in WP4. This will provide great benefits in situations where a completely new tool is not always possible to adopt. An example of these can be quickly embeddable "search windows" capable of providing quick lookups based on the entities mined in the current application page, or "entity views" e.g. "view of suspect 1234"

Deliverables
D5.1: Generic reusable, embeddable lightweight interactive investigative widgets. [EBOS] (M24) First version of lightweight version of tools implementing web-based application extensions of searching and navigation, delivering an easy to configure packaged functionality for WP5 outputs. D5.2: Generic reusable, embeddable lightweight interactive investigative widgets – Final Version. [EBOS] (M42) Lightweight version of tools implementing web-based application extensions of searching and navigation, delivering an easy to configure packaged functionality for WP5 outputs.

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INSPECTr Experience
Time Flies!

- 3 years seems a long time. It is not.
  - First 6 months establishing working partnerships, infrastructure setup, design, etc.
  - Next 6 months deliverables, annual reporting, etc.
  - Most of year 1 dominated by ethics
  - Continuous meetings, dissemination activities, mid-term reviews, etc.

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INSPECTr Experience: Things may not go to plan

- COVID was a major impact at month 7
  - Partners were forced to leave (other commitments)
  - Other partners required to reduce commitment to project
  - EC sympathetic, extensions given to most projects

- Often things will not go as expected on a project
  - Grant amendments are possible
  - Quite a challenging process sometimes

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TAKE THE JOURNEY

The road will soon become familiar.

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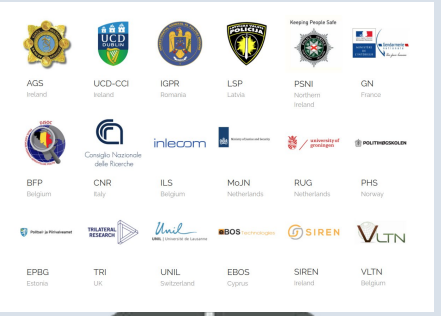
The road will soon become familiar.
You will meet like-minded travellers.

TAKE THE JOURNEY

The road will soon become familiar
You will meet like-minded travellers
It all starts with an idea!

TAKE THE JOURNEY