



D6.3 Dissemination, Communication and Exploitation Activities Report 2 (Document, Report)

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1.0	31/05/2024	Nikos Avgerinos	Final version for submission

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Abbreviations

AI	Artificial Intelligence
BayHfoD	University of Applied Sciences for Public Administration in Bavaria
CEPOL	European Union Agency for Law Enforcement Training
EACTDA	European Anti-Cybercrime Technology Development Association
ECTEG	European Cybercrime Training and Education Group
EU	European Union
GA	Grant Agreement
GCPI	Inspectoratul de Politie Judetean Galati
GDPR	General Data Protection Regulation (GDPR)
GPI	Inspectoratul General al Politiei
IDIAP	Fondation de l'institut de recherche IDIAP
KEMEA	Kentro Meleton Asfaleias – Center for Security Studies
KER	Key Exploitable Result
KPI	Key Performance Indicator
LEA	Law Enforcement Agency
PT	Performance Technologies
TL	TRACY Labs
TRACY	a big-data analyTics from base-stations Registrations And Cdrs e-evidence sYstem
WP	Work Package

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Executive Summary

The Dissemination, Communication and Exploitation Activities Report 2, developed under the Dissemination, Exploitation and EU Impact Work Package (WP6), presents an updated version of the TRACY Project's comprehensive strategy for dissemination, communication, and exploitation as explained in D6.1 and the reported activities until M6 of D6.2. This report encompasses various key aspects, including:

- Updated dissemination and communication objectives and channels
- Updated and narrowed identification of target audiences, stakeholders, key messages, and activity types
- Status of the project's visual identity and online presence
- Status of key performance indicators (KPIs)
- A detailed and updated activity roadmap outlining partners' responsibilities
- Updated Key Exploitable Results (KERs)

This report serves to present the current status quo of the activities that were planned in D6.1. As such it is a vital reference for consortium partners, to demonstrate what has already been achieved and where there is an urgent need for improvement. Thus, the document serves to direct their individual and collective endeavors towards disseminating, communicating and exploiting project outcomes with the aim of achieving high visibility, accessibility, and effective promotion of TRACY. Furthermore, this report establishes a framework for evaluating the impact of the TRACY project's communication and dissemination activities as well as for fostering the exploitation and sustainability of the project outcomes.

In M18 the next updates on Dissemination, Communication and Exploitation Activities will be given, to ensure that its objectives are successfully met and any potential environmental changes are adequately accommodated.

Effective dissemination, communication, and exploitation are crucial steps for the successful adoption of the TRACY Platform. An important basis for all dissemination, communication, and exploitation activities is Article 17 of the Grant Agreement (GA). All beneficiaries commit to adhering to and actively pursuing the stipulations of Article 17 and all annexes throughout the project, with special attention to ensuring the visibility of EU funding when communicating and disseminating project-related information.

1 Introduction

Law Enforcement Agencies (LEAs) must keep pace with increasingly sophisticated criminal activities that leverage advanced technologies. This necessitates their adoption of cutting-edge technologies and AI applications to avoid falling behind. However, it is crucial to balance this progress with compliance to fundamental rights and personal data protection laws, such as the European GDPR. These legal obligations can sometimes complicate the process of criminal prosecution.

The TRACY project, a big-data analytics system focusing on base-station registrations, CDRs, and e-evidence, aims to address these challenges. It seeks to showcase new innovative approaches and AI-based methods for handling non-content data (metadata) provided by Electronic Communications Service Providers (ESPs). These approaches have the potential to greatly assist LEAs in investigating and prosecuting cases of organized crime and terrorism.

Therefore, the primary objective of TRACY is to develop and implement an open-source platform that utilizes AI and telecommunications metadata within a fully operational environment while respecting fundamental rights and personal data protection. To maximize its impact, the solution will be validated by additional LEAs participating in the project, with the intention of continued use beyond its completion. LEA personnel will receive training on the project's outcomes, which will be made accessible to CEPOL. Furthermore, TRACY will create a realistic anonymized dataset and share it with the EU LEA community, including Europol, for their use.

Effective dissemination, communication, and exploitation are crucial steps for the successful adoption of the TRACY Platform. An initial plan for a concise strategy was rolled out in D6.1 - Dissemination, Communication and Exploitation Plan in M3. The TRACY Dissemination, Communication and Exploitation strategy encompass a diverse array of activities aimed at maximizing the project's impact and sustainability of its outcomes. The consortium partners committed themselves to enhancing TRACY's visibility, accessibility, promotion, and overall influence.

This document is an updated version of the initial report covering all activities during the period between M6 – M12 of the project lifetime. It focuses solely on changes and adaptations made in comparison to the previous versions D6.1 and D6.2 of the Dissemination, Communication and Exploitation Activities.

This document is a public document and thus transparently communicates all endeavours to fulfil the activities of Work Package 6 (WP6) of the TRACY project. Additionally, this document addresses the representatives of the HaDEA (European Health and Digital Executive Agency), the Project Officer, and the reviewers' team, to be aware of the project plans and facilitate them in monitoring the fulfilment of the obligations by the partners.

2 Dissemination and Communication Strategy

In Chapter 2 of D6.1, we initially outlined our dissemination and communication strategy. This included detailing the scope of our dissemination plan, identifying target groups, defining dissemination levels, proposing tailored key messages for the TRACY project across different audiences, and explaining our chosen dissemination channels. D6.3 reports any changes related to this strategy as included in previous versions of the relevant deliverables i.e. D6.1 and D6.2.

In the following section, we will focus on updates made to this chapter. Notably, chapters 2.1 "Target Groups and Stakeholders" and 2.2 "Open Access and Archiving" from D6.2 remain unchanged and will not be revisited in this report.

2.1 Dissemination and Communication Channels

This chapter exclusively reports changes and adaptations related to the Dissemination and Communication Channels introduced in D6.1 and elaborated in D6.2. More detailed descriptions can be found there.

2.1.1 TRACY Website changes

2.1.1.1 Updated site menu

The TRACY website <https://tracy-project.eu> was recently extended. As a next version of the project website, PT introduced the frequently updated sections in the site menu:

- **Downloads:** designed to provide access to all the material produced in the course of the project concerning dissemination and overall promotion of the project's outcomes. This page will be constantly updated with related content, such as flyers, brochures, and the rest of the Media Kit material, peer-reviewed publications, public deliverables and project presentations, as presented in

Deliverable No	Deliverable Name	Public Deliverable
D1.1	Project Management Handbook, Quality Assurance and Risk Management	
D2.1	Report on State of the Art, end users' requirements, Uses Cases and Technical Requirements	
D2.2	Data protection impact assessment report	
D2.3	Platform & Appliances Detailed Design Specifications	
D2.4	Revised data protection impact assessment report	
D2.5	Revised Platform & Appliances Detailed Design Specifications	
D3.1	TRACY Platform Prototype (Development Appliance)	
D3.2	Annotate Demonstration Dataset	
D3.3	Athens demonstration	
D4.1	TRACY Platform (Pre-Prod, Production and Demonstration Appliances)	
D4.2	Pilot Assessment Report	
D4.3	Annotated Demonstration Dataset	

Figure 1 List of deliverables as presented in TRACY website

Exciting Announcement: TRACY Project Joins CYBERSPACE LEA Project Cluster!

We are thrilled to announce that the TRACY project has officially become a part of the CYBERSPACE LEA Project Cluster! This significant partnership aligns us with an esteemed community focused on bolstering law enforcement efforts against some of the most pressing challenges of our times, including [...]

[Read more →](#)

Exciting Training Lab Alert!

Get ready to elevate your skills to new heights! We're thrilled to announce our upcoming TRACY LAB #1: TRACY FUNDAMENTALS. Whether you're a seasoned professional or just starting out, this hands-on session is designed to empower you with practical knowledge and real-world applications. 📅 Date: 05-06 February [...]

[Read more →](#)

TRACY's 6-month wrap up

On 2 June, the project's partners were invited to Athens, Greece to attend the Kick-off Meeting (KoM) of TRACY project organized by Performance Technologies S.A.. During this one-day event, representatives from partners' organisations gathered to discuss the activities of the first months of TRACY project. During the [...]

[Read more →](#)

Figure 2 List of announcements in TRACY website

Communications: intends to present the latest project updates and information such as upcoming plenary meetings, technical workshops, participations in events, synergies with other projects, demonstrations, conferences, publications, newsletters, peer-

reviewed papers, blog posts, etc., as presented in



- APR 16**
2024

April 16 - April 17

CYCLOPES Dissemination Event

TRACY will join CYCLOPES Dissemination Event in Vienna next week. The event will bring together members of law enforcement with research and commercial partners to discuss various topics that support successful fight and prevent cybercrime. The event will include a mixture of tool demonstrations, keynote speeches, presentations and interactive sessions to address the priorities previously obtained [...]
- FEB 5**
2024

February 5 @ 8:00 am - February 6 @ 6:00 pm

Research to Reality – Digital Solutions to European Challenges

TRACY will be part of the 'Research to Reality – Digital Solutions to European Challenges', event organised under the Belgian presidency in cooperation with the European Commission that will take place in Brussels on 5 and 6 February 2024. This two-day event is dedicated to explore and stimulate the dynamic interplay between cutting-edge research in digital technologies under Horizon [...]
- DEC 14**
2023

December 14, 2023 @ 9:00 am - December 15, 2023 @ 4:30 pm

CERIS annual event 2023

DG HOME is organising this two-day annual event to bring together security research practitioners, policy makers, researchers, civil society and industry to discuss cross-cutting topics that have a broad and horizontal impact on research and innovation in this domain. TRACY will give a presentation for realistic shareable dataset.

- Figure 3 - Figure 4.

Deliverable No	Deliverable Name	Public Deliverable
D1.1	Project Management Handbook, Quality Assurance and Risk Management	
D2.1	Report on State of the Art, end users' requirements, Uses Cases and Technical Requirements	
D2.2	Data protection impact assessment report	
D2.3	Platform & Appliances Detailed Design Specifications	
D2.4	Revised data protection impact assessment report	
D2.5	Revised Platform & Appliances Detailed Design Specifications	
D3.1	TRACY Platform Prototype (Development Appliance)	
D3.2	Annotate Demonstration Dataset	
D3.3	Athens demonstration	
D4.1	TRACY Platform (Pre-Prod, Production and Demonstration Appliances)	
D4.2	Pilot Assessment Report	
D4.3	Annotated Demonstration Dataset	

Figure 1 List of deliverables as presented in TRACY website

The screenshot shows a section of the TRACY website with three announcement cards. Each card has a title, a brief description, and a 'Read more' link with a right-pointing arrow.

- Exciting Announcement: TRACY Project Joins CYBERSPACE LEA Project Cluster!**
We are thrilled to announce that the TRACY project has officially become a part of the CYBERSPACE LEA Project Cluster! This significant partnership aligns us with an esteemed community focused on bolstering law enforcement efforts against some of the most pressing challenges of our times, including [...]
- Exciting Training Lab Alert!**
Get ready to elevate your skills to new heights! We're thrilled to announce our upcoming TRACY LAB #1: TRACY FUNDAMENTALS. Whether you're a seasoned professional or just starting out, this hands-on session is designed to empower you with practical knowledge and real-world applications. 📅 Date: 05-06 February [...]
- TRACY's 6-month wrap up**
On 2 June, the project's partners were invited to Athens, Greece to attend the Kick-off Meeting (KoM) of TRACY project organized by Performance Technologies S.A.. During this one-day event, representatives from partners' organisations gathered to discuss the activities of the first months of TRACY project. During the [...]

Figure 2 List of announcements in TRACY website

The screenshot shows a news section on the TRACY website with three articles. Each article includes a date, a title, and a short summary.

- APR 16 2024**
April 16 - April 17
CYCLOPES Dissemination Event
TRACY will join CYCLOPES Dissemination Event in Vienna next week. The event will bring together members of law enforcement with research and commercial partners to discuss various topics that support successful fight and prevent cybercrime. The event will include a mixture of tool demonstrations, keynote speeches, presentations and interactive sessions to address the priorities previously obtained [...]
- FEB 5 2024**
February 5 @ 8:00 am - February 6 @ 6:00 pm
Research to Reality - Digital Solutions to European Challenges
TRACY will be part of the 'Research to Reality - Digital Solutions to European Challenges', event organised under the Belgian presidency in cooperation with the European Commission that will take place in Brussels on 5 and 6 February 2024. This two-day event is dedicated to explore and stimulate the dynamic interplay between cutting-edge research in digital technologies under Horizon [...]
- DEC 14 2023**
December 14, 2023 @ 9:00 am - December 15, 2023 @ 4:30 pm
CERIS annual event 2023
DG HOME is organising this two-day annual event to bring together security research practitioners, policy makers, researchers, civil society and industry to discuss cross-cutting topics that have a broad and horizontal impact on research and innovation in this domain. TRACY will give a presentation for realistic shareable dataset.

Figure 3 List of articles under News in TRACY website



Issued Newsletters

1st Newsletter – December 2023

Figure 4 TRACY 1st newsletter available on the website

2.1.2 TRACY LinkedIn Channel

As planned in the DEC plan D.6.1 PT created a LinkedIn channel for the TRACY project:

<https://www.linkedin.com/in/tracy-project-698ab82a1/>

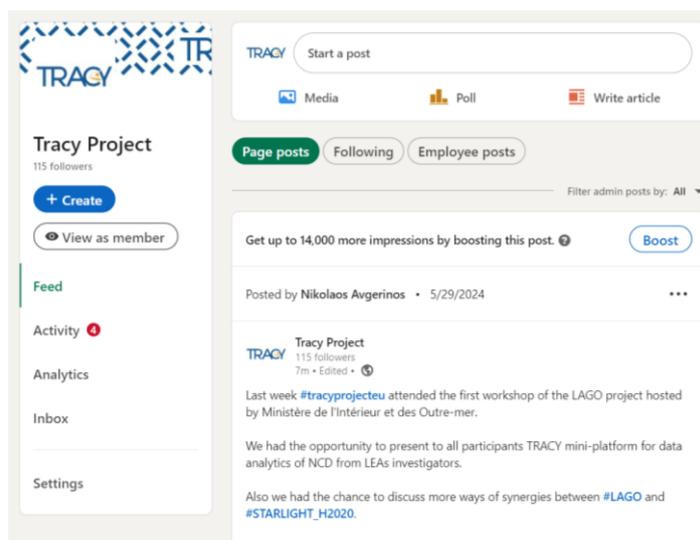


Figure 5: TRACY page at LinkedIn

The LinkedIn channel is a cutdown version of the TRACY website. Performance Technologies will be responsible for maintaining and updating the LinkedIn page, carrying out any updates / reposts as they appear during the course of the project. Partners will also monitor closely the LinkedIn page and update information according to project developments. Partners who have a LinkedIn page for their own organization will share and repost news from the TRACY LinkedIn channel to expand its followership and spread the TRACY messages.

2.2 Dissemination and Communication Material

In relation to D6.1, this chapter reports on the dissemination and communication material produced during the first twelve months of the project. Since no changes were necessary for D6.2 chapters 2.2.1 EU Emblem and Acknowledgement of Funding and 2.2.2 TRACY Communication Kit they still maintain the same as in D6.2.

2.2.1 Newsletters

Newsletters will be produced by PT with input from all consortium partners periodically, every six months, in order to provide updates on project activities and results, relevant events organised by the consortium, or ones that the project has been presented, planning of future events, peer-reviewed publications, etc. Newsletter recipients are stakeholders and interested parties that have subscribed to receiving the periodic issue, through the module available at the project website. The 1st newsletter was produced end of M7 and was uploaded to the project website. The structure of this version is as follows: (1) Brief Summary, (2) Objectives & Use Cases, (3) News, (4) Upcoming events, (5) Project achievements, (6) Meet our partners. The following newsletter will be available by end of M12, while the other versions will be delivered on M18 and M24.



Figure 6 TRACY project 1st newsletter available on project website

2.2.2 Partner Interviews

Based on the dissemination and communication strategy of the project a series of small interviews called “*Meet the partners*” are planned aiming to allow TRACY partners presents their work within the project. The interview is based on three main points: the role of the partner in the project, an update about the latest developments, and next steps in the project.

Feedback from all partners will be gathered and uploaded to the project website to keep visitors better informed. Below the first interview with Timelex is presented.

The screenshot shows the TRACY website's 'Partners Interviews' section. The header includes the TRACY logo and navigation links: HOME PAGE, ABOUT, CONSORTIUM, CONTACT US, DOWNLOADS, COMMUNICATION, PRIVACY POLICY, and NETWORK. The main heading is 'TRACY Partners Interviews'. Below it, the section is titled 'Meet the Partner: TIMELEX'. The content is organized into three questions with corresponding answers in light blue boxes:

- Tell us about the role of your company in this project.**
Timelex is a boutique law firm specialised in the legal aspects of information technology (IT), privacy & data protection (GDPR), intellectual property as well as media & electronic communications. We act as a legal and ethical expert to the project, providing input in the design phase, during development and interpretation as well as with regard to future implementation.
- Can you give an update about the latest developments?**
Most importantly, we have recently finalised the first draft of the Data Protection Impact Assessment (DPIA) to ensure that all activities under TRACY comply with data protection by design and by default. It is important that the legal-ethical assessment is an active part of the development process to ensure project's compliance.
- What are your company's next steps in the project, in relation to the pilot site?**
We will continue to monitor the legal and ethical issues throughout the project regarding the retention and processing of non-content data as well as their production, exchange, access, and overall usage. Additionally, a Data Management Plan will be developed and maintained, which will contain information related to the types and other attributes of data the project will generate/collect, the data standards to be used, and how partners might exploit the data, thus setting robust procedures and supporting GDPR compliance.

Figure 7 TRACY “Meet the partners” interview with Timelex

2.3 Completed Dissemination and Communication Activities

This chapter will provide an overview of the completed dissemination and communication activities up to the date of the last version of this report.

2.3.1 Meetings and Workshops

TRACY Labs Session 1 - The Mobile Network and Data Analytics – 27 & 28 Feb. 2024

TRACY Lab #1 was the first event in the series, with the goal of capability building sessions. The meetings provided the necessary familiarity with the problem domain, the TRACY tools as well as the TRACY methodology. Subsequent Labs will provide more exposure to the rest of TRACY functionality. Additional details can be found in D5.2 and D5.4.

There were two different events:

1. TL1. Athens: an event organized at the premises of PT in Athens.
2. TL1. Remote: an event available through the Teams platform for remote participation.

Table 1: The agenda of the TRACY Lab #1

Day 1: Theory: Presentations on fundamentals
Fundamentals of the Mobile Network
Basic operation of mobile terminals
Basic operation of base stations, antennas, cells, and radio design
Basic operation of terminal handoffs
Principles of Data Analytics and Tools for TRACY
Basic understanding of the TRACY Platform
Data: Representation, Ingestion and processing
Observability: Tableau as a visualization and analysis platform
Mobile Signaling Data Collection and Synthetic Generation
Day 2: Practice: Data Exercises on TRACY related data sets
Actual MSD (mobile signaling data) presentation and analysis
Provide sample MSD data set from an actual mobile device, as the owner moves around an area of Athens
Import data set to Tableau, and perform a basic analysis of it
Exercises
Simulated MSD presentation and analysis
Provide a collection of 100 MSD traces from 100 terminals that have been simulated in a specific area (as with the previous case)
Import it to Tableau and ask simple questions
Analyze the trajectories of 100 terminals and answer basic questions on their presence in different parts of the city at different times
Exercises

TRACY Workshop: Data Analytics for LEAs – 24 May 2024

During M12 of the project a workshop dedicated to Data Analytics for LEAs was organized by PT centered around two state-of-the-art analytics platforms, that can be used to support the LEA investigations. The first platform is SAS Visual Investigator, which transforms criminal investigations with advanced analytics, data integration, and visualization tools. The second platform we present is Chainalysis, a leading blockchain analysis platform used for investigating and preventing cryptocurrency-related crime. Finally, the last part of the workshop provided a round table discussion on the role of Analytics Platforms in law enforcement investigations.

The workshop was organized in a hybrid mode; both physical and online presence was available. Representatives from SAS participated physically while representatives from Chainalysis participated remotely.

From TRACY consortium HPOL participated with 15 representatives (8 of them physically), while GCPI and GPI participated in the event with 6 and 2 colleagues respectively.

Also, external stakeholders to TRACY consortium were also invited by PT by addressing invitations to other EU projects with which TRACY has established synergies, namely LAGO, POLIICE, CYCLOPES, CYBERSPACE etc. Twenty-eight (28) representatives from 14 different LEAs and public authorities were registered to attend this event. Below is the agenda of the event. More details for this workshop are reported to the dedicated deliverable; D6.10.

Table 2: TRACY Data Analytics for LEAs Workshop Agenda

TRACY Data Analytics for LEAs Workshop – 24 May 2024 – Agenda – (09.00 CEST – 14.00 CEST)	
08.45 – 09.00	Audience connection
09.00 – 09.15	Welcome message and introduction
09.15 – 09.30	TRACY Overview <ul style="list-style-type: none"> Brief introduction of the project
09.30 – 11.00	SAS Visual Investigator <ul style="list-style-type: none"> Presentation Demo
11.00 – 11.30	<i>Coffee break</i>
11.30 – 13.00	Chainalysis – Crypto Currency Analytics <ul style="list-style-type: none"> Presentation Demo
13.00 – 13.45	Roundtable Discussion <ul style="list-style-type: none"> The role of Analytics Platforms for LEA incidents
13.45 – 14.00	Wrap up and conclusions

2.3.2 Project related events & conferences

The following table provides an overview of events with presence of TRACY project members for project months 7-12.

Table 3: Events with the representation by TRACY

Title	Location	Date	Link	Partner	Relevant WP
Unlocking synergies: fostering collaborative innovation	Brussels [Belgium]	05/02/2024	link	PT	WP6
Frontex Industry Days	Online	04/11/2024	link	PT	WP4, WP6

CYCLOPES Dissemination Event	Vienna [Austria]	16- 17/04/2024	link	PT	WP6
SMI2G Event 2024	Paris [France]	22- 23/05/2024	Link	PT	WP4, WP6
LAGO Workshop	FRMOI Paris [France]	24/05/2024	n/a	PT	WP2, WP4, WP6

2.3.3 Formed synergies with relevant projects

The following table gives a brief overview about the established synergies with relevant projects in the EU landscapes and indicates TRACY partner responsible for the communication and establishing synergy.

Table 4: Synergies with relevant projects in the EU landscape

Project	Link	Relevance to TRACY	Partner responsible
CYCLOPES	https://cyclopes-project.eu/	CYCLOPES brings together 12 practitioners fighting cybercrime and connects 4 research and academia organisations, 2 companies and 3 public and non-profit organisations.	PT
POLIICE	https://poliice-project.eu/	POLIICE vision is to advance European LEAs to a novel lawful-interception, investigation and intelligence era in which they will be able to effectively prevent, detect and investigate crime and terrorism amid the new age of communication (5G&Beyond, end-to-end encrypted communication and Quantum based encryption).	BayHfoD and KEMEA
ALIGNER	https://aligner-h2020.eu/	ALIGNER project aims to unite European actors who have concerns about AI, law enforcement and policing to jointly identify and discuss how to enhance Europe ' s security whereby AI strengthens law enforcement agencies while providing benefits to the public. The project ' s work will help pave the way for an AI research roadmap.	Timelex
AP4AI	https://www.ap4ai.eu/	The Accountability Principles for AI (AP4AI) Project develops solutions to assess, review and safeguard the accountability of AI usage by internal security practitioners in line with EU values and fundamental rights. AP4AI means a step-change in the application of AI by the internal security community by offering a robust and application-focused Framework that integrates security, legal, ethical as well as citizens' positions on AI.	Timelex

NOTIONES	https://www.notiones.eu/	NOTIONES will establish a network to connect researchers and industries with the intelligence community. This network will facilitate exchange on new and emerging technologies but also equip solution providers with insights on the corresponding needs and requirements of practitioners. The so gained findings will be disseminated in periodic reports containing technologic roadmaps, priorities and recommendations for future research projects and development activities.	BayHfoD
HECTOR	https://www.astynomia.gr/hector/?lang=en	The HECTOR project aims to shield tourism infrastructure across Europe, emphasizing strengthening cooperation between the private and public sectors to define security standards, procedures and protocols (Security Model Plan for Tourism Industry).	HPOL, KEMEA

2.3.4 Dissemination and Communication Activities by Partner (M6-M12)

2.5.4.1 Performance Technologies

During M8 (January 2024) a bilateral teleconference with European Cybercrime Training and Education Group (ECTEG) has been arranged. The agenda included a brief presentation of TRACY project and identify ways of possible collaboration/contribution to ECTEG activities, ongoing and planned ones.

Between M8 and M11 bilateral telcos with EACTDA were scheduled to establish a concrete communication channel between two initiatives. EACTDA presented to PT possible exploitation pathways such as the Tools4LEAs Catalogue of pre-existing tools and the Pre-Agreement, signed between the technology provider and EACTDA when the tools are offered in the catalogue.

Another Dissemination activity undertaken by PT was an article presenting TRACY Training Lab #1 that has been included in the CYBERSPACE LEA Cluster Newsletter #2 issued on March 2024.

Project Events

TRACY EU PROJECT

We are excited to announce our first TRACY LAB activity. **TL1.Athens** opened its doors to educate and train our consortium members on modern analytics technologies, methods, and tools. We had a two-day session at the premises of Performance Technologies in Athens, on February 5th and 6th.

During our hands-on training sessions, participants enjoyed practical exercises using visual analytics tools to locate and observe criminal activities. Data was generated by validated simulation tools.

Experienced telecom experts from HELLENIC TELECOMMUNICATIONS ORGANIZATION SA (OTE) and data scientists from Performance Technologies (PT), provided the training and advised students on using the tools to meet the course objectives. Looking forward for the next events **TL1.Remote**: an event available through the Teams platform for remote participation. Certification of attendance will be issued for people participating in TL1.Athens.

TRACY is a two-year project, funded through the European Commission's. Starting in June 2023 TRACY will provide an innovative digital forensic and investigation platform to identify suspects of serious organized crimes and terrorism in dense urban areas significantly advancing the process of LEAs investigations and prosecutions. The project consortium consists of nine partners from six countries and is co-ordinated by PERFORMANCE TECHNOLOGIES S.A.

The project has received funding from the DIGITAL 2022 programme under grant agreement No 10102041

TRACY LABS #1 – The Fundamentals

2 Newsletter

Figure 8: CYBERSPACE LEA Cluster Newsletter #2 presenting TRACY Lab #1

Finally, a manuscript has been prepared in collaboration with EMPOWER project (funded from the same call as TRACY). The intention was to prepare a position paper presenting a high-level description of both projects, their starting point/motivation, their objectives, the technological concepts proposed and the use cases of interest. The manuscript entitled “Innovative digital forensic and investigation tools for Law Enforcement: The EMPOWER & TRACY Approach” has been submitted to 20th International Conference on Artificial Intelligence Applications and Innovations (AIAI 2024), that will be held between 27 - 30 Jun 2024 in Ionian University, Corfu, Greece. The manuscript has been also scheduled to be transferred to SPRINGER for publishing the proceedings of the AIAI 2024 in the SPRINGER IFIP AICT Series. PT will participate remotely to the conference.

Innovative digital forensic and investigation tools for Law Enforcement: The EMPOWER & TRACY Approach

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Abstract. Constantly growing digitalisation in all sectors and the rapidly changing technological landscape provide vast opportunities for criminals and terrorists. Law Enforcement Agencies (LEAs) often lack the necessary technical and financial means as well as digital skills when preventing, detecting, investigating or prosecuting criminal and terrorist activities supported by advanced technologies. The overall goal of EMPOWER is to foster the uptake of innovative solutions based upon AI powered tools allowing Law Enforcement Agencies (LEAs) to increase their capabilities in such investigative fields. To that end, EMPOWER will pilot test a total of 8 investigative tools in the fields of Image/Video, Voice/Text and Federated Learning. During the project, 8 tools will be brought to TRL 8 level, following their testing by 2 LEAs with operational datasets in real-life environments. The proposed TRACY solution is an open-source platform with main objective: to uptake an AI-based system, by running large scale pilots on LEA's premises, using telecommunications metadata in a fully operational environment, in full respect of fundamental rights and personal data protection. For greater impact, the solution shall be validated by additional LEAs within the project, with the aim to be permanently used after its completion.

Figure 9: TRACY – EMPOWER joint position paper frontpage

2.3.4.1 OTE (COSMOTE)

OTE (COSMOTE) co-authored the paper “Innovative digital forensic and investigation tools for Law Enforcement: The EMPOWER & TRACY Approach” that has been submitted to the 20th International Conference on Artificial Intelligence Applications and Innovations (AIAI 2024), that will be held between 27 - 30 Jun 2024 in Ionian University, Corfu, Greece.

OTE participated also in TRACY Lab 1 both in the face-to-face meeting in Athens and the remote meeting through the Teams platform presenting the fundamentals of the mobile communications network.

2.3.4.2 Center for Security Studies (KEMEA)

Through KEMEA TRACY managed to establish synergies with HECTOR ISF project. An invitation was sent to TRACY to attend one of the workshops of HECTOR. In the near future more opportunities for synergies will be identified.

2.3.4.3 IDIAP Research Institute

IDIAP is in contact with the Malta Police Force to discuss and review case scenarios to make them as close to a real case as possible.

2.3.4.4 Timelex

Timelex has been in touch with similar research initiatives surrounding the development of the AI impact assessment such as AP4AI and ALIGNER. The aim is to exchange expertise and spread knowledge on TRACY's activities with other research projects and legal experts.

2.3.4.5 University of Applied Sciences for Public Service in Bavaria (BayHfoD)

BayHfoD has updated the TRACY project on the company website in its research part ([link.](#))

As WP leader BayHfoD was also present in the remote version of the first TRACY labs.

As coordinator of EU funded projects POLIICE and Cyberspace, BayHfoD formed synergies with TRACY and regularly provides updates on the status and mission of TRACY. Furthermore, a short overview of TRACY was provided internally of BayHfoD to keep Police Officers and the students of the police academy informed. TRACY news will be shared within the NOTIONES project on a regular basis.

2.3.4.6 Hellenic Police

HP being the coordinator of HECTOR ISF project took the initiative to establish a synergy between TRACY and HECTOR aiming to identify activities of common interest in the dissemination and communication plan of both projects but also identify use cases of common interest in the operational environment promoting TRACY work in other areas.

2.3.4.7 Galati County Police Inspectorate

A brief description of the TRACY project was posted on the unit's website on the first page (3rd bullet), including a link to the project's website ([link](#)).

2.4 Planned Dissemination Activities

2.4.1 Meetings and Workshops

In the context of WP6 at least four more workshops will be organised by the end of the project lifetime (M24). A tentative list of these workshops is presented below:

1. Legal-Ethical Issues and AI (Timelex) - The following workshop aims to provide training on the legal and ethical issues surrounding the TRACY project both on the data and AI-related topics. Main audience will be TRACY partners.

2. New AI Act and impact on tool developers and LEAs (Timelex) - Due to the newly adopted Artificial Intelligence Act, the intention of the project is to organise an additional workshop dedicated solely to the new legislation and its impact on LEAs using AI tools of medium and high risk. Target groups will be TRACY partners but also LEAs and public authorities outside TRACY project.
3. TRACY Platform demonstration Workshop (PT) – This workshop is scheduled for M15-M16 before starting the official period of the real life use of the TRACY platform by HPOL. Intention is to showcase the TRACY platform capabilities and functionalities.
4. TRACY Exploitable results (PT) – This workshop aims to present to all partners the exploitable results of the project. Target groups will be TRACY partners but also partners from other EU project as well as representatives from the public and private sector as well as EU initiatives such as ECTEG, EACTDA.
5. Policy recommendation workshop (Timelex) – Timelex will organise a small series of workshops inviting relevant stakeholders to present project outcomes and also receive feedback from EU projects and relevant stakeholders as part of the policy recommendation task.
6. Data Analytics Roadmap workshop (KEMEA) – To prepare a guide dedicated to end-users summarising the lessons learnt as well as the recommendations and best practices related to the TRACY trainings a workshop will be organised in M23 of the project with the participation of end-users’ trainees and relevant stakeholders. Additionally, shall introduce a recommendation roadmap for, Europol, ENFSI, CEPOL (European Union Agency for Law Enforcement Training) and ECTEG (European Cybercrime Training and Education Group), to maximise impact.

2.4.2 Scientific Publications

Since no changes were necessary for D6.3 chapters 2.4.2 Scientific Publications remains the same as in D6.2.

2.4.3 Conferences, events & workshops

Below is the updated version of the list of potential conferences/events/workshops that are of interest to TRACY projects. Next to each entry responsible TRACY partner is mentioned.

Table 5: Planned Participation in Events

Title	Location	Time	Link	Partner
RISE-SD Event	Halkidiki, Greece	Oct 2024	n/a	PT

Security Research Event 2024	Brussels	Oct 2024	https://home-affairs.ec.europa.eu/policies/internal-security/innovation-and-security-research/security-research-event_en	PT
EAI International Conference on Digital Forensics & Cyber Crime	Croatia	October 2024	https://icdf2c.eai-conferences.org/2024/	IDIAP/ PT

2.4.4 Synergies with EU Initiatives

The TRACY project aims not only on expanding existing synergies and relations with projects described in chapter 2.3.3, but also to establish new synergies, collaborations and exchange of information with other EU initiatives. Especially with those that the TRACY consortium partners have contacts with, while keeping in mind confidentiality and data protection.

In the following period TRACY will try to establish collaboration with the following EU H2020 project(s):

- **STARLIGHT:** STARLIGHT (H2020) aims to create a community that brings together LEAs, researchers, industry, and practitioners in the security ecosystem under a coordinated and strategic effort to bring AI into operational practices.
- **SAFECITIES:** The SAFE-CITIES (HE) project aims to help to protect public spaces by providing a security and vulnerability assessment framework supported by an interactive platform. The mentioned assessment leads to recommendations of actions for current and future-planned spaces to be adjusted so that the risks identified within the first phase are consequently and effectively mitigated.
- **SHIELD4CROWD:** SHIELD4CROWD (HE) establishes a baseline for European pre-commercial procurement and technical innovation to protect public spaces. SHIELD4CROWD connects security practitioners across Europe to identify the common vulnerabilities posing risks to the protection of public spaces. Through an iterative process, the project will prioritise the pertinent challenges and threats, establishing the technology gaps and assessing the market ecosystem in each area.

2.5 Monitoring and Key Performance Indicators

In relation to D6.1 we can report changes on the Dissemination and Communication Timeline as well as the list of key performance indicators (KPIs). The important chapter of Risk Assessment has not changed in the last months compared to D6.1 and is thus not provided here. Chapter 2.5.1. Dissemination and Communication Timeline remains the same as in D6.2.

2.5.1 Key Performance Indicators (KPIs)

The KPIs set regarding the activities already mentioned in the previous paragraphs are depicted below and updated for a current overview of progress:

Table 6: TRACY Communication and Dissemination KPIs (M1-M6)

Dissemination/Communication KPI	Target	Y1 Planned	Y2 Planned	Status M12
Scientific Papers (publications in open scientific journals/ conferences, Open Research Europe or book chapters)	2	1	1	1
Clustering with other projects: Joint Clustering Meetings	2	1	1	1
Presentations of results in international events and conferences	2	1	1	1
Distribution of leaflets in international events	800	400	400	200
TRACY Final Conference with emphasis in exploitation of results	1	0	1	0
Project identity (Project presentation template (part of the media kit))	1	1	1	1
Brochure (A4 brochure developed at project start, updated at M18)	3	2	1	1
Roll up banner	1	1	0	1
Newsletters	4	2	2	2
No of visitors at the website by M24	500	200	300	700 unique users/views
No of LinkedIn followers	200	100	100	115
No of training activities (TRACY Labs)	3	1	2	2
No of TRACY workshops	4	2	6	2
No of meetings with LEAs	4	2	2	2
No of events where TRACY is (re)presented	4	2	2	9
No of contacts established with DIGITAL-2021 & 2022-DEPLOY funded projects	1	1	2	1
No of contacts established with H2020 & HE projects	2	2	1	9
No of EU organizations/institutions reached	3	1	2	1
No of Working Groups reached	2	1	2	1

2.5.2 Planned Budget

In the following table the distribution of the TRACY project budget, based on the GA under category “C.3 Other goods, works and services”¹, is presented. TRACY plans to allocate a small portion of the total budget in Year 1 of the project lifetime, while keeping the majority of the budget for the second half of the project. This is a decision based on the fact that TRACY activities will deliver outcomes and results to be disseminated after M12.

Table 7: TRACY Dissemination budget

	Available	Y1 Planned	Y2 Planned	Status M12
Dissemination Budget (euros)	40,000	5,000	35,000	~6,000

3 Exploitation and Impact Sustainability Planning

The objectives of exploitation for TRACY are: a) to prepare partners’ joint and individual exploitation plans (form the list of exploitable assets to support partners to shape their exploitation routes, produce a joint exploitation of the project’s results), b) the detailed identification of exploitable assets of newly developed IPs, along with the partners/contributors that own the IPR, c) the creation of an IPR registry for partners and co-developers to report and update, d) To facilitate market adaptation of the TRACY project results and components (separately and as whole approach), “before”, “during” and “after” the project.

In relation to D6.2 updates will be provided in the following section for chapter “Key Exploitable Results initial analysis”.

3.1 Business Analysis Methodology

In D6.1 (M3) the Business Analysis Methodology was provided based on which the exploitation and sustainability of the project outcomes will be pursued. The Methodology comprises the following steps:

1. Identification of the key exploitable results (KERs) generated in TRACY which shall be explored in relation with the key innovations stimulated by the project.

¹ Annex 2 of the Grant Agreement No 101102641, Digital Europe 2022.

2. Business analysis based on a well-structured tool, the Value Proposition Canvas [<https://www.strategyzer.com/canvas/value-proposition-canvas>], to explore and foster KERS' exploitation.
3. Partners' individual exploitation plans to be updated as the project progresses.

The following chapter extends the methodology provided in D6.1 and D6.2.

3.1.1 Key Exploitable Results initial analysis

The list (tentative & non exhaustive) of key exploitable results (KER) of TRACY project includes:

1. Realistic synthetic datasets developed by PT;
2. TRACY e-Evidence platform developed by PT;
3. Training material 1 & 2 v2, developed by PT, OTE;
4. Artificial Intelligence Impact Assessment Framework developed by Timelex.

The above list of exploitable results of TRACY is slightly updated compared to the previous early version of the list reported in D6.1 (M3). Below the course of activities to identify solid exploitation pathways per KER is described.

KER 1: Realistic synthetic datasets (PT)

For **KER 1** TRACY identified one solid exploitation pathway via the LAGO EU funded project. LAGO aim is to address the data issue in the Fighting Crime and Terrorism (FCT) research landscape by building an evidence-based and validated multi-actor reference architecture for a trusted EU FCT Research Data Ecosystem (RDE). The RDE will be an open, transparent and secure data infrastructure where FCT-related data can be co-created, made available and shared in a trusted environment. The RDE will comply with European values and principles on data protection, privacy and ethics. It will support multiple data spaces where interested actors deposit, share and co-produce data and tools for FCT research purposes based on common rules, protocols, standards and tools in a trusted environment and accompanying governance framework. In this direction TRACY and LAGO signed a Memorandum of Understanding (MoU). In the context of this MoU TRACY will be able to support the building of the RDE by providing realistic synthetic datasets.

One of the key aspects of the MoU refers to joint organisation of dataset management activities/exercises/events, focused on topics such as:

- Methodologies
- Tools and techniques
- Testing / evaluation
- Ethical, Legal and Social Aspects.

So far one such dataset has already been shared with LAGO. LAGO technological partners will then assess if and which of the technological concepts developed within LAGO could be also applied and in which way in the process of generating synthetic datasets in TRACY.

KER 2: TRACY e-Evidence platform (PT)

For the TRACY e-Evidence platform one possible exploitation pathway identified so far is via the EUROPEAN ANTI-CYBERCRIME TECHNOLOGY DEVELOPMENT ASSOCIATION (EACTDA). The purpose of the Association is the development of technological solutions for European Law Enforcement Agencies and Forensic Laboratories to use them in their fight against crime. EACTDA tries to facilitate the market uptake of technological solutions to operational use by European public security practitioners.

Technology providers that own a software tool, that are willing to collaborate/participate with EACTDA but that are not members of it can:

1. Become permanent full-members, participate in the project, and then continue being active members of EACTDA beyond the duration of the project.
2. Become “temporary” full-members, participate in the project, and then terminate their membership.
3. License their technology to EACTDA so that EACTDA and/or its members can further develop it.

The licensing scheme overview offered by EACTDA is the following. Once the “last-mile” development project is successfully complete, the final product (which is considered to be “fully-tested” and “operational-ready”) will be licensed to EU public entities fighting crime under the “licensing-out” license, with no license cost and with access to the source code. Also, if the licensee conducts any derivative work, this will have to be “licensed-back” to EACTDA so that it can then be shared with the rest of the EU public entities fighting cybercrime community as well as with the Technology Provider who originally provided the pre-existing tool/asset. The final product (fully-tested and operational-ready) will be licensed by EACTDA to EU public entities fighting crime by two means:

1. To EU Law-Enforcement Agencies (LEA) via Europol Tool Repository (ETR), using its own licensing model/agreement.
2. To EU non-LEA public entities fighting cybercrime via EACTDA’s tool repository, using EACTDA’s licensing model.

Via EACTDA the TRACY project will try to identify the capability to share with relevant stakeholders **KER 2**.

KER 3: Training material (PT, OTE)

For **KER 3** activities to identify possible pathway for exploitation of the training material took place during the previous months. In this direction PT contacted European Cybercrime Training and Education Group (ECTEG) to identify the possibility to exploit training material developed in TRACY. ECTEG is an International Non-Profit Association (AISBL) composed of European Union and European Economic Area Member States law enforcement agencies, international bodies, academia, private industry and experts. ECTEG is funded by the European Commission and working in close cooperation with Europol-EC3 and CEPOL. The key role of ECTEG in

developing training materials for law enforcement experts was acknowledged in the EU Agenda to Tackle Organised Crime 2021-2025 (COM-2021 170 final) and in other strategic documents. The ambition of TRACY is to manage to share via ECTEG training material to law enforcement organisations. The list of available training course package by ECTEG is available [here](#).

KER 4: Artificial Intelligence Impact Assessment Framework (Timelex)

For **KER 4** Timelex has developed a first draft of an AI impact assessment template for TRACY that incorporates aspects of the new AI Act. While in the early stages of the template development, the Consortium recognises the importance of creating a customised AI impact assessment for law enforcement purposes. The tool draws inspiration from already available resources in this area, including the Assessment List for Trustworthy Artificial Intelligence (ALTAI)² developed by the High-Level Expert Group on Artificial Intelligence. TRACY consortium aims to exchange expertise with other research projects concerned with AI impact assessments to mutually benefit from each other's findings.

² European Commission, Directorate-General for Communications Networks, Content and Technology, The Assessment List for Trustworthy Artificial Intelligence (ALTAI) for self assessment, Publications Office, 2020, <https://data.europa.eu/doi/10.2759/002360>

4 Conclusions & Next Steps

This Dissemination, Communication and Exploitation Report 2 serves a four-fold purpose, as elaborated throughout the chapters:

- Firstly, it reports dissemination and communication activities between M6 and M12 of the project lifetime. In parallel, it acts as a reference and guide for consortium partners during the execution of dissemination and communication and exploitation activities and provides an overview of the current status of progress.
- Secondly, it facilitates consistency, message discipline, and coordination within the consortium.
- Thirdly, as a public deliverable it tries to give a transparent overview of TRACY's progress and objectives that are followed with this project.
- Lastly, the plan provides a framework to monitor the impact and of these activities and work on the sustainability of the project outcomes.

The document depicts the flowing process of DEC-activities and planning and updates the initial planning of D6.1 and the updated structure in D6.2. This way it ensures the successful implementation of a dissemination and communication strategy of the TRACY project.

Overall, it can be stated that the TRACY Dissemination, Communication and Exploitation strategy is on a good path to reach its goals. Since Year 1 was mostly on planning and kicking-off the first tasks, the first activities of Year 2 will show if the planned agenda has success or updates might be needed.

Bi-annual reporting on the dissemination, communication and exploitation activities will be delivered until the end of the project, according to the GA. The next version of this deliverable (D6.4) is expected on M18 and it will follow up the communication, dissemination and exploitation activities that mark the completion of the first half of the project. The final report will be presented in D6.5 (M24).



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