



A project of the European Anti-Cybercrime Technology Development Association
(EACTDA)



D2.4 Report on exploitation management activities



This project has received funding from the European Union's ISF Police programme, under grant agreement no 101036219.

Version:	1.0	
Delivery date:	June 2025	
Dissemination level:	Public	
Status	FINAL	
Nature:	Report	
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DOCUMENT CONTROL

Version	Date	Author(s)	Change(s)
0.1	15/05/2025	Edmundas Piesarskas (L3CE; seconded to EACTDA)	Initial discussion on the concept of the document with EACTDA.
0.2	15/05/2025	Juan Arraiza (EACTDA)	Initial comments received.
0.3	27/05/2025	Edmundas Piesarskas (L3CE; seconded to EACTDA)	Request for data and comments shared with EACTDA
0.4	30/06/2025	Edmundas Piesarskas (L3CE; seconded to EACTDA) Juan Arraiza (EACTDA)	Data and comments re previous version included
1.0	30/06/2025	Juan Arraiza (EACTDA)	Final version

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1. Introduction

1.1. Overview of the Tools4LEAs project

EACTDA is the acronym of the European Anti-Cybercrime Technology Development Association, which is a private non-profit association, established in San Sebastian, Spain. The members of the Association include European Union (EU) public entities fighting cybercrime, universities and research technology organisations, for-profit private companies, and other relevant actors in the field of the EU security research and innovation.

The Tools4LEAs projects are a series of projects that receive a Direct Award under the ISFP programme, and which main goal is to facilitate and promote the uptake of innovative technologies by EU public entities fighting cybercrime. EACTDA, via the Tools4LEAs projects, aims at further developing pre-existing assets, mainly from EU-funded security research and development projects, so that they are offered with no license cost and with access to the source code to EU public entities fighting cybercrime.

In the first Tools4LEAs project (v1; Jul'21 to Jun'23), the focus was on designing and setting up the infrastructures, processes, and governance / decision-making mechanisms, whilst delivering the first set of “fully-tested and operational-ready” tools via Europol’s Tool Repository. Though 11 tools were further developed in the v1 project, it is expected that 3 of them will not be released to their targeted audience as they do not pass the pre-established quality threshold of “operational-ready”. Also, an End-User Advisory Board (EUAB) composed as of Jun'25 by 22 members from 15 EU member states and co-chaired by two Europol units (EC3 and Innovation Lab) was established and it is the body responsible for identifying and prioritising end-user needs and which has veto right over the decisions done by EACTDA/Tools4LEAs with regard to the tool development roadmap.

In the second Tools4LEAs project (v2; Jul'23 to Jun'25), the number of tools delivered has been more than doubled. Also, the repository of tools implemented in v1, and currently used to host the results of the Tools4LEAs projects, has been enhanced and reused to host the results of EU-funded security research projects (when relevant in the field of cybercrime). EACTDA will play the role of custodian of these results, and the technical, IPR, and administrative aspects needed to create this new repository of security research results will be put in place. In addition, the v2 project included a pilot to proof the concept of initial and limited support&maintenance periods for a selection of tools. Besides, a pilot of the concept of EACTDA national nodes was included, with nodes planned in LT, FR, ES. Also, a platform for end-users to evaluate online tools has been implemented. Finally, the v2 project included activities to further build the community of Tools4LEAs stakeholders and to promote the creation and/or adoption of technical blueprints, and in general, of commonly accepted best practices.

1.2. Main objective of this document

This deliverable presents a summary of the exploitation management activities conducted during the execution of the Tools4LEAs v2 project up until June 2025.

1.3. Relation to other deliverables

This deliverable is closely related to the following deliverables:

- **D2.3 Exploitation Management Handbook:** deliverable D2.4 presents the activities conducted during the Tools4LEAs v2 project which have been executed following the guidelines and directions provided as part of deliverable D2.3.

1.4. Structure of the deliverable

Section 2 of this document presents the facts and comments in relation to the exploitation management activities conducted as part of the Tools4LEAs v2 project up until June 2025.

Then, section 3 summarises the goal and key aspects of this document, it acknowledges that there is still work to be done to improve the document, and it presents the plan there is to continue with these activities as part of the Tools4LEAs-v3 project.

2. Implementation results

This section of the document is dedicated for the detailed description of implementation of each block of the exportation strategy. Deliverable D2.4 provided the specification of each block and is not repeated in this document.

Description of implementation aims to illustrate efforts made during the period between strategy development and current. It also includes lessons learned that should be considered in future work. To do so the following sections provide actual figures and insights into each step of the strategy.

All 4 blocks are described in a similar structure, providing the very condensed remainder of the block, including the process schema. This is followed by table, containing three main descriptors:

- Quantitative indication of efforts made during the implementation of the strategy. In addition to the efforts made those data also provide a better understanding of the whole pipeline from the starting point to the end of the process.
- Comments regarding the implementation of each step on how successful the implementation was and what can be gained from the experience as improvement points. This descriptor is of qualitative nature and provides insights on modification of the process if considered relevant and important.
- Some of the process steps should be modified significantly or essential challenges were faced. This is also provided in the table and some key insights for the closing section of future work.

At the end of the section on each block main findings, quantitative and qualitative are summarised to highlight main aspects.

2.1. Technological Roadmap definition

The starting block is Technological Roadmap definition. It consists of 3 main components and is organised in two directions – from supply side (Bottom-up) and demand side (Top-down). There are two starting points that initiate the exploitation implementation:

- The “bottom-up” process component starts with contacting different Tech-providers. Tech-providers can also initiate contact with EACTDA themselves.
- The “top-down” process block component is a demand driven approach. The process component is triggered by requesting the members of the End-user Advisory Board (EUAB) to provide end-user needs in a structured way.

The closing component of this block is Prioritisation. Based on the Catalogue of pre-existing tools and End-user needs list, the Consolidated list of end-user needs is composed. This is done by mapping proposed solutions to the needs list. Each need is linked to proposed solution. The final deliverable of this block is the Tools development Roadmap.

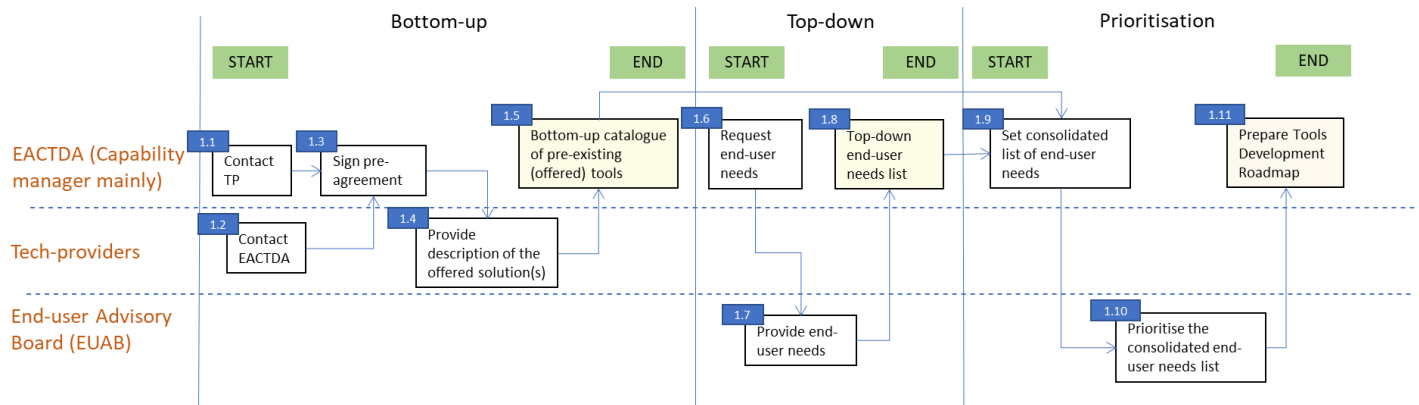


Figure 1 – Technological Roadmap definition process block.

The following Table provides the detailed description of each step as described in the introduction section.

Step		Facts	Comments on the facts	Key considerations
No.	Activity			
1.1	Contact TP	+100	Not all contacts documents, as many took place during events; more than 70 bilateral webconferences and meetings to present EACTDA and Tools4LEAs.	Majority of EU funded projects
1.2	Contact EACTDA	+20	The number of entities contacting spontaneously EACTDA has significantly increased (by email, whilst attending events, etc.).	The awareness about EACTDA and its activities seems to be much better and widely known now than 2 years ago.
1.3	Sign pre-agreement	13	4 pre-agreements not signed yet but are part of the pipeline.	
1.4	Provide description of the offered solution(s)	+60	+60 pre-existing tools were fully documented and included in the catalogue.	
1.5	Bottom-up catalogue of pre-existing (offered) tools	5	A total of 5 tools were proposed by end-users that have been included in the catalogue of pre-existing tools.	
1.6	Request end-user needs	+10	End-users reminded to provide their needs in all EUAB meetings, in Tools4LEAs events, and in other meetings, workshops	

			and events such as those of the National Nodes.	
1.7	Provide end-user needs (EUAB)	4	Four last-mile development projects proposed by end-users.	
1.8	Top-down end-user needs list	6	And for one of them it was not possible to identify pre-existing tools/assets	
1.9	Set consolidated list of end-user needs	4	4 sets, one per each review and prioritisation exercise.	
1.10	Prioritise the consolidated end-user needs list	4	4 prioritisation exercises executed by the EUAB with the support of EACTDA Secretariat.	
1.11	Prepare Tools Development Roadmap	4	4 roadmaps, one per each of the prioritisation exercises.	

The efforts to reach out Technology Providers continued following the same approach as how it was done in the Tools4LEAs v1 project. The number of contacts decreased a bit, as in v1 projects from the previous 3-5 years were identified and contacted, whilst in the v2 project only the new ones.

On the other hand, the number of entities that spontaneously contacted EACTDA significantly increased in the v2 project in comparison to the v1 project.

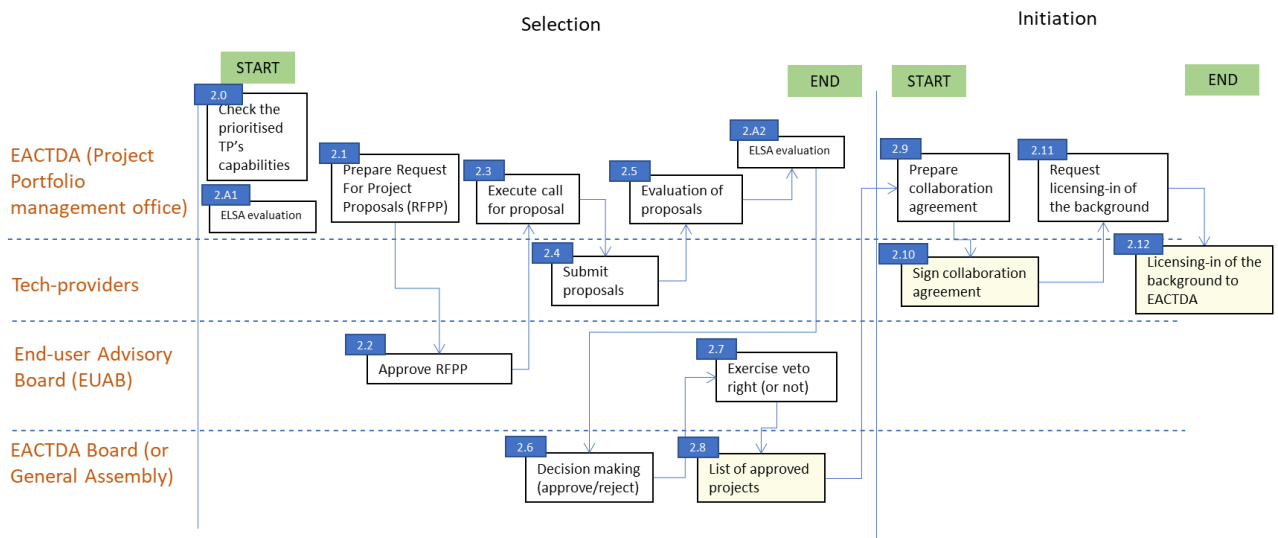
Considering all factors, the number of quality of tools identified and offered by the Technology Providers to the end-users via EACTDA has increased, allowing the Tools4LEAs v2 project goals to be met. However, EACTDA considers that there is room for improvement and will continue to seek for new creative ways to approach Technology Providers and to convince them to join the Tools4LEAs community.

2.2. Selection and Initiation of Projects

The second block of the process contains two phases Selection and Initiation. The focus of the block is on the alignment of the end-user needs with the Tech-providers understanding of the solution at detailed level.

It is started by developing the Request for Project Proposals (RFPP), that includes detailed Business Requirements. After RFPP is approved by EUAB call for proposals is executed. Tech-providers submit proposals, preliminary evaluation is made and then presented for approval. The decision made by the EACTDA governance body is still to be verified by end-users (EUAB). After the EUAB's verification, EACTDA prepares the final list of approved projects.

After the final list of approved projects is made, a more administrative component is to be executed. A very important activity at this stage is the licensing-in management during the Initiation phase. The main outputs of this process component are the Collaboration agreement and the licensing-in licence



The following Table provides the detailed description of each step as described in the introduction section.

Step		Facts	Comments on the facts	Key considerations
No.	Activity			
2.0	Check the prioritised TP's capabilities	24	24 times, the TPs owning the top six prioritised tools per each of the prioritisation exercises	In 3 cases, though the TP confirmed interest and capabilities... then they did not react/respond timely
2.A1	ELSA evaluation	24	ELSA evaluation embedded in the process in two steps, firstly done by EACTDA Secretariat and then reviewed by the ELSA team (to speed up the process)	Now thinking on improvements in the part that relates to the AI Act compliance
2.1	Prepare Request For Project Proposals (RFPP)	24	24 RFPPs started	
2.2	Approve RFPP	20	20 RFPPs completed	
2.3	Execute call for proposal	24	24 project proposals	
2.4	Submit proposals	22	22 project proposals submitted for approval	
2.5	Evaluation of proposals	22	22 proposals evaluated	
2.A2	ELSA evaluation			
2.6	Decision making (approve/reject)	22	22 projects approved	
2.7	Exercise veto right (or not)	0	No veto exercised	
2.8	List of approved projects	22	22 projects approved	
2.9	Prepare collaboration agreement	22	22 collaboration agreements prepared and signed by all parties; in 2 projects there were 2 TPs	
2.10	Sign collaboration agreement	22	All collaboration agreements signed	

2.11	Request licensing-in of the background	22	All licensing-in requests made	
2.12	Licensing-in of the background to EACTDA	22	All licensing-in licenses obtained (note: 1 of them with significant delay)	

The selection and prioritisation processes established during the Tools4LEAs v1 project were fine tuned and applied during the v2 project, allowing a smooth realisation of these processes and meeting with no relevant incident or issue the needs of the project.

2.3. Project execution

The following process block aims to develop tools to the expectations of end-users. This is the most heavyweight block and is the main focus of the Tools4LEAs project. It covers tools development, supported by EACTDA, and demonstration and evaluation events, followed by evaluation activities. At the end of this block tools are made available for end-users for use.

There are few components in the development process that should be reminded:

- Monitoring of the process, ensuring that the progress is made according to the Development plan and early identification of potential problems is made.
- Ensuring that the end-user expectations are fully met.
- Quality of the development is a primary concern of the Testing team. Standardization, application of relevant certification schemas is also part of Testing team activities.

The main objective of whole development process (3.1 – 3.9) is to move the tool to TRL 9. Development phase is followed by the Initial evaluation phase, mainly in the format of Demonstration & Evaluation (DEM&EVAL) events. It is important to remind, that at this point only the initial evaluation of tools is made. After initial evaluation by end-users is provided, the tool with all relevant documentation is made available in the Final tool's repository environment.

The main output of this block is tools, including all relevant elements and evaluation reports, are made available through repositories of EACTDA, Europol's and other trusted partners.

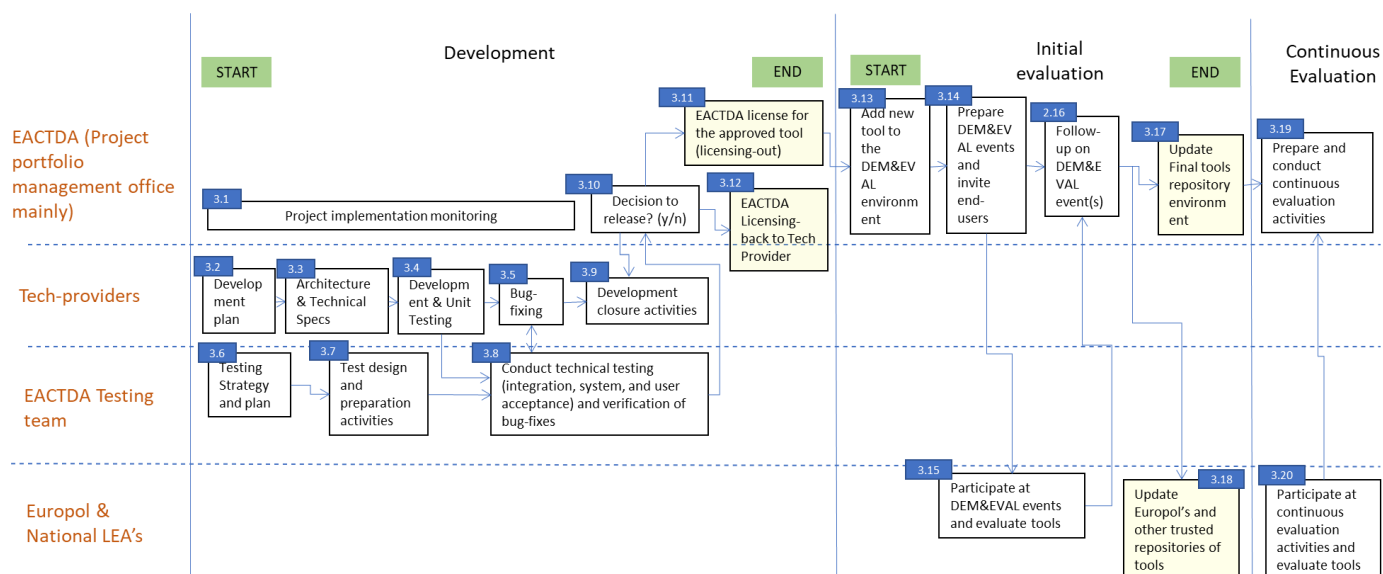


Figure 2 – Project execution process block.

The following Table provides the detailed description of each step as described in the introduction section.

No.	Step	Facts	Comments on the facts	Key considerations
	Activity			
3.1	Project implementation monitoring (continuous)	22	At minimum monthly tracking meetings; often additional ad hoc meetings	
3.2	Development plan	22	Done by the technology providers; followed at high level with EACTDA during the monthly tracking meetings	
3.3	Architecture & Technical Specs	22	Done in all projects	
3.4	Development & Unit Testing	16	As of June 2025, 6 projects are finalising their DEV phase	
3.5	Bug-fixing	16	Technical testing and bug-fixing completed in 16 projects; in the remaining 6 projects still ongoing	
3.6	Testing Strategy and plan	22	Done in all projects	
3.7	Test design and preparation activities	22	Done in all projects	
3.8	Conduct technical testing and verification of bug-fixes	16	Technical testing and bug-fixing completed in 16 projects; in the remaining 6 projects still ongoing	
3.9	Development closure activities	16	Done in all projects for which the development, and the testing and bug-fixing phases have been completed	

3.10	Decision to release? (y/n)	12	As of June 2025, 12 tools already released; 4 more about to be packaged and released	
3.11	EACTDA license for the approved tool (licensing-out)	12	Done for all tools already released	
3.12	EACTDA Licensing-back to Tech Provider	8	Still pending for 4 of the tools that have been (recently) released	
3.13	Add new tool to the DEM&EVAL environment	12	Done for all tools already released	
3.14	Prepare DEM&EVAL events and invite end-users	3	March 2024 Lisbon; October 2024 Mallorca; April 2025 Vienna. Next one planned for November 2025 in Athens.	
3.15	Participate at DEM&EVAL events and evaluate tools	Yes	In the range of 45-55 attendees per each of the events	
3.16	Follow-up on DEM&EVAL event(s)	Yes	Post-event lessons learned exercises conducted always 1-2 weeks after the event by EACTDA Secretariat	
3.17	Update Final tools repository environment	Yes	EACTDA Portal, including the final tools repository and the online evaluation platform are updated with the tools released	
3.18	Update Europol's and other trusted repositories of tools	Yes	All Tools4LEAs tools are offered to Europol so that they can be uploaded to the ETR. Only 3 tools uploaded so far, and 3 more in the pipeline.	
3.19	Prepare and conduct continuous evaluation activities			
3.20	Participate at continuous evaluation activities and evaluate tools			

The experience gained during the Tools4LEAs v1 project, and the emphasis on standardising as much as possible the project execution processes has allowed scaling up (more than doubling) the number of last-mile development projects with a much smaller increase in the number of resources within the EACTDA Secretariat Staff.

2.4. Adoption

This is the final block, focusing on the gap between available tools and up-take by end-users. The adoption component aims to facilitate and coordinate specific requirements and needs that the end-users will have at national level.

The concept is based on the network of national or regional level service providers, that can support deployment and adaptation of the tool provided.

This concept also provides new capabilities for continuous improvement, as smaller scale improvements and additional functionalities will be handled back to EACTDA and included in new version of tool.

During the Exploitation strategy development stage (D2.6), the full concept of Certification framework (4.3) was still to be detailed, leaving this block to be explored in more details during the implementation. The aim of it is to provide end-users with additional support, making adoption of tools more realizable.

The final step of exploitation strategy, and the main goal of it, from the end-user perspective, is operation of tool and providing evaluation as requested.

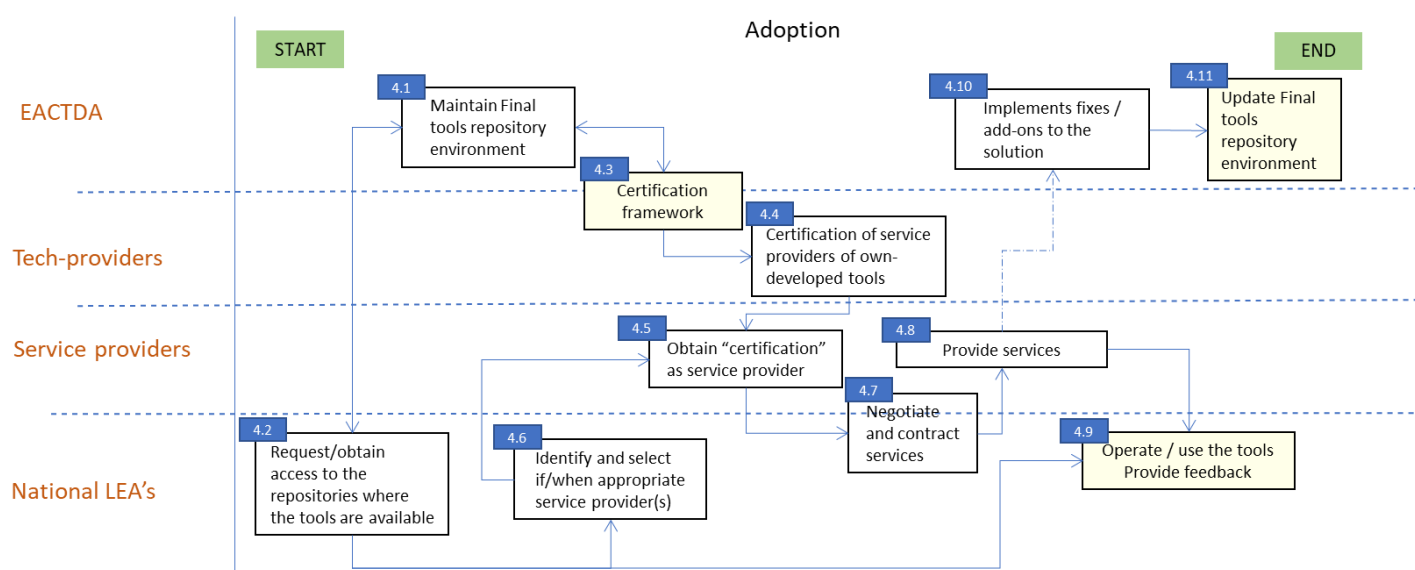


Figure 3 – Adoption process block.

Step		Facts	Comments on the facts	Key considerations
No.	Activity			
4.1	Maintain Final tools repository environment	Yes		
4.2	Request/obtain access to the repositories where the tools are available	Yes		
4.3	Certification framework	No		
4.4	Certification of service providers of own-developed tools	No		

4.5	Obtain “certification” as service provider	No		
4.6	Identify and select if/when appropriate service provider(s)			
4.7	Negotiate and contract services	Yes	In the early-adopters pilot, with 2 technology providers	
4.8	Provide services	Yes	Support&Maintenance (free) services offered when users agreed to become “early adopters”	
4.9	Operate / use the tools Provide feedback	Yes	In the context of early-adopters; also by several end-users who are not providing feedback	
4.10	Implements fixes / add-ons to the solution	Yes	Several maintenance versions prepared and released	
4.11	Update Final tools repository environment	Yes	The new EACTDA Portal and the new Tools4LEAs repository of tools	

It is difficult to obtain an exact picture of how the Tools4LEAs tools that are released are being adopted by the targeted end-users community. There are a few cases where EACTDA learns of has information about the adoption of the tools by the end-users, but EACTDA has the impression that in the majority of the cases where the tools are being adopted the feedback/information about this does not come back.

As for example, several of the tools further developed and released within the Tools4LEAs projects (v1 and v2) were originally developed under the FREETOOL project, and the wide community of users that exists around the FREETOOL Hub has received and get access to these new versions of the tools (now further developed under the Tools4LEAs project) via that alternative distribution channel.

Also, EACTDA is aware of the tools that have been adopted by the “early adopters”, who have provided very valuable feedback that will be used for the maintenance and evolution of those tools.

Finally, as per June 2025, three tools further developed under the Tools4LEAs projects have been uploaded to the Europol Tool Repository (ETR). EACTDA however does not have detailed information about the adoption of those tools by the targeted end-users who have got access to the tools via the ETR.

The Tools4LEAs v3 project, starting July 2025, will continue with the focus and work of the 2 previous projects, and will set “adoption” as the main goal (and theme) for the project. A greater effort will be made to establish KPIs and measurement mechanisms to increase the level of adoption and to obtain better information about it.

3. Summary

3.1. Conclusion

This document presents the activities conducted by EACTDA in relation to the exploitation management matter during the execution of the Tools4LEAs v2 project up until June 2025. The deliverable follows the structure and workflow presented originally in deliverable D2.3, exploitation management handbook.

3.2. Evaluation

During the Tools4LEAs v2 project multiple and very diverse exploitation management activities have been done.

Continuing with the efforts initiated during the Tools4LEAs v1 project, multiple new Technology Providers were contacted to raise awareness about EACTDA and Tools4LEAs projects. As a consequence of these efforts, the number of Technology Providers that signed the Pre-Agreement and that offered their technologies to the end-users via EACTDA and Tools4LEAs significantly increased comparing to the v1 project.

The licensing scheme designed during the Tools4LEAs v1 project was used comprehensively, including the licensing in of the pre-existing tools that were further developed (matured) as part of the last-mile development projects.

Also, once the last-mile development projects were prioritised, approved, executed, and finalised, the licensing back license was provided as/if appropriate by EACTDA to the corresponding Technology Provider(s) that participated in the project. The project execution methodology and standardised processes implemented by EACTDA have allowed more than doubling the number of last-mile development projects executed in the v2 project in comparison to the v1 project without the need to equally increase the resources at EACTDA Secretariat.

The distribution of tools was initiated and, though not at the speed and with the volume that was originally planned and desired, the tools developed during the Tools4LEAs v1 and v2 projects were released to the targeted end-users via the Europol Tool Repository and via the Tools4LEAs Tool Repository. In addition, as several of the tools originally came from the FREETOOL project, the Technology Provider also distributed them via the FREETOOL HUB repository.

3.3. Future work

During the Tools4LEAs v3, that starts July 2025, the exploitation management handbook and strategy will evolve, with the main focus being on ensuring the adoption of tools.

It is also worth noting that that, during the v2 project, EACTDA and several key stakeholders identified the need to revisit and update EACTDA's business model and licensing scheme to make it more attractive for Technology Providers whilst maintaining the expected benefits for the targeted end-users. As a consequence of this, during the months of May and June 2025 EACTDA invited several representatives of the different categories of technology providers (Academia and RTOs, industry, end-users) to participate in two workshops that took place in Brussels and Amsterdam. Next, EACTDA Executive Director and representatives of the Board of the Association analysed the conclusions of the workshops to identify some updates to be made to EACTDA's business model and licensing scheme. These changes will be further defined and implemented during Q3 and Q4 of 2025.