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# Analysis System for GAthered Raw Data


# ASGARD

**Instrument:** Research and Innovation Action

**Thematic Priority:** FCT-1-2015

# D13.6. Dissemination Plan

| | | |
|---|---|---|
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## DISCLAIMER

# Table of Contents

## Annexes



## Tables



## Figures

# 1. Introduction

## 1.1. Overview

The DoA describes this deliverable as:

> *D13.6 Dissemination plan [M42] This deliverable presents the detailed dissemination plan as well as a summary of the related activities undertaken.*

The main objective of this document is to introduce the rationale for the need to raise awareness and the dissemination strategy in ASGARD, as well as a preliminary dissemination plan. This final version of D13.6 includes the complete list of activities undertaken in ANNEX V, which are also periodically updated on the SYGMA platform.

This deliverable constitutes a guideline for the dissemination and communication activities to be undertaken throughout the duration of the project. The overall objective of the dissemination activities in the project is to develop interaction between the research action and the European industry and users. Dissemination of results has been achieved through two main channels: online and non-electronic materials. The project created a dedicated Web Site and Identity set which includes updated public information, and keeps areas with content dedicated to project partners and the Commission only. The site facilitates to raise public awareness of the results of the project.

For non-electronic dissemination channels, appropriate strategies have been developed to identify conferences, workshops and exhibitions where the results of the project have been (and will be) presented. All project partners are involved in these activities. The dissemination activities also include the preparation of relevant material (e.g., updated multimedia, presentations, electronic and printed brochures, press releases).

The main goal of the draft ASGARD Dissemination Plan is to provide specific guidelines to follow vis-à-vis the interaction between the project, the industry and users. Dissemination of results of ASGARD is realised based on communication strategies tailored to target audience groups, with a specific dissemination strategy per partner type (RTO-Academia, End-users-LEAs, Industry-SMEs).

## 1.2. Relation to other deliverables

This deliverable is related to the following other ASGARD deliverables:

**Receives inputs from:**

| Deliv. # | Deliverable title | How the two deliverables are related |
|---|---|---|
| D11.1 | Project Management Plan | Receive the necessary collaboration tools for an effective coordination process |
| D11.2 | Scientific Management Plan | Receive a detailed list of potential dissemination events (e.g. conferences) and journals where the results of ASGARD can be presented, enhanced with other dissemination possibilities (special issues, dedicated conferences, workshops and challenges) |

| | | |
|---|---|---|
| D11.3 | Quality Management Plan | Receive input on how to comply with the guidelines for preparation of deliverables |

*Table 1 – Relation to other deliverables – receives inputs from*

## 1.3. Structure of the deliverable

This document includes the following sections:

- Section 2 (Dissemination Strategy): A summary of the dissemination strategy for the results of ASGARD is included in this section, highlighting the main goals and procedures.
- Section 3 (Dissemination Plan): This section contains an overview of the contents that have been disseminated in the project, the target audiences, the dissemination channels, and the expected results.
- Section 4 (Communication activities and resources): The communication strategy is introduced in this section, as well as the main activities undertaken and the materials and resources in this area.
- Section 5 (Results gathering and Evaluation): This section described the mechanisms for tracking and reporting dissemination and communication activities in the ASGARD project.
- Section 6 (Conclusions): The final conclusions are summarised in Section 6, as well as the evaluation and future work to be carried out in the context of D13.6.

# 2. Dissemination Strategy

## 2.1. Goals

As already introduced, dissemination activities are an important aspect of the ASGARD project. As stated by the European Commission, dissemination of scientific research results should be one of the defining principles for Europe's research landscape. Therefore, a special effort has been put into communication and dissemination activities during the duration of the ASGARD project.

A set of simple recommendations provided by the EC to engage with the public has been the basis of this Dissemination Plan:

- Focus on communicating results rather than processes.
- Be interactive by listening and adapting the message regularly according to the response obtained from the audience and to the expected/obtained results of the activity.
- Activities should be selective and targeted in order to maximise impact. Avoid communicating on matters with little or no interest to the outside world.
- Particular emphasis will be put on "local" communication and dissemination activities, using partners' contacts, local press, etc. to ensure pan-European approach to dissemination at both global and local levels.
- Tailor communication to different audiences by responding to the issues that matter locally.
- Position the project research within a broader socio-economic and policy context, explaining both the results and their relevance to policy-makers and citizens.

The dissemination of the results of this project is conditioned by the characteristics of the application domain in which the technologies, methodologies and training materials developed in the project are applied. Communications to each of the target audience groups will therefore be tailored. These actions will follow a clear strategy and action plan with three different phases, naturally linked to the three RTD cycles defined in ASGARD (prove feasibility, show efficiency, and application adaptation):

(i) **Awareness building phase** (making the project known): to raise awareness of ASGARD motivation and reasoning behind the project;

(ii) **Participation phase** (targeting defined user groups): to enable identified target groups to understand the concepts of ASGARD and the results achieved. In this phase, presentations and examples will be disseminated through the portal and selected events;

(iii) **Action phase** (influencing practices, products and standards): to receive feedback in the form of demonstration of the results, alternative approaches or new reference implementations. This phase will include events with the end-users, gathering new requirements for ASGARD, etc.

LEA partners will focus their dissemination activities on targeting the international end-user community, as well as other private and public institutions in Europe related to the topic; RTOs and University partners will focus on targeting academics, the research community, and other (related) research activities/projects; and industrial partners will focus on targeting the industry.

## 2.2. Obligation to disseminate results – Visibility of EU funding

Unless it goes against their legitimate interests, each beneficiary must, as soon as possible, disseminate its results by disclosing them to the public by appropriate means (other than those resulting from protecting or exploiting the results), including in scientific publications. This is stated in Article 29 of the ASGARD GA – Dissemination of Results — Open Access — Visibility of EU Funding.

This does not change the obligation to protect results in Article 27, the confidentiality obligations in Article 36, the security obligations in Article 37 or the obligations to protect personal data in Article 39, all of which still apply.

Furthermore, according to Article 38 of the GA — Promoting the Action - Visibility of EU Funding – the beneficiaries have the obligation to promote the action and its results, by providing targeted information to multiple audiences (including the media and the public) in a strategic and effective manner. This does not change the dissemination obligations in Article 29, the confidentiality obligations in Article 36 or the security obligations in Article 37, all of which still apply. Before engaging in a communication activity expected to have a major media impact, the beneficiaries must inform the Commission (see Article 52 of the Model GA).

This obligation has been assumed by the ASGARD consortium:

- Non-confidential project results shall be published via appropriate channels/media in a timely manner.
- Major activities shall be planned and recorded, including all dissemination and communication activities.
- Different and confidential processes have been established in ASGARD for the different types of dissemination activities foreseen.

### 2.2.1. Notification procedure

A beneficiary that intends to disseminate its results must give advanced notice to the other beneficiaries of at least 45 days, together with sufficient information on the results it will disseminate. Any other beneficiary may object within 30 days of receiving notification, if it can show that its legitimate interests in relation to the results or background would be significantly harmed. In such cases, the dissemination may not take place unless appropriate steps are taken to safeguard these legitimate interests.

#### 2.2.1.1. Urgency notification procedure

The notification of any dissemination action according to the previously disclosed notification procedure is mandatory. For exceptional cases where this period could exceed the deadlines for a dissemination action, the Steering Committee has approved an Urgency Notification Procedure that shortens notification and objection periods as follows:

- Notification period: At least 20 days before the publication date.
- Objection period: 15 days after receiving the notification.

In order to apply to this Urgency Procedure, the partner responsible of the dissemination action shall communicate it to the Coordinator.

# 3. Dissemination Plan

## 3.1. Dissemination contents

The first step in the dissemination plan is to identify the **WHAT**, i.e., the message or messages to be disseminated. At this stage, the ASGARD consortium has identified the main key message that need to be disseminated and that are summarised in a brief document entitled "Project Overview" (see Annex III).

Moreover, other specific contents or messages have been defined based on the target audiences and will be explained in the following sections.

**Restricted Access Information**

It is also important defining which messages should not be disseminated, since not all documents and knowledge compiled or generated during the project will be available for the public. Special attention must be given to restrict any dissemination of material not classified as public. This will be the case for any document containing personal data, contents subject to intellectual property rights restrictions, those that describe key technologies developed and tested by the consortium during the development of the tests that could compromise the secrecy that could be necessary to obtain patents and avoid potential competitors to gain advantage, or other sensitive reasons.

## 3.2. Dissemination target audiences

The next step in the dissemination plan is to identify **TO WHOM**, i.e., the target audience. The following list identifies the stakeholders that may be interested in the ASGARD project or its results. We have prioritised the primary communication targets; organisations and individuals with whom we want to have an intensive dialogue on the content of our research and demonstration activities:

- End-users and end-user networks and associations (see also activities carried out as part of T2.3);
- Potential members of the ASGARD Community (as per T2.1);
- Other research initiatives covering synergistic subject matter and national or regional funding bodies;
- Research communities and enterprises in areas of direct, specific relevance to the project.

Secondary communication targets with whom we plan to have a less intensive dialogue about outcomes and user experiences include:

- Vendors, integrators and sector organisations (other than standards bodies);
- Wider research community in areas related to our project activities; and
- Policy makers at European, national, or regional level.

As already introduced, LEA partners will focus their dissemination activities on targeting the international end-user community, as well as other private and public institutions in Europe related to the topic; RTOs and University partners will focus on targeting academics, the research community, and other (related) research activities/projects; and industrial partners will focus on targeting the industry.

An initial dissemination strategy per partner type is outlined in the table below, linked to the natural target audiences for each of them.

| Dissemination strategy per partner type |
|---|
| **RTO – Academia** |
| The main dissemination activities to be carried out by the RTOs and Universities in the ASGARD Consortium will include authoring or co-authoring of scientific publications for international journals and conferences as detailed below, press releases in the relevant media, websites, newsletters, project dissemination material (e.g. leaflets, brochures, poster), or the attendance at related events, such as technical workshops and fair trades. Moreover, the partners will organise several meetings with potential end-users at local level in order to create a target group interested in the project development, and to receive relevant feedback. Such meetings will be held anytime and potential stakeholder will be contacted in the future. |
| **End-users – LEAs** |
| In general terms, the end-users involved in ASGARD have the necessary network of contacts with operational and technical practitioners within national, regional and local law enforcement to disseminate the results of ASGARD. LEAs will use all the communication channels with stakeholders, in order to disseminate the results of the ASGARD project. Dissemination activities will have the purpose of sharing information and knowledge within law enforcement community that will include international partners, mainly at the bilateral co-operation level with counterpart LEAs and services. |
| **Industry – SMEs** |
| The main dissemination activities to be carried out by the industrial partners in the ASGARD Consortium will include participation in scientific publications for international journals and conferences, press releases in the relevant media, websites, newsletters, project dissemination material (e.g. leaflets or brochures). Moreover, several SMEs will exploit their market leadership position in their location to disseminate the project results in sponsored workshops, to customers and business partners and within national and international security association. |

## 3.3. Dissemination channels

The ASGARD Consortium has selected the most appropriate channels to disseminate the results of the project, based on the nature of the message and the target audience.

### 3.3.1. Scientific publications

During the course of the project, the ASGARD partners selected the most appropriate journals and conferences in order to disseminate the results achieved. All scientific publications stemming from ASGARD research have been made available through green open access. More details can be found in D11.2 – Scientific Management Plan.

### 3.3.2. Conferences and other events

Industry and other non-scientific conferences have been excellent platforms to disseminate our findings and start direct conversations with the audience, particularly those regional, national, or international events related to the Law Enforcement Community. We aim to get speaking slots at some of those conferences (see table in Section 2.2.1 of the DoA). Moreover, the ASGARD Consortium is fully aware of the importance of

showing the project progress made in fairs and congresses around Europe to obtain future end-user's attention and promote community building.

One of the key factors to success has been the organisation of events, which have mobilise the key stakeholders and promote exchanges of ideas and follow-up actions. These workshops allowed the project end-users, innovation experts and policy makers within the Law Enforcement domain to set the ground for the creation of the ASGARD community. A goal of ASGARD is to trial an approach based on hackathons within the LEA community and amongst practitioners.

Over the course of the project, special sessions, workshops and technology demonstrations have been proposed for inclusion in key scientific conferences in the scientific domains identified (see D11.2). Workshops and special sessions featured contributions from project partners but also from other leading researchers working on similar or related topics. This has ensured that ASGARD is promoted within the various communities whilst ensuring that the project keeps abreast of the current state of the art. Conferences and congresses offer chances to meet in the same place for short periods of time with different people interested in certain research areas.

### 3.3.3. Hackathons

Hackathons are a hands-on Workshop for experimentation. In ASGARD these events team computer programmers, graphic designers, interface designers, domain experts and users, collaborate intensively on mini software projects. The ASGARD tools have been presented and made available to end user groups and a number of topics related to ASGARD have been selected as focus for the Hackathons. The Hackathons encourage participants to form ad hoc multidisciplinary teams, brainstorm ideas, implement and present a demo from which a winner is picked by popular vote. Hackathons are common occurrence within the open source community and have also begun to become valuable tool in FP7 and H2020 projects.

Hackathons aid in setting project priorities and deadlines, team building and efficient integration and testing. ASGARD hackathons have taken place every six months during RTD cycles as part of a project workshop. For further information, refer to D2.2.

### 3.3.4. Advisory Boards

The regular interaction established with the three Advisory Boards in ASGARD (Stakeholder Advisory Group, Ethics and Societal Impact Review Board, and Security Advisory Board) represent another key channel for the dissemination of the project results.

The advisory boards provide regular and meaningful input and ensure that the project objectives are broadly understood and activities and outcomes communicated to relevant stakeholders and decision makers.

## 3.4. Expected results

Another step in the dissemination plan is to identify the **WHY**, i.e. the goals to achieve when carrying out dissemination activities. The following goals have been defined in a way that could be measurable:

- To promote active participation of **end users** and interested parties, letting them contribute with requirements, to follow the achievements of the project during its development and to test the prototypes.
- To inform the **scientific community** about the goals and technologies on which the ASGARD project is based, in order to create opportunities for collaboration.

- To provide a controlled, integrated and common **public image** of the project, facilitating its recognition and preparing the market acceptance for the resulting products.
- To let the **general public** be aware that there is a project funded by the European Commission which aims to Provide LEAs with Technological Autonomy by creating a long-lasting community of LEAs and the research and development industry, focused on a set of tools and techniques, that facilitate effective collaboration in order to define, develop, share, and evolve open source big data technology solutions that will help LEAs prevent and fight against crime and terrorism.
- To provide enough information about the **organisations** integrating the consortium, to increase confidence on the expertise and capabilities to reach the project goals.

A summary of the different results that have been and will be disseminated during the project to the different target audiences, as well as the most appropriate dissemination channels for the purpose is included in the following table:

| Audience | Main Objectives | Contents | Dissemination Channels |
|---|---|---|---|
| **Industry (including associations and clusters)** | Presentation of results | Leaflets, project presentations, posters, demos | Trade shows, conferences and exhibitions, public events, website |
| **End-users and end-user networks and associations** | Raising awareness; invitation to participate; presentation of results | Leaflets, project presentations, posters, newsletters, demos | Private and public forums/events attended by LEAs, hackathons, project demonstrations, website |
| **Private and public institutions in Europe related to the topic** | Presentation of results | Project presentations, newsletters, demos | Project demonstrations, website |
| **Academics** | Presentation of results | Scientific papers, posters, project presentations | Journals, workshops, conferences, website |
| **Other research activities** | Raising awareness; invitation to collaborate; presentation of results | Leaflets, project presentations, Scientific papers, posters, newsletters, demos | Email, teleconferences, meetings, website |
| **Inside each partner organisation** | Raising awareness; Obtaining support | Project presentations, demos | Meetings, newsletters, intranets |
| **General public** | Obtaining support | Basic project information, project presentations | Website |
| **Media** | Obtaining support | Press release | Email, website |

*Table 2 – Summary of dissemination strategy*

# 4. Communication activities and resources

The communication plan includes the overall strategy and procedures for general and non-scientific dissemination and communication activities in the ASGARD project. The communication plan comprises a number of activities that has enabled a proactive communications effort. These include maintaining a strategic calendar to prepare for important events, working with a network of communication contacts developed in the course of the project and finally strengthening our messaging both in terms of content and in the way it is communicated. Active promotion and communication activities, including online and non-electronic communication methods and tools, special events as well as publications are core activities of this project.

A visual identity has been developed for the project comprising a logo and style guidelines for on-line and off-line publications including at least the following applications:

- The logo

*Figure 1 – ASGARD logo*

- The project website: The ASGARD project website has acted as our dissemination hub, central repository and broadcast channel for public information, and as the main point of communication for the ASGARD Community. For more information: [http://www.asgard-project.eu/](http://www.asgard-project.eu/)

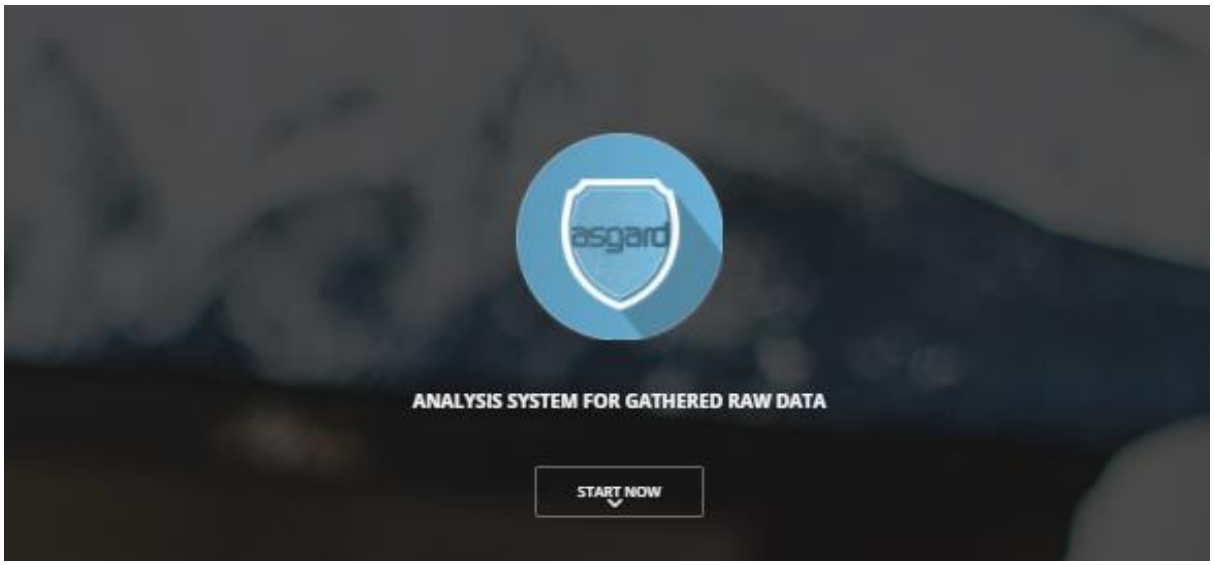



*Figure 2 – ASGARD project's website*

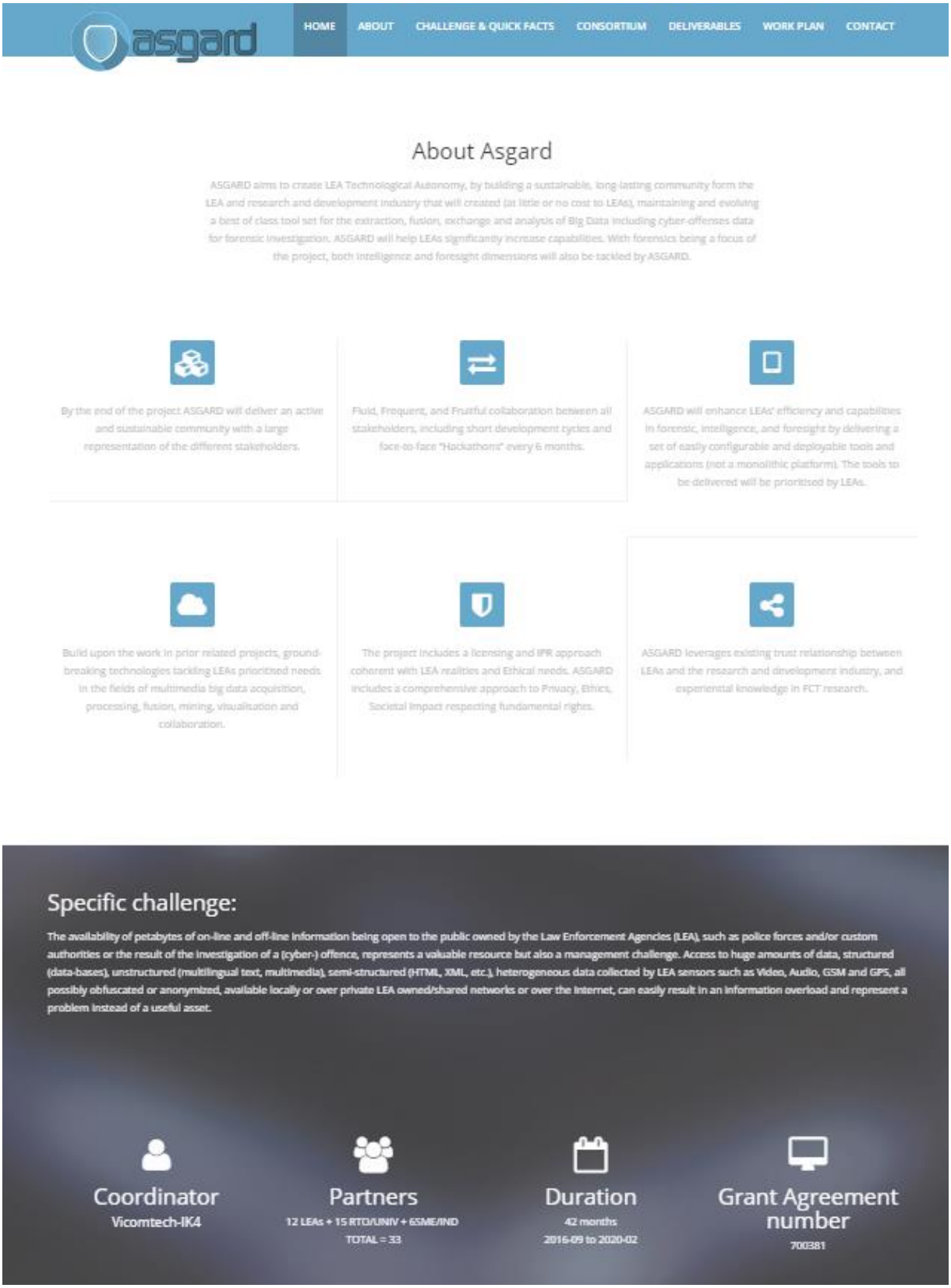



*Figure 3 – Overview of the ASGARD webpage*

- PowerPoint presentation and technical report templates


*Figure 4 – Example of a presentation template*

- Project leaflet and other promotional material: A flyer provides a short summary of the project, combining a graphical design that should facilitate its identification and a text that provides the key ideas about the project. It can be translated to different languages, facilitating the distribution of each version depending on the target audience to which has to be delivered. The flyer may require changes along the project, in case that the message needs to be changed adding updated information, or adapt the design to a new style.


*Figure 5 – ASGARD leaflet (cover)*

## About

ASGARD aims to contribute to LEA Technological Autonomy, by building a sustainable, long-lasting community from the LEA, research and industrial community. At little or no cost to LEAs, it will create, maintain and further develop a best of class tool set for the extraction, fusion, exchange and analysis of Big Data including cyber-offenses for forensic investigation.

ASGARD will help LEAs significantly increase capabilities. With forensics being a focus of the project, both intelligence and foresight dimensions will also be tackled by ASGARD.

## Challenge

The availability of petabytes of on-line and off-line information being open to the public and possessed by Law Enforcement Agencies (LEA), such as police forces or customs agencies, or as the result of the investigation of a (cyber-) offence, represents a valuable resource, but also a significant management challenge.

Access to large volumes of data, structured (data-bases), unstructured (multilingual text, multimedia), semi-structured (HTML, XML, etc.), heterogeneous data collected by LEA sensors such as Video, Audio, GSM and GPS, all possibly obfuscated or anonymised, available locally or over private LEA owned/shared networks or over the Internet, can easily result in an information overload and represent a problem instead of a useful asset.

## Work Plan

**The project is organised in 5 phases:**

**PHASE 1**

The initial "Ramp Up" phase (M1-M3) will focus on project governance and operational structures (e.g. Management and Quality plans, Ethical Societal Impact Review Board and Stakeholder Advisory Group kick-offs), relevant research will be analysed, and work related to use-cases definition and Social Ethical Legal and Privacy activities will begin.

**PHASE 2**

During the "Prove Feasibility" phase (M4-M15), the foundations of the platform will be laid and readily available State-of-the-Art technologies will be integrated. A feasibility study of available datasets will also be carried out in this phase.

**PHASE 3**

The "Show Efficiency" phase (M16-M27) will focus on development of new tools and applications, as well as on use-case refinements.

**PHASE 4**

The "Application Adaptation" phase (M28-M39) will focus on ensuring domain adaptation of the tools and applications, up-scaling, increasing collaboration, and on training and certification.

**PHASE 5**

Finally, the "Ramp Down" phase (M40-M42) will focus on the commissioning of project results and project closure.

*Figure 6 – ASGARD Leaflet (inside)*

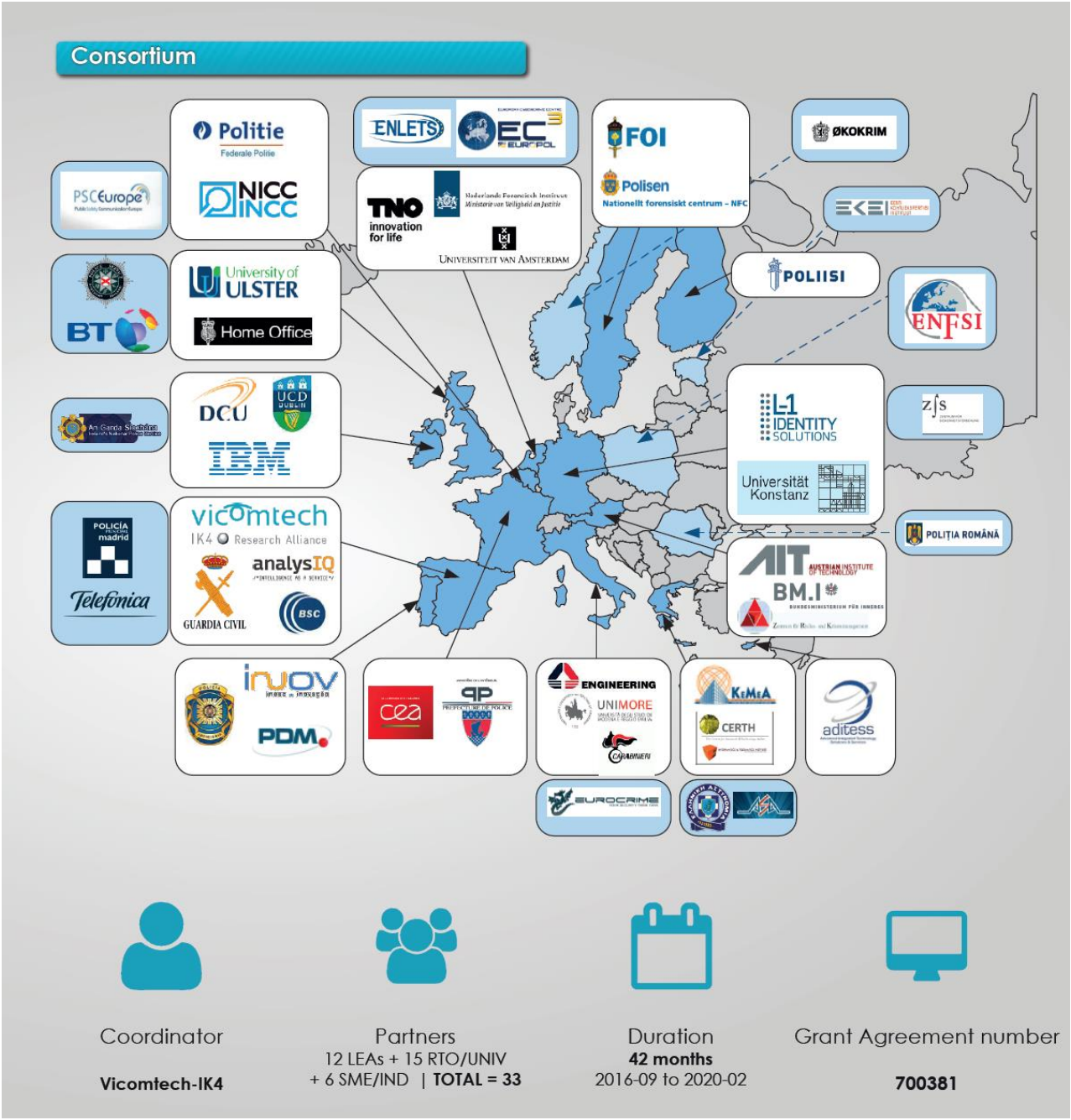



*Figure 7 – ASGARD leaflet (consortium)*


*Figure 8 – ASGARD leaflet (back cover)*

In order to have maximum impact, the Consortium has chosen its communications channels based on its communications targets. The Consortium has engaged in direct conversations with a number of relevant research communities, LEAs, related projects, and other organisations.

| Comm. Channel | ASGARD Approach | KPI (quantified indicators and targets) |
|---|---|---|
| ASGARD Website | Low profile. Basic information and references, contact forms, and links to request further details | • Website published by M3<br>• Minimum updates every 3 months<br>• Number of visits >300 by end of project |
| Traditional Media Presence | Low profile. Use of press releases | • >10 articles in newspapers and or interviews with radio stations<br>• Presence in >7 countries |
| Trade shows, exhibitions, and public events | Low profile. High level project presentations, basic information | • >3 events |
| Private demonstrations | Hackathons and final project demonstrations | • 6 hackathons<br>• 3 final project demonstrations |

| | | |
|---|---|---|
| Scientific journals and conferences | High profile. As many publications as possible of the non-classified results | • >10 papers in indexed journals<br>• >20 papers or posters in indexed conferences |
| LEAs only forums and networks | High profile. LEA partners. As much dissemination as possible | • >10 project presentations in these types of private forums |
| Project presentations | Medium profile. As many as needed for targeted audience | • >5 presentations to Private and public institutions in Europe related to the topic<br>• >5 presentations to (related) research projects |

## 4.1. Public Relations Officer and Outreach

Given the understandable public sensitivity to the type of research in ASGARD it is necessary to ensure a coordinated and concise message is given to the media, non-governmental or societal organisations on the goals and activities of the ASGARD. For such eventuality an expert Public Relations Officer is included in the project structure (as further explained in the DoA).

# 5. Results Gathering and Evaluation

## 5.1. Dissemination activities log

The dissemination manager, in collaboration with the project coordinator and the scientific manager (see template for reporting scientific publications in Annex IV), has maintained a log describing the main actions executed and any relevant information that facilitates to follow a historical and contextual description of the execution of the dissemination plan. The log includes information about the publications, participation in events, appearance in mass media, etc. and the summary and relevant information has been also uploaded to the Participant Portal to be shared with the EC.

One of the goals of the log is to learn from the experience in order to continuously improve and reuse knowledge acquired during the implementation of the plan, and to refine it during the project development, helping to produce new versions of the dissemination plan.

**Dissemination & Communication Activities**

**Specify the number of Dissemination and Communication activities linked to the project for each of the following categories (please list only activities directly linked to the Action):**

| | |
|---|---|
| **Organisation of a Conference** | 0 |
| **Organisation of a Workshop** | 0 |
| **Press release** | 0 |
| **Non scientific and non-peer-reviewed publication (popularised publication)** | 0 |
| **Exhibition** | 0 |
| **Flyer** | 0 |
| **Training** | 0 |
| **Social media** | 0 |
| **Website** | 0 |
| **Communication Campaign (e.g. Radio, TV)** | 0 |
| **Participation to a Conference** | 0 |
| **Participation to a Workshop** | 0 |
| **Participation to an Event other than a Conference or a Workshop** | 0 |
| **Video/Film** | 0 |
| **Pitch Event** | 0 |
| **Brokerage Event** | 0 |
| **Trade Fair** | 0 |
| **Participation in activities organized jointly with other H2020 projects** | 0 |
| **Other** | 0 |

*Figure 9 – Log of dissemination and communication activities*

**Specify the estimated number of persons reached, in the context of all dissemination and communication activities, in each of the following categories:**

| | |
|---|---|
| **Scientific Community (Higher Education, Research)** | 0 |
| **Industry** | 0 |
| **Civil Society** | 0 |
| **General Public** | 0 |
| **Policy Makers** | 0 |
| **Media** | 0 |
| **Investors** | 0 |
| **Customers** | 0 |
| **Other** | 0 |

*Figure 10 – Log of the audience reached by the dissemination and communication activities*

## 5.2. Data sources

In order to measure the effectiveness of the execution of the dissemination plan, the following techniques have been considered to be used:

- Questionnaires and surveys: Asking a representative sample of population a structured set of questions would allow extrapolating basic indicators about the awareness about the project goals and status, and their opinion about it.
- Web search engine results: Querying for relevant keywords (such as the project's name, or the main words describing it) would provide a good idea about how many results are related to the project and which information is found by those who search for the project in the Web. Configuring automatic searches could help compare the evolution of the search results in different moments.
- Web audience statistics: The statistics collected by the Web server or by third party services provide a rich description of the people visiting the project Website, including basic demographics and others reports enabling the ASGARD consortium to understand how the people arrived at the website and how they navigated within its contents.
- Citations: The number of citations from research publications is another indicator of the results obtained.
- References in public media: The number and type of references published in general media about the project and its activities could provide a good idea about the public interest in the project.

# 6. Conclusion

## 6.1. Summary

In this document we have described the internal guidelines that have been followed for the appropriate management of the dissemination and communication activities within the ASGARD project. This deliverable complements the information provided in D11.1 Project Management Plan, which is the handbook on project management for ASGARD, and D11.2 Scientific Management Plan.

Some of the sections in this document have been updated throughout the lifetime of the project, as previously indicated, in order to appropriately coordinate all the dissemination activities, maximise the impact of the project, identify the strategic communication priorities, undertake corrective actions if needed in order to meet the dissemination plan, identify and manage risks.

With this deliverable, we have demonstrated a range of dissemination activities. In section 3.2 there is an impressive level of engagement shown with LEAs and other interested professional bodies across Europe. At the same time, academic partners within ASGARD have published work in important scientific journals in the field. It is worth highlighting that dissemination has been targeted at improving performance of LEAs and other stakeholders. Finally, we would like to point to EUROPOL invitations to demonstrate ASGARD's work at such events as SIRIUS – Cross Border Access to Electronic Evidence in the Hague in 2019 and our participation at Security Research Event 2019, co-organised by the European Commission and the Ministry of the Interior in Finland as a side event of Finland's Presidency of the Council of the European Union. It is fair to say that key stakeholders in the LEA community were aware of the ASGARD project and keen to hear the results.

## 6.2. Evaluation

During the execution of the dissemination plan, the Dissemination Manager in close collaboration with the ASGARD Project Coordinator and the Scientific Manager collected the data from the different sources and define and monitor the main specific indicators.

Taking in account the general objectives and the specific situation in the project, the coordinator identified specific needs that could influence the execution of the plan, and together with the rest of the team decide the corrective actions if needed.

In general terms, the project has met its dissemination goals and has followed the dissemination and communication strategies that were defined in the first phase of the project.

## 6.3. Future work

All activities have been tracked and monitored continuously during the project. At the end of the project, a global evaluation has been made, summarising the dissemination activities performed and the results achieved.

There are other stakeholders and policy-making communities that would benefit from engagement with the outputs of ASGARD. These communities will be invited to engage with elements of the ASGARD outputs. At

the same time, work will continue within the wider European research community and in some instances, this will be European Commission funded.

The final version of D13.6 will be submitted in M51 (November 2020). The present document has been updated on a regular basis throughout the project and it will not be updated any more unless the review requests / recommends that changes should be made.

# ANNEX I. GLOSSARY AND ACRONYMS

The table below shows the list of acronyms and terms used in this document:

| Term | Definition / Description |
|---|---|
| DoA | Description of Action |
| EC | European Commission |
| ENFSI | European Network of Forensic Science Institutes<br>ENFSI is recognized as a pre-eminent voice in forensic science worldwide by ensuring the quality of development and delivery of forensic science throughout Europe. |
| FP7 | Framework Programme 7 |
| GA | Grant Agreement |
| Hackathon | A usually competitive event in which people work in groups on software or hardware projects, with the goal of creating a functioning product by the end of the event |
| H2020 | Horizon 2020 |
| LEA | Law Enforcement Agency |
| RTO | Research and Technology Organisation |
| SNA | Social Network Analytics<br>Social media analytics is the process of gathering and analysing data from social networks |
| SME | Small or Medium Enterprise |
| WP | Work Package |

*Table 3 – Glossary and Acronyms*

# ANNEX II. REFERENCES

The table below shows the most significant references used and/or cited to prepare this document:

| Reference | Source |
|---|---|
| ASGARD Webpage | www.asgard-project.eu |

# ANNEX III. ASGARD PROJECT OVERVIEW


## Analysis System for GAthered Raw Data

ASGARD is a project that has received funding from the European Union's Horizon 2020 - Research and Innovation Framework Programme, under grant agreement no 700381.

# PROJECT OVERVIEW

| | | |
|---|---|---|
| **Version:** | 1.0 | |
| **Delivery date:** | 2016-11-10 | |
| **Dissemination level:** | Public | |
| **Author(s):** | Juan Arraiza | Vicomtech-IK4 |

## Contents

# 1. ASGARD in a nutshell

**PROJECT AIMS**

Provide LEAs with Technological Autonomy by **creating a long lasting community** of LEAs and the research and development industry, focused on a set of tools and techniques, that **facilitate effective collaboration** in order to define, develop, share, and evolve **open source big data technology solutions** that will help LEAs **prevent and fight against crime and terrorism.**

**VISION**

By the end of the project ASGARD will deliver an **active and sustainable community of practitioners** that has found a **valid and sustainable model** for all participants and has **successfully delivered and evaluated the tools & infrastructure** developed during the project, **reinforcing all participants' motivation to** participate in the community.

**STRATEGY**

- **Fluid, Frequent, and Fruitful collaboration between all stakeholders**, including **short development cycles** and face-to-face **"Hackathons"** every 6 months. After the hackathons LEAs will be able to take the tools, deploy and test them in their own premises and with their own data providing feedback to the ASGARD community.
- **Build the sustainable community starting with a large representation** of the different stakeholders in the **strong ASGARD consortium**.
- **Definition and design of the solution based on** (1) forensic, intelligence and foresight **processes**, (2) end-user needs driven **use cases** and scenarios, (3) SoA **technologies** and beyond SoA achievable challenges, and (4) **Social, Ethical, Legal, and Privacy aspects**.

**IMPACT**

- ASGARD will **enhance LEAs' efficiency and capabilities** in forensic, intelligence, and foresight by delivering a **set of easily configurable and deployable tools and applications** (not a monolithic platform). The tools to be delivered will be **prioritised by LEAs**. Each tool will be designed and developed to tackle a specific task, whether it be data or task driven. User-friendly and easy-to-use applications will allow very **quick definition and set up of ad hoc** data acquisition, processing, analysis, and exploitation **workflows** to tackle the **specific needs of each investigation**.
- **Iterative and participatory multi-actor dialogues** will take place **at least every 6 months**, during the "hackathons", and will foster understanding and collaboration.
- ASGARD will also **improve LEAs' capabilities for trans-border LEAs data-exchange and collaboration.**

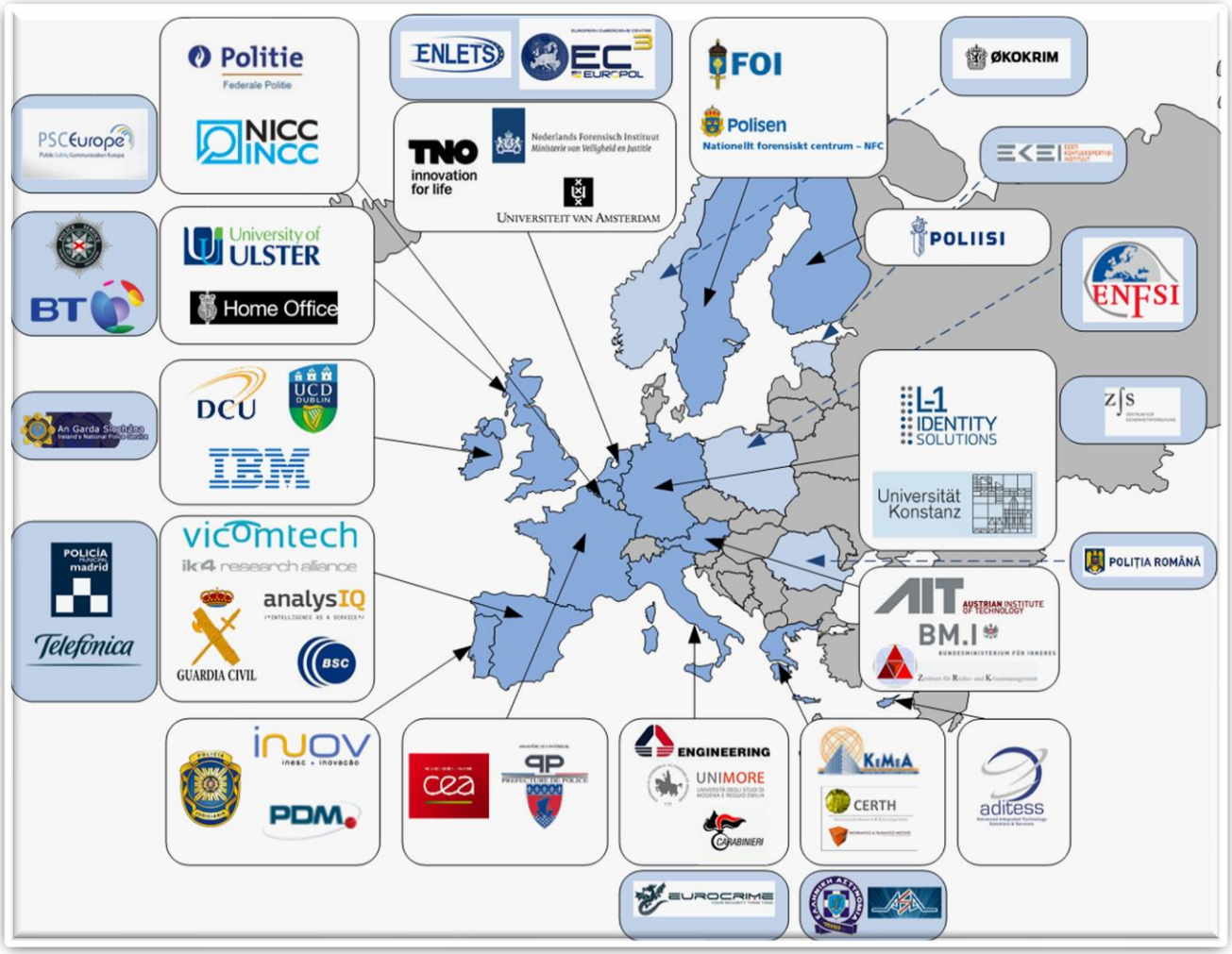
**EXCELLENCE**

- **Interoperability**: Develop easy-to-use, interoperable sets of tools which complement LEAs' current systems.
- **Technological breakthrough:** Build upon the work in prior related projects, ground-breaking technologies tackling LEAs prioritised needs in the fields of multimedia big data acquisition, processing, fusion, mining, visualisation and collaboration.
- **Social, Ethical, Legal and Privacy compliance:** Fully compliant with new legislative framework resulting from new EU data protection directive with emphasis on Privacy by Design and Societal Impact, the Charter of Fundamental rights and H2020 MGA provisions

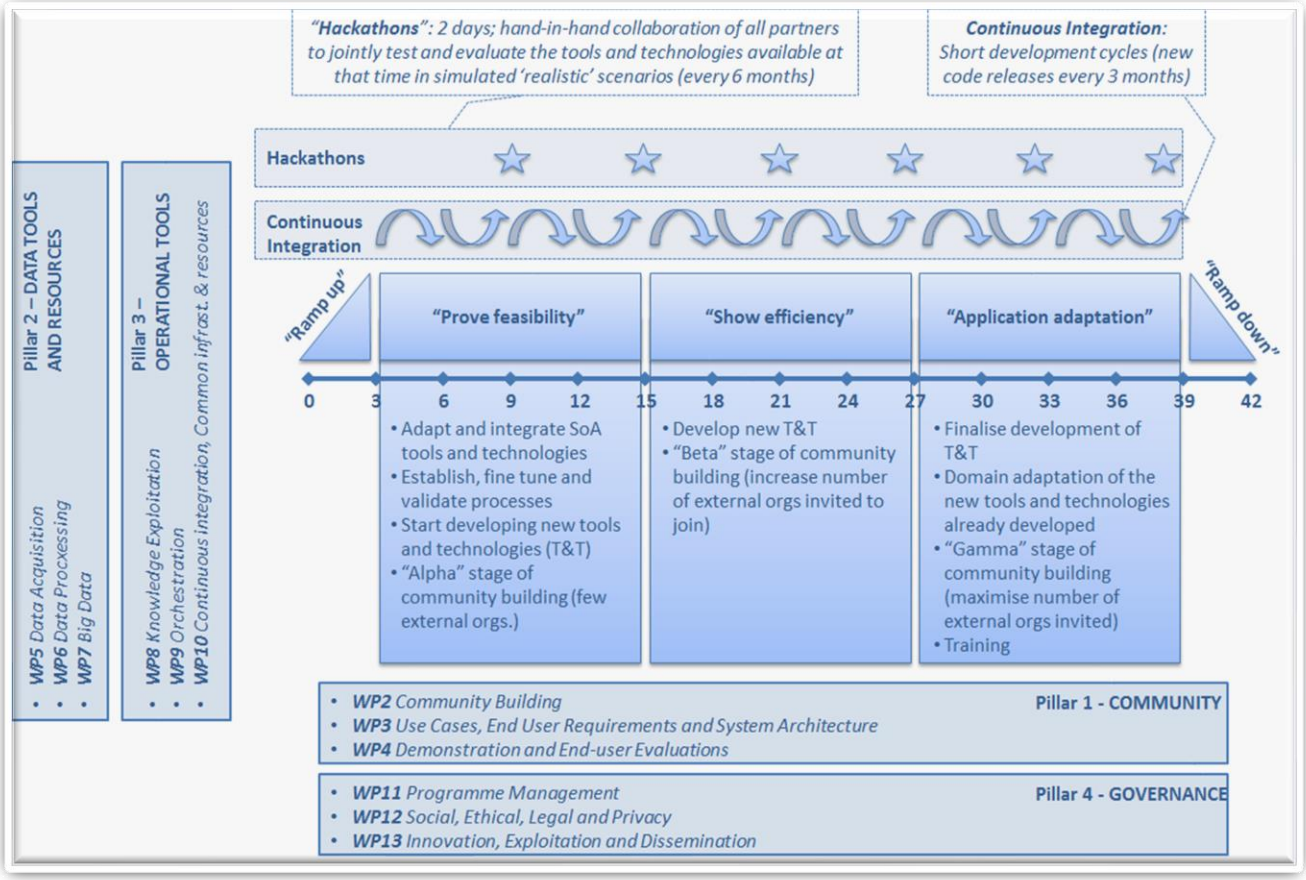
**IMPLEMENTATION**

- **Agile:** Modern continuous development and integration methodologies and short development cycles to ensure the LEAs in the project have early and frequent access to the project results (at least 6 times during the project) so that they can provide prompt feedback to re-prioritise the work plan if needed.
- **Streamlined management and coordination:** Few partners per task and few tasks per partner (mainly in RTD tasks) and efficient governance and decision making mechanisms to simplify management and coordination and to facilitate prompt and appropriate issue/conflict resolution.

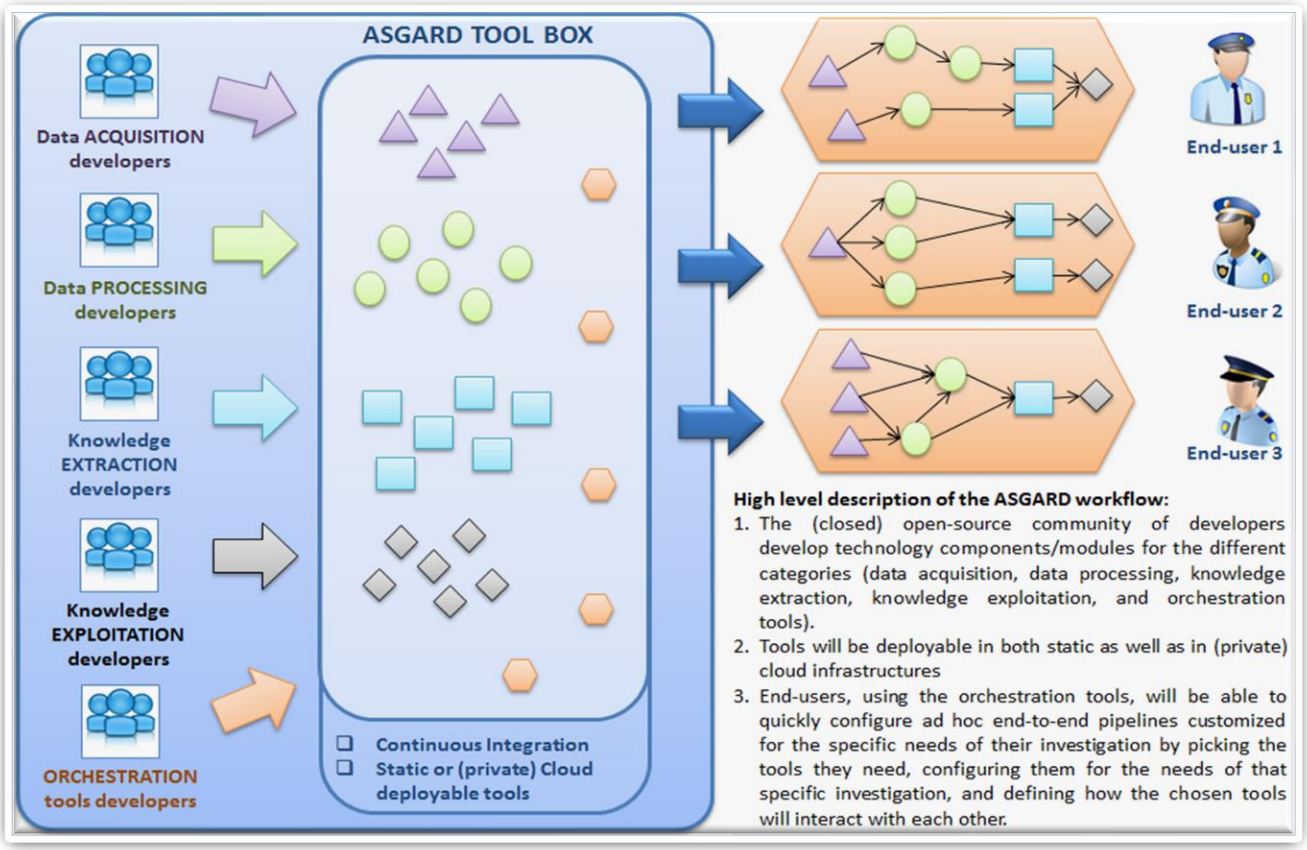
# 2. ASGARD Consortium



# 3. Conceptual view of the implementation strategy



# 4. ASGARD components



# ANNEX IV. SCIENTIFIC PUBLICATIONS FORM

The following form is used in the project for tracking and reporting of publications in the ASGARD project.

## Publications

**Provide a DOI for the publication (recommended) or fill-in manually the required information:**

**Publication 1** * Mandatory fields

**DOI**

search a DOI name

**Type of publication** *

*Article in Journal/Publication in Conference, proceedings or Workshop/Book or Monograph/Chapter in a Book/Thesis or Dissertation / Other*

**Repository Link**

*Link to a copy of the published version on the author's accepted manuscript that has been deposited in a repository for scientific publications, or to a page within that repository providing access to the deposited version (possibly after the end of an embargo period, where applicable). This is NOT a link to the publication on the journal / publisher website, and it is NOT a link to a personal or institutional homepage where the publication may have been posted*

**Link to the publication**

*If the publication does not have a DOI, please enter a link to the publication on the journal/ publisher website*

**Title** *

**Authors** *

**Title of the Journal/Proceedings/Books series/Book (for book chapters)**

**Number, date or frequency of the Journal/Proceedings/Book**

**Relevant pages**

**ISBN**

**Publisher** *

**Place of publication** *

**Year of publication** *

**Is this publication available in Open-Access, or will it be made available?** *

*Yes - available in Green Open Access*
*Yes - available in Gold Open Access*
*No*

**Is this a peer-reviewed publication?** *

**Is this a joint public/private publication?** *

*Both the joint publications coming from public and private project participants as well as from private/public project participants with public/private organisations outside the consortium (as long as they are related to the funded project) should be reported*

# ANNEX V. DISSEMINATION ACTIVITIES

### 3.1. Scientific Publications

Publications

| No. | Type | Title | Authors | Title of the Journal/ Proc./ Book | Number, date or freq. of the Journal/ Proc./ Book | Is Peer-reviewed ? | Is Open Access ? | DOI | Repository Link |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Publication in Conference proceedings/ Workshop | Semantic filtering for video stabilization | K. Karageorgos, A. Dimou, A. Axenopoulos, P. Daras, F. Alvarez | 2017 14th IEEE International Conference on Advanced Video and Signal Based Surveillance (AVSS) | | Yes | Green | 10.1109/AVSS.2017.8078488 | https://zenodo.org/record/1134544 |
| 2 | Publication in Conference proceedings/ Workshop | Automatic analysis of online image data for law enforcement agencies by concept detection and instance search | Henri Bouma, Maaike H. T. de Boer, Maarten C. Kruithof, Frank B. ter Haar, Noëlle M. Fischer, Laurens K. Hagendoorn, Bart Joosten, Stephan A. Raaijmakers | Counterterrorism, Crime Fighting, Forensics, and Surveillance Technologies | Sep-17 | No | Green | http://dx.doi.org/10.1117/12.2277970 | https://www.spiedigitallibrary.org/conference-proceedings-of-spie/10441/2277970/Automatic-analysis-of-online-image-data-for-law-enforcement-agencies/10.1117/12.2277970.full |
| 3 | Publication in Conference proceedings/ Workshop | Using Transfer Learning in Part-Of-Speech Tagging of English Tweets | Meftah, Sara & Semmar, Nasredine & Zennaki, Othman & Sadat, Fatiha. | The 8th Language and Technology Conference (LTC 2017) | | Yes | Green | | https://www.researchgate.net/publication/323551856_Using_Transfer_Learning_in_Part-Of-Speech_Tagging_of_English_Tweets |
| 4 | Publication in Conference proceedings/ Workshop | Hate Speech Dataset from a White Supremacy Forum | Ona de Gibert, Naiara Perez, Aitor García-Pablos, Montse Cuadros | Proceedings of the 2nd Workshop on Abusive Language Online (ALW2) | | Yes | Gold | 10.18653/v1/w18-5102 | http://arxiv.org/abs/1809.04444 |
| 5 | Publication in Conference proceedings/ Workshop | Rapid Annotation Tool to Train Novel Concept Detectors with Active Learning | Maaike H. T. de Boer, Henri Bouma, Maarten Kruithof and Bart Joosten | MMEDIA 2019: International Conference on Advances in Multimedia | | Yes | Gold | | |
| 6 | Publication in Conference proceedings/ Workshop | Flexible image analysis for law enforcement agencies with deep neural networks to determine: where, who and what | Henri Bouma, Bart Joosten, Maarten C. Kruithof, Maaike H. T. de Boer, Alexandru Ginsca, Benjamin Labbe, Quoc T. Vuong | Counterterrorism, Crime Fighting, Forensics, and Surveillance Technologies II | vol. 10802 | No | Green | 10.1117/12.2325452 | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 7 | Chapter in a Book | DeepAD: A Generic Framework Based on Deep Learning for Time Series Anomaly Detection | Teodora Sandra Buda, Bora Caglayan, Haytham Assem | Advances in Knowledge Discovery and Data Mining | 10937 | Yes | Green | 10.1007/978-3-319-93034-3_46 | https://www.researchgate.net/profile/Teodora_Buda/publication/325840218_DeepAD_A_Generic_Framework_Based_on_Deep_Learning_for_Time_Series_Anomaly_Detection/links/5c542db6299bf12be3f2c4b4/DeepAD-A-Generic-Framework-Based-on-Deep-Learning-for-Time-Series-Anomaly- |
| 8 | Publication in Conference proceedings/ Workshop | Exploiting Relational Information in Social Networks using Geometric Deep Learning on Hypergraphs | Devanshu Arya, Marcel Worring | Proceedings of the 2018 ACM on International Conference on Multimedia Retrieval - ICMR '18 | | Yes | Green | 10.1145/3206025.3206062 | https://ivi.fnwi.uva.nl/isis/publications/2018/AryaICMR2018/AryaICMR2018.pdf |
| 9 | Publication in Conference proceedings/ Workshop | Visual Analytics Framework for the Assessment of Temporal Hypergraph Prediction Models | Dirk Streeb, Devanshu Arya, Daniel A. Keim, Marcel Worring | Proceeedings of the Set Visual Analytics Workshop at IEEE VIS 2019 | | Yes | Green | | https://scibib.dbvis.de/uploadedFiles/2019-08-14doctemplate.pdf |
| 10 | Publication in Conference proceedings/ Workshop | Visual Analytics of Conversational Dynamics | Seebacher, Daniel; Fischer, Maximilian T.; Sevastjanova, Rita; Keim, Daniel A.; El-Assady, Mennatallah | EuroVis Workshop on Visual Analytics (EuroVA) | | Yes | Green | 10.2312/eurova.20191130 | https://bib.dbvis.de/uploadedFiles/2019-08-21preprint-1.pdf |
| 11 | Article in Journal | Visual Analytics for Temporal Hypergraph Model Exploration | Maximilian T. Fischer, Devanshu Arya, Dirk Streeb, Daniel Seebacher, Daniel A. Keim, Marcel Worring | IEEE Transactions on Visualization and Computer Graphics | | Yes | Green | 10.1109/tvcg.2020.3030408 | http://arxiv.org/abs/2008.07299 |
| 12 | Publication in Conference proceedings/ Workshop | Distances, Neighborhoods, or Dimensions? Projection Literacy for the Analysis of Multivariate Data | Dirk Streeb, Rebecca Kehlbeck, Dominik Jäckle, and Mennatallah El-Assady | Workshop on Visualization for AI Explainability | | Yes | Green | | |
| 13 | Chapter in a Book | Integrating Specialized Bilingual Lexicons of Multiword Expressions for Domain Adaptation in Statistical Machine Translation | Nasredine Semmar, Meriama Laib | Computational Linguistics | 781 | Yes | Green | 10.1007/978-981-10-8438-6_9 | https://hal-cea.archives-ouvertes.fr/cea-01772655 |

**Forthcoming;**

A book agreement exists in Springer Nature; Technology Development for Security Practitioners (the "Work") edited by:Babak Akhgar, Dimitrios Kavallieros and Evangelos Sdongos.

### 3.2 Other selected related dissemination activities

GUCI internal INFO-DAY (May 7th, 2018), "INFO-DAY para Guardia Civil de Proyectos Europeos Innovación Tecnológica. H2020". Internal conference in Dirección General de la Guardia Civil, Madrid, Spain.

ENFSI Digital Imaging Working group (DIWG) Annual Meeting (September 18-20th 2018), The ENFSI Digital Imaging Working group (DIWG) Annual Meeting. Organised by ENFSI DIWG and National Forensic Laboratory (NFL) Ljubljana in Bled (Slovenia)

DANTE Workshop (November 2018), at Engineering Informatica S.a.P. premises in Rome, Italy. Mr Juan Arraiza made a presentation of the ASGARD project and answered the questions made by the audience, which included security research practitioners.

Security Research Event (SRE) 2018 (December 2018), Brussels, Belgium. The ASGARD project had a booth at which multiple presentations and live demos of the ASGARD results were made.

Security Research Event (SRE) 2019 (November 2019), Helsinki, Finland. The ASGARD project had a booth at which multiple presentations and live demos of the ASGARD results were made. Among those that visited the booth it was the Minister of Interior of Finland, Mrs Ohisalo. Also, Mr Seán Gaines, from Vicomtech and part of the ASGARD project team, participated in the panel on Artificial Intelligence.

ENFSI FITWG Annual Meeting (September 25-28th 2018), ENFSI Forensic IT Working Group (FITWG) organised the ENFSI FITWG Annual Meeting in Saint Petersburg (Russia).

Presentation of ASGARD project and demonstration of ADITESS developed tools to Cyprus Police in October 2019.

Mediterranean Security Event, Crete, October 2019. The ASGARD project had a booth at which the project was presented, and the results demoed. Besides, the project was also part of the panel on privacy, ethical and social impact aspects.

Invited to present the ASGARD project during a workshop at the annual meeting of the IT-Expertenkreises des Bund Deutscher Kriminalbeamter (IT expert group of the Federation of German Detectives), comprised of police officers / policy makers from different federal ministries. December 2019.

ENFSI Digital Imaging Working group (DIWG) Annual Meeting (November 5-7th 2019) ENFSI Digital Imaging Working Group (DIWG) Annual Meeting was organized by ENFSI DIWG and Comisaria General de Policia Científica in Madrid (Spain).

Security Research Event 2019, Co-organised by the European Commission and the Ministry of the Interior in Finland as a side event of Finland's Presidency of the Council of the European Union., 6-7 November 2019 – Helsinki, Finland.

Presentation in Criminal Intelligence Service of Austria (March 11th 2020), A presentation was made in the Criminal Intelligence Service of Austria.

Community of Users (CoU) workshop - Security research data: legal & ethical aspect (June 16$^{th}$, 2020). Several ASGARD project team members participated in the event and the Privacy, Ethical, and Data Protection protocol to evaluate datasets implemented in the project was presented to the audience.

Community of Users (CoU) FCT workshop – Forensics (October 22$^{nd}$, 2020).

VICTORIA project's conference, Improving Video Analysis for a Safer Europe, 16-18$^{th}$ November 2020.

Final Virtual Event of the ASGARD project. The project was presented to around 100 attendees.

The ASGARD project was also presented at the Virtual conference “Nicosia Risk Forum” - https://cerides.euc.ac.cy/nicosia-risk-forum/nicosia-risk-forum-2020 (November 26th, 2020). There was a total of 118 registered people, from the following categories:

| | |
|---|---|
| LEA & other public security practitioners: | |
| organisations: | 31 |
| attendees: | 51 |
| European Commission attendees: | 3 |
| SME/Industry attendees: | 15 |
| RTO/University attendees: | 49 |

The agenda of the event was as follows:

| # | Session | Start (CET) |
|---|---|---|
| 1 | **Project overview and history** | 14:00 |
| 2 | **Thematic panels**: what the different stakeholders think about the project | |
| | Partner LEAs' point of view | 14:30 |
| | Non-LEAs' partners' point of view | 14:50 |
| | Non-partners' (stakeholders') point of view | 15:10 |
| | Joint discusion | 15:30 |
| 3 | **Breakout (parallel) sessions** | 15:50 |
| | A) Live demos (attendees decide what to do live) | |
| | B) 4 "Pre-canned" demos: | |
| | 1) Hyper-Matrix visual analytics | |
| | 2) From Zero to Hero | |
| | 3) Knowledge Export: exporting ASGARD data to UMF | |
| | 4) From mail to jail! | |
| 4 | **The Project ends. What is next?** | 16:50 |
| 5 | **Wrap up** | 17:10 |

Community of Users (CoU) FCT workshop - Involvement of practitioners in FCT security research projects (November 26th, 2020). Though it was not part of the agenda, the ASGARD project was mentioned several times as a success story of the involvement of end-users in security research project.