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NOTE

From:	French and German delegation
To:	Working Party on Information Exchange and Data Protection (DAPIX)
Subject:	Information Management Strategy (IMS) action No 2 – Action EPRIS-ADEP – Draft executive summary of the evaluation report

Delegations will find in annex the draft executive summary of the evaluation report of the pilot implementation of EPRIS-ADEP.

The final report will be available after submission to the Commission by the end of February 2019.

EPRIS-ADEP

ADEP Pilot Implementation and Evaluation by MS

DRAFT EXECUTIVE SUMMARY OF THE EVALUATION REPORT

(760832 – EPRIS-ADEP)

Version 1.0

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DRAFT EXECUTIVE SUMMARY OF THE EVALUATION REPORT

Basic data of the pilot project

ADEP (Automation of Data Exchange Processes) is the name of action 2 of the 5th Information Management Strategy (IMS) action list of the Working Party on Information Exchange and Data Protection (DAPIX).

Within the project 'ADEP Pilot Implementation and Evaluation by MS' the European Police Records Index System (EPRIS) has been piloted. The pilot led by France has been funded by the European Commission with an amount of 1.5 million Euros for the period from the 1st of July 2017 to 31st of December 2018. In addition to France, Finland, Germany, Ireland and Spain participated in this pilot project, as well as Europol[1]. Three countries were associated as observers: Hungary, Belgium and Austria[2].

Business object of the pilot

According to the project-specific communication strategy, this project is also called 'EPRIS-ADEP'. The scope of EPRIS-ADEP is the automation of presently manual and therefore labour and time-consuming processes for identifying whether certain law-enforcement-related data is available in one or several Member States (MS) in order to enable and facilitate the subsequent bilateral or multilateral information exchange. The pilot project aimed to create a technical system cross-checking index databases provided by each participant, containing an extract of law enforcement records (with pseudonymised biographical data such as family name, surname, any other names/alias, date of birth, place of birth, gender). The index database is located at each participant. The independently initiated search in the indexes of the other participants results in the indication of a 'hit' or 'no-hit'. In case of a hit, additional data has to be requested using existing channels for law enforcement cooperation such as SIENA (Secure Information Exchange Network Application).

1 Europol is not a partner/beneficiary of the Grant Agreement. The before mentioned countries are in the following entitled as Member States (MS).

2 Austria attended partly.

Thus, EPRIS-ADEP applies the principle of privacy by design by its decentralized architecture and the use of pseudonymised data – whereby the identity of persons of interest will not be revealed as long as potential hits have not emerged. It is based on a decentralized architecture – thus avoiding storing copies of personal data in centralized databases – and an UMF[3] compliant interface, which is planned for the follow-up communication as one major task in the continuation of the activities. The EPRIS-ADEP system uses already existing Europol infrastructure, in particular the Europol Operations Network (EON) and SIENA.

The envisaged system is based on the automation of the existing standard in information exchange while distinguishing two phases of the request process using advanced privacy by design solutions.

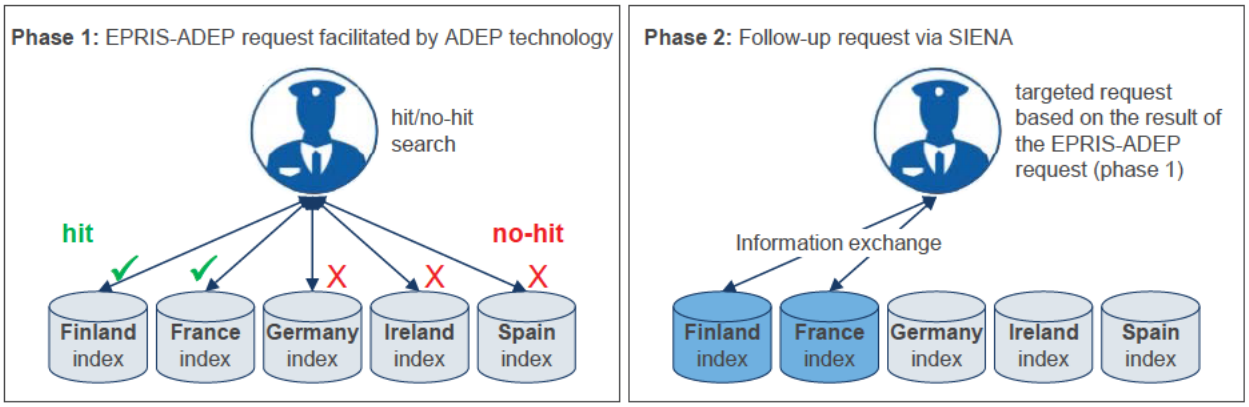

Figure 1: Phases of the request process with EPRIS-ADEP (example)

Phase 1 serves to locate with the help of the ADEP-Technology where relevant data of a person of interest is with high probability available in another MS indicated by a hit. A search resulting in a no-hit means that there is no information available in the other MS concerning the person of interest. Prior to search in EPRIS-ADEP, all preconditions for the bilateral information exchange have to be fulfilled (e.g. principle of proportionality and legal requirements). The request contains a very restricted set of search criteria (first name, family name/alias, date of birth, place of birth - not in the scope of the pilot project- and gender). In the example in Figure 1, the query has been sent to five countries. So the law enforcement officer has initiated a search in the indexes of the selected MS. The request only contains a set of pseudonymised data. The law enforcement officer will immediately receive all relevant hit/no-hit-results from the addressed MS. In the example in Figure 1, the law enforcement officer receives hits from Finland and France and no-hits from Germany, Ireland and Spain. This phase 1 was in the scope of the pilot project.

3 Universal Message Format

In case of a positive result (hit or hits), a ***phase 2*** can be initiated by the requesting law enforcement officer after assessing the results obtained in phase 1. The issuance of follow-up requests is not mandatory. Using SIENA, a request is forwarded to the MS holding the information (the MS where the matching of the pseudonymised data resulted in a hit), clearly indicating that the request is a follow-up on an EPRIS-ADEP hit. With reference to the example in Figure 1, follow-up requests are therefore sent only to Finland and France. The requested MS manually verify the hit, which is content of the request, and send their response via SIENA to the requesting law enforcement officer. The relevant and available information is exchanged in accordance with the provisions of the Swedish Framework Decision 2006/960/JHA, without any change to the current procedure.

The decentralised approach complements other EU initiatives including the interoperability agenda[4]. It increases the availability of information by complementing the centralized European information systems with the decentralized information systems of the MS. ADEP-Technology's matching algorithm, whose functionality has been proven in this pilot project, could also be interesting for other European systems and projects.

EPRIS-ADEP helps to create links to other cases. Since participants can be queried more purposefully, it helps to limit the spread suspicion against a person (principle of limitation of recipients). Moreover, EPRIS-ADEP enables to shorten investigations by providing '*real and workable solutions to the problems stemming from the lack of interconnectivity of decentralised information systems and help foster trust and cooperation between the Member States*'.[5] The technical architecture of the described system meets highest data protection and data security standards. Therefore, this hit/no-hit approach complies with the principle of data ownership, which is crucial for ensuring confidence of data.

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4 Proposal for a Regulation of the European Parliament and of the Council on establishing a framework for interoperability between EU information systems (borders and visa) and amending Council Decision 2004/512/EC, Regulation (EC) No 767/2008, Council Decision 2008/633/JHA, Regulation (EU) 2016/399 and Regulation (EU) 2017/2226; 12.12.2017, COM(2017) 793 final, 2017/0351 (COD) and
Proposal for a Regulation of the European Parliament and of the Council on establishing a framework for interoperability between EU information systems (police and judicial cooperation, asylum and migration), 12.12.2017, COM(2017) 794 final, 2017/0352 (COD)

5 European Parliament resolution of 12 December 2018 on findings and recommendations of the Special Committee on Terrorism (2018/2044(INI))

Overall objective of the pilot project

The overall objective of this project was to demonstrate and evaluate the feasibility of the EPRIS-ADEP approach and ADEP-Technology described above with regard to the specific legal, organisational, functional and technical requirements of the participating pilot MS and Europol. This included aspects of cost-efficiency of the ADEP-Technology in terms of the software itself and its deployment in the MS, process optimisation of the exchange of information, easy integration in different existing environments of the MS, easy EON connectivity and high level of usability.

The project successfully achieved its overall objective following the approach below.

Approach of the pilot project

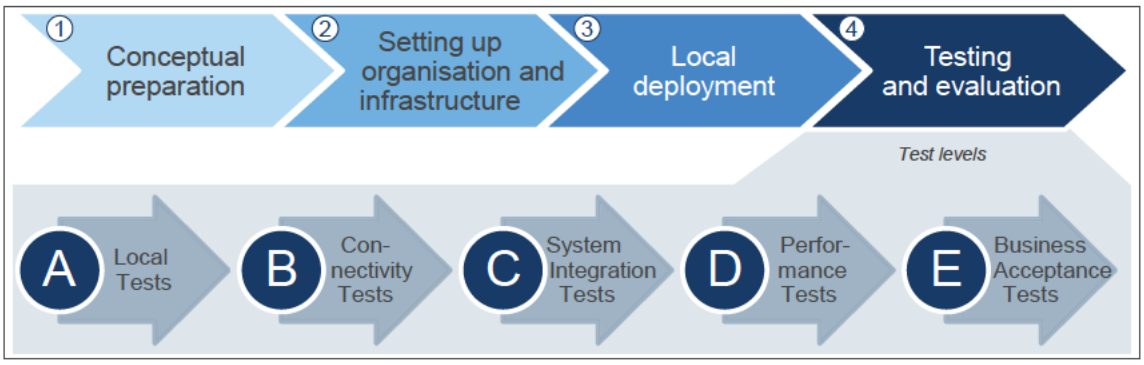

Figure 2: Approach of the pilot project

The project's approach consisted of four main activities:

1. Conceptual preparation, in particular the creation of an organisational and technical target conception for the pilot including further specification of requirements for the ADEP-Technology,

2. Setting up the organisation including resources and infrastructure for the project and at national level,

3. Deployment of the ***ADEP-Technology*** at the involved pilot partners (different versions of the ADEP software solution have been deployed during the pilot project) and

4. Testing and evaluation in local, pre-production and production environment of the involved pilot partners.

In order to demonstrate the feasibility of the ***ADEP-Technology*** in a real environment, the pilot partners planned and successfully performed the following test levels: local tests in the local test environment, establishing the connectivity via EON, both system integration tests (SIT) and performance tests in the pre-production environment and business acceptance test (BAT) for business validation in the production environment (with real data in the indexes from the national systems of the MS involved using the EON).

Results of the pilot project

All planned test levels have been performed successfully. In particular, the SIT and BAT delivered the main results demonstrating the feasibility of the EPRIS-ADEP approach. The SIT focused on the technical feasibility of the ***ADEP-Technology*** including network topology and algorithms used, whereas the BAT was concentrating on the business validation of the EPRIS-ADEP approach including the usability of the software (matching algorithms, etc.) and SIENA for the follow-up communication.

EPRIS-ADEP's added value

It was proven that EPRIS-ADEP enables to

- make decentralised data available without revealing the content of the data in full respect of data ownership,
- retrieve relevant data through well-targeted follow-up requests by independently determining where data can be expected, while at the same time determining with certainty where no relevant data is available.

This added value of the EPRIS-ADEP approach was demonstrated in detail by verifying the feasibility of the following technological capabilities for law enforcement activities related to the European information exchange:

☑ ADEP-Technology – pseudonymisation features and search algorithm

☑ ADEP-Technology – hit/no-hit approach

- ☑ ADEP-Technology – micro services supporting the solution (e.g. for index management)
- ☑ ADEP-Technology – organisational indexes with pseudonymised real biographical data from the national source system(s) of the participating MS
- ☑ Network – interconnectivity of decentralised systems of the participating MS via EON
- ☑ Network – capability of the EON to deal with the traffic generated by ADEP for five MS

Moreover, the potential benefits of this unique EPRIS-ADEP approach could be further confirmed by the experiences gained within the pilot.

Conclusion

In light of the positive results of the pilot project and the promising benefits, all pilot partners, including Europol, declared their commitment for continuing the work in the ADEP initiative, particularly in a dedicated follow-up project, in order to preserve and strengthen the present achievements.

Considering the evaluated optimisation potentials and the next step towards operations, a mutual roadmap for a follow-up project with the working title 'ADEP 2' has already been prepared.

The overall strategic objective of ADEP 2 is the further automation of the data exchange processes between MS in order to strengthen the processes and increase their efficiency and effectiveness. Therefore, the software solution used in the pilot for the data location has to be further developed and transformed from a pilot into a productive system. In this context, new requirements considering business and operational aspects become more relevant. New tests have to be carried out based on data expected in a future productive use and linked with new features. Additionally the automation and integration of the follow-up communication in the existing environment is a major challenge.

Moreover the envisaged main elements of ADEP 2 could be:

- Stabilization of the software solution and processes,
- Building trust into the system,
- Establishing central services at Europol,
- Involvement of more partners,
- Clarifying legal issues,
- Process improvement towards more automation,
- Identification of other use cases and
- Harmonization with other European initiatives.