EUROPEAN
COMMISSION

Brussels, 28.2.2025
COM(2025) 58 final

REPORT FROM THE COMMISSION

on ARACHNE - Implementation for CAP expenditure

EN   **EN**

Arachne

Arachne is an integrated IT tool developed by the European Commission for data mining, data enrichment and risk scoring. The objective of Arachne is to provide the Member States' authorities with an operational tool to identify risks and support them in their administrative controls and management checks.

List of acronyms

CAP – Common Agricultural Policy

DG AGRI – Directorate General for Agriculture and Rural Development

EAGF – European Agricultural Guarantee Fund

EAFRD – European Agricultural Fund for Rural Development

IACS – Integrated Administration and Control System (integrated system as per Article 65(2) of Regulation (EU) 2021/2116)

Non-IACS – All CAP measures and interventions following Regulation (EU) 2021/2115 that are not under the above referred integrated system

Table of content

1. INTRODUCTION

1.1. Background and context

Article 59(2) of Regulation (EU) 2021/2116 of the European Parliament and of the Council ([1]) lays down that "*[...], the Commission shall make available to the Member States a data-mining tool to assess risks presented by projects, beneficiaries, contractors and contracts while ensuring minimal administrative burden and effective protection of the Union financial interests. [...] By 2025, the Commission shall present a report which assesses the use of the single data-mining tool and its interoperability with a view to its generalised use by Member States".*

Member States are to set up efficient management and control systems that ensure compliance with the Union legislation governing Union interventions. Necessary actions must be taken to ensure the proper functioning of their management and control systems and legality and regularity of expenditure declared to the Commission. In terms of the EU Agricultural Funds (EAGF and EAFRD) the paying agencies are in charge of the disbursement of CAP expenditure and thus setting up the management and control systems at Member State or at their equivalent administration level.

In this context the Commission is to make available a data-mining tool to assist the Member States to put in place efficient management and control systems for the CAP. To fulfil this legal requirement the Commission chose to make use of the tool Arachne.

Arachne is an integrated IT tool for data mining and risk scoring with data enrichment developed by the European Commission. Its objective is to support Member States in their administrative controls and management checks. Arachne enriches the data with publicly available information to identify, based on a set of risk indicators, the projects, beneficiaries, contracts, contractors, and sub-contractors that are susceptible to risks of fraud, conflicts of interest or other irregularities ([2]). However, it does not assess the individual conduct of fund recipients and does not automatically exclude beneficiaries or potential beneficiaries from EU funds. The tool sends risk alerts to the paying agencies to enrich their management checks but does not supply them with any proof of error, irregularity, or fraud.

For the implementation of the CAP interventions and measures, the use of Arachne becomes important in the risk analysis to be performed at the level of the paying agencies for their main functions and more precisely for their fraud prevention, detection, and

---

([1]) Regulation (EU) 2021/2116 of the European Parliament and of the Council of 2 December 2021 on the financing, management and monitoring of the common agricultural policy and repealing Regulation (EU) No 1306/2013 (OJ L 435, 6.12.2021, p. 187)

([2]) 'Irregularity' shall mean any infringement of a provision of Community law resulting from an act or omission by an economic operator, which has, or would have, the effect of prejudicing the general budget of the Communities or budgets managed by them, either by reducing or losing revenue accruing from own resources collected directly on behalf of the Communities, or by an unjustified item of expenditure (Article 1(2) of Council Regulation (EC, EURATOM) 2988/95).

Fraud is a deliberately committed irregularity constituting a criminal offence. When reporting an irregularity to the Commission, Member States must indicate whether any fraud is suspected or established in each case.

management procedures. The paying agencies should consider that the Arachne risk reports are used in combination with other data available in the management and control systems of the CAP at national level, and that the use of the tool is integrated into their procedures.

To map and establish the risk to the financial interests of the EU, the operational data from the paying agencies is transmitted to Arachne. This data includes information on beneficiaries, project partners, sub-contractors, service providers, consortium members and others involved. This operational data is then further complemented in Arachne by information from external data sources, the Orbis and World Compliance databases, containing officially published and publicly available data on the companies and persons involved.

Orbis provides information on companies such as financial data, addresses, historical data, and information on shareholders, management and key staff. World Compliance provides information such as the profiles of politically exposed persons, their families and associates; a sanctions list, including individuals and companies with the highest risk rating; and an enforcement list, including information received from regulatory and governmental authorities and the content of warnings and actions against individuals and companies.

The European Commission offers Arachne free of charge to paying agencies and guarantees technical assistance and training in Member States.

1.2. Objectives and scope of the report

The objective of this report is to assess the current use of Arachne for the CAP, its interoperability with the current tools and systems used by the Member States, and to provide recommendations regarding its future use.

To prepare this report, the Commission Services (DG AGRI) addressed a survey to all Member States on the use of Arachne and its interoperability in July 2024. Member States were asked for information about their use of the system. They were also asked for suggestions for any improvements or requirements that would make the use of Arachne easier. The results of this survey were presented to the Member States during an expert group meeting, on 20 September 2024 and the results of the discussions form part of this report.

The report is split into six parts. Chapter 2 explains the actions taken by the Commission to enable and promote the use of Arachne. The third and fourth parts of the report describe the current state of play and outline the opportunities and challenges associated with the use of Arachne. The fifth section outlines the interoperability with the current tools used by Member States. The report concludes with the next steps and long-term perspective regarding the use of Arachne, with a vision for the tool's future development and deployment.

2. ACTIONS TAKEN BY THE COMMISSION TO ENABLE AND PROMOTE THE USE OF ARACHNE FOR THE CAP

In line with the legislative framework, the Commission is undertaking a variety of actions to promote and enable the use of Arachne by the Member States for the CAP expenditure.

To enable the use of the tool for the CAP expenditure, the Commission defined the requirement specifications for the development (ultimate owner, and other risk scores relevant for the IACS payments) in 2021. The main development concerned a feature to enable automatic data upload and download considering the volume of payment data under IACS. The automatic data upload became available as from February 2024. The automatic download is under testing by some Member States at the date of this report.

Along this process the Commission continuously provided Member State authorities with trainings and help desk functions both before they started using the tool and while using it. Additionally, discussions and exchanges of best practices in meetings of expert groups of Horizontal questions concerning the CAP (e.g. held on 20 September 2024 for the Member State authorities, mostly paying agencies) and Learning Network of the paying agencies (subgroup of anti-fraud and conflict of interest), as well as further bilateral discussions and workshops at the Member States' request, were organised.

Most of these discussions concern the paying agencies' anti-fraud, conflict of interest, circumvention policy and procedures.
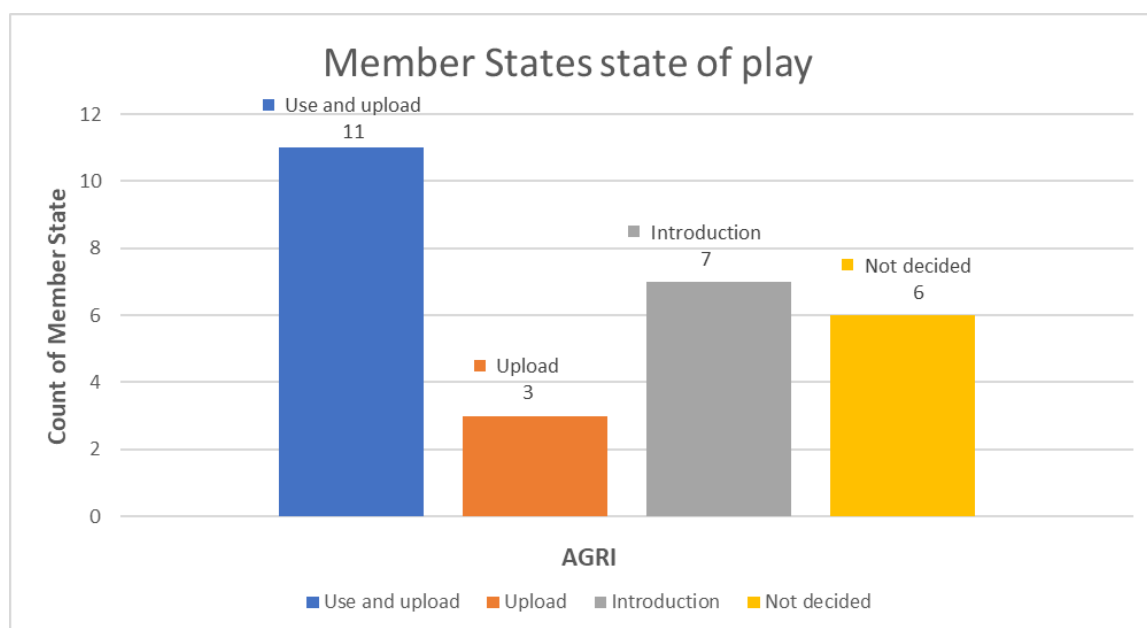
These efforts will be continued until the full-fledged use of Arachne for the CAP expenditure is achieved.

3. STATE OF PLAY: CURRENT USE OF THE DATA-MINING TOOL

3.1. Overview of the tool's implementation and deployment

Arachne uses an entity-relationship model to organize and manage its data. The system integrates internal data from Member States and external data from sources like Orbis and World Compliance. The data is then matched and enriched to calculate risk scores for projects and contracts, thus providing the user with a detailed risk evaluation for the requested data. The system also includes a user management module for data isolation and authentication.
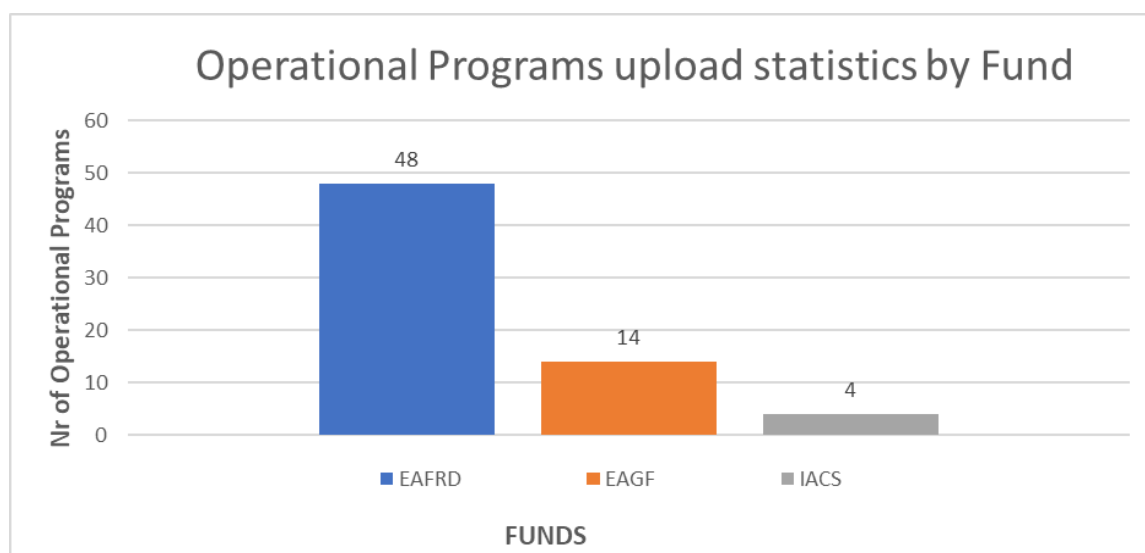
Statistics on the use of Arachne for CAP (³)

As regards the CAP expenditure, the graph shows that 11 Member States are using the full potential of the tool (uploading and using). There are three further Member States that are already uploading data to the tool. However, they are not using yet the enriched data available from Arachne. Seven Member States have only undergone an introductory training and still are to start the upload and use of the tool. The remaining six Member States requested the introductory trainings at the time of the preparation of this report.

Three out of the 11 Member States using Arachne are testing the capabilities of the tool for EAGF IACS interventions.

As regards the "Use and upload" and "Upload" stages, regarding the programming period 2014-2022, Arachne was used for 17 Rural development programmes. For the current period 2023-2027, the tool is already used for 1 CAP Strategic Plan rural development expenditure. This covers 167.731 projects and 139.911 beneficiaries.
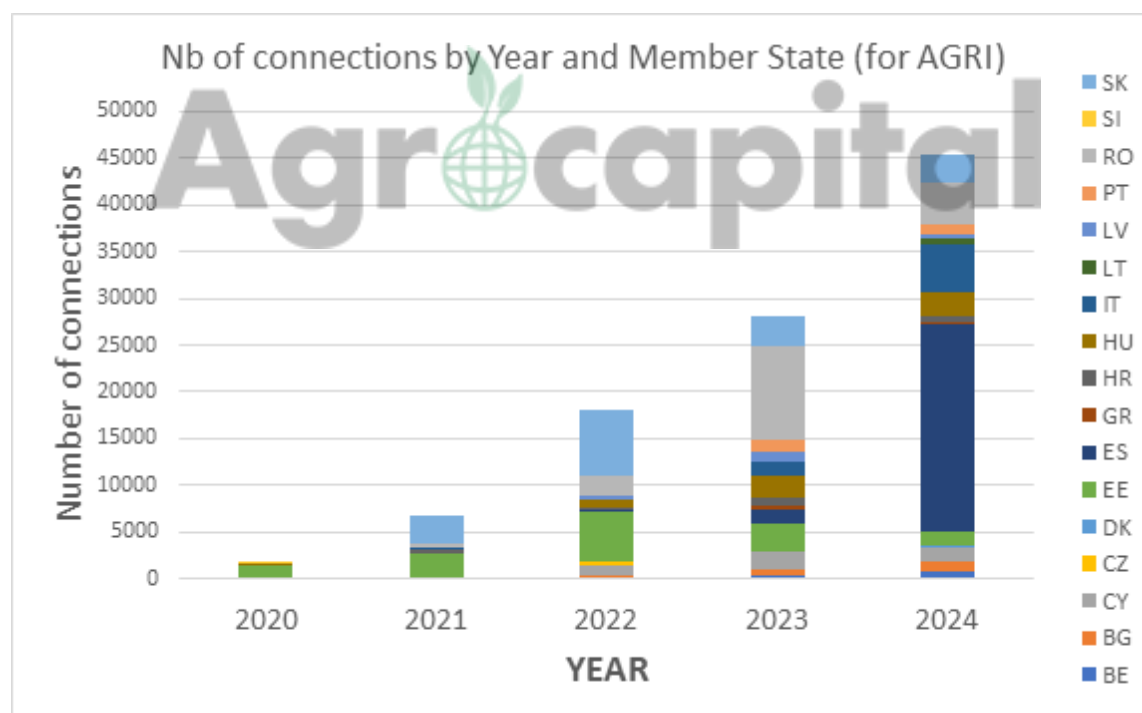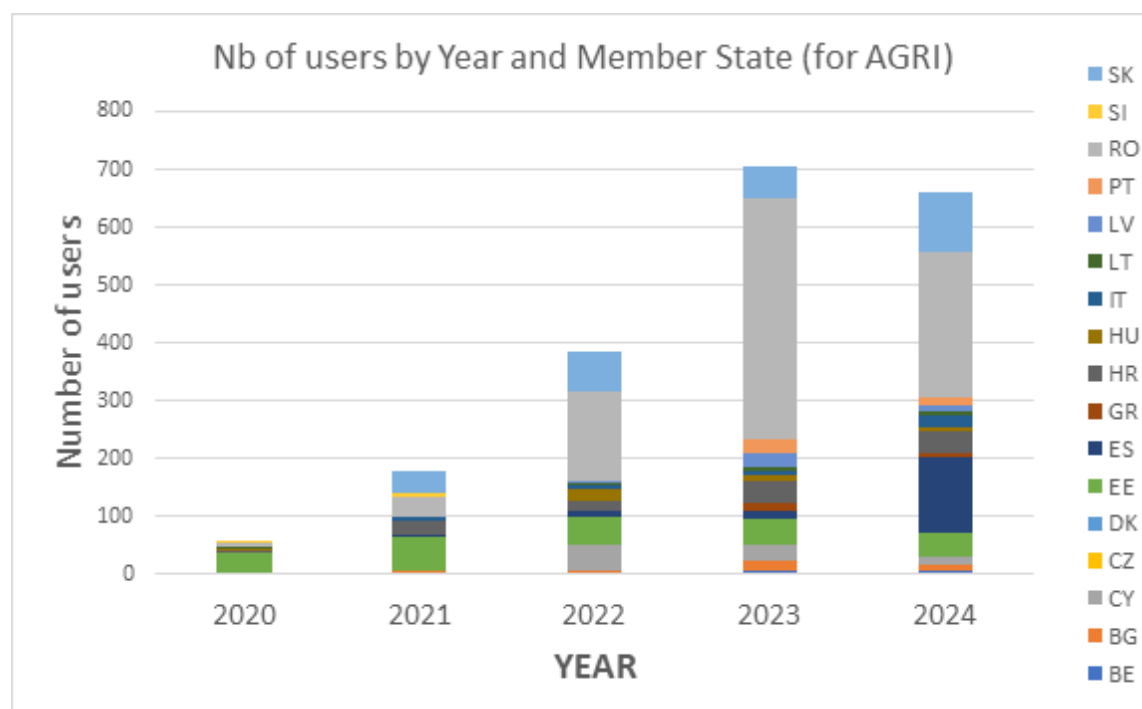

Statistics on upload of CAP data ([4])

The potential of the tool is in its enriched databases. This process is still to be further accomplished with fully fletched data upload by Member States for all Funds. The databases used in Arachne are cross-cutting and they complement each other. To take advantage of the tool's capabilities Member States need to upload data. The above statistics show that Arachne captures already data from several CAP rural development programmes and market measures. However, the data upload as regards IACS payments is still just starting, also due to the fact that the automatic data upload feature, which is necessary for the IACS data upload, became available in February 2024.

([4])   Source: Arachne statistics – September 2024

Statistics on usage of Arachne by users in agricultural departments (⁵)

Nb of users by Year and Member State (for AGRI)

Nb of connections by Year and Member State (for AGRI)

(⁵)   Source: Arachne statistics – November 2024. User statistics are based on user profiles. Any user with access to at least one agricultural programme is included in the list. However, when users connect to Arachne, it cannot be determined which specific project or programme they are accessing. As a result, if a user has access to both an agricultural programme and an ESIF programme, it will appear in the list of CAP users. Consequently, the number of sessions and actions recorded may be overestimated, as the user could also be connecting for ESIF projects only.

It is clear from the statistics that not all Member States that provide data to the tool use the system, although there was a gradual progress in the number of users and connections to the tool as regards the CAP expenditure over the years. Member States make substantial effort to provide data. The Commission will continue to encourage Member States in their further uptake of the potential of Arachne i.e. to get it used for the paying agencies' risk assessment and fraud prevention, detection and management procedures.

3.2. The tool's functionality and performance

Arachne is a powerful tool that aims to provide high-value risk indicators, enhancing management verifications. It establishes a comprehensive and complete database of projects implemented under EU funds, enriching the data with publicly available information. As regards the use of the tool for the CAP expenditure, the critical development of automatic upload and download of data functionalities became available in the course of 2024. However, to use this automatic upload and download functionalities for massive IACS data, Member States must develop a software. Member States made four uploads of IACS data so far. Two Member States are testing the automatic data download from Arachne. The rest of the downloads for both IACS and Non-IACS expenditure were done manually.
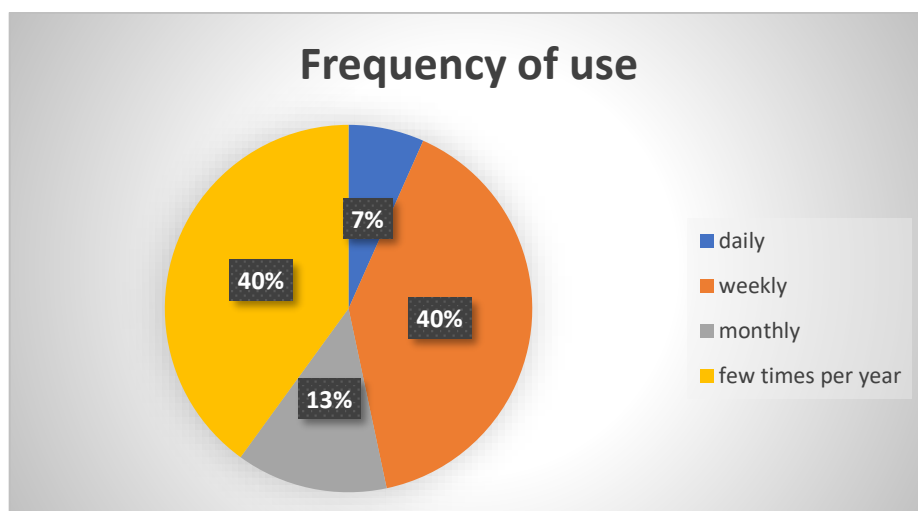
Arachne can sometimes be challenging due to the extensive number of risk indicators it produces, making it difficult to use without a thorough understanding of the tool. Furthermore, the required timeframe for the tool to generate results can be lengthy. After the upload of data, the results are provided on a weekly basis. However, this time span can cause some additional delays in the authorization process of the paying agency.

4. USE BY MEMBER STATES BASED ON THE SURVEY: OPPORTUNITIES AND CHALLENGES

As already mentioned, the Commission conducted a survey on the use of Arachne in July-August 2024 to get input for the future project actions to better serve the Member States' needs.

In total, 25 replies were provided which were prepared either at Member State level (representing several paying agencies) or at paying agency level. 15 Member States/paying agencies (60%) declared to be using Arachne to date. For 8 of them (53%), the use of Arachne is mandatory according to their internal procedures. As regards the frequency of use, according to these 15 replies, 1 Member State/paying agency (7 %) is using it daily, 40 % of them are using it weekly, and another 2 Member States/paying agencies at least monthly.

Frequency of use of Arachne among 15 Member States/Paying Agencies (CAP) ([6])
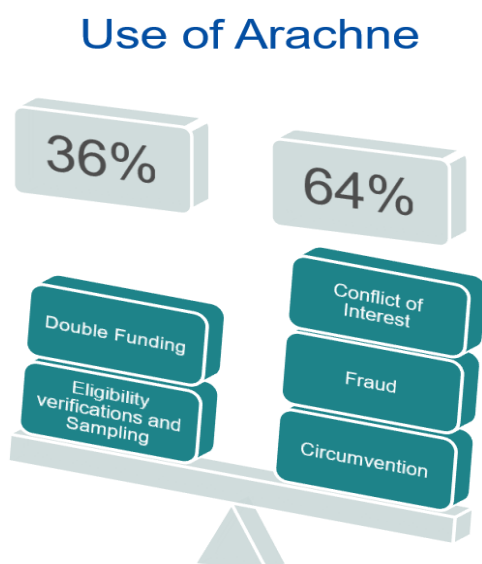

For the EU Agricultural Funds, the paying agencies are the main users of Arachne. However, in half of the cases reported, the Certification Bodies, in charge of certifying the paying agencies' management and control systems, are also using Arachne.

27% of the paying agencies currently using Arachne that took part in the survey declared to use the tool both for IACS and Non-IACS expenditure, while the rest of the paying agencies use it only for Non-IACS expenditure.

Arachne is mostly used for fraud, conflict of interest and double funding detection purposes. The main indicators used are related to the identification of links between different stakeholders, concentration of aids, reasonableness of costs, as well as other default and reputational alerts and SME and start-up indicators.

Main purpose of use of Arachne (CAP) ([7])

([6])   Source: Commission survey on the use of Arachne – July 2024

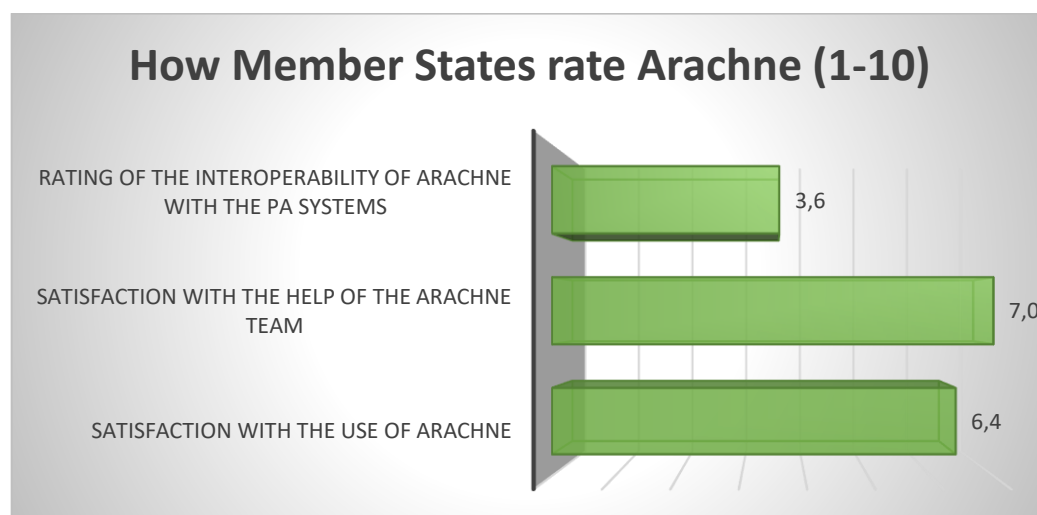([7])   Source: Commission survey on the use of Arachne – July 2024

The paying agencies using Arachne declared to use it mostly to verify eligibility conditions and to obtain the sample of their on-the-spot controls. One third of these paying agencies declared to have identified irregularity and fraud cases based on information from Arachne, and a vast majority are satisfied with its use.

Nevertheless, the paying agencies using Arachne identified several areas for improvement, in relation to its ease of use (more intuitive interface, screens and dashboards functionalities, improvement of searching facilities), the data availability (quicker availability of more complete and more frequently uploaded data) and the tool outputs (development of the SME module, enhancement of the reports obtained). Overall, the easiness to extract the data from Arachne to be integrated into the paying agencies' systems was lowly rated, and only half of the paying agencies using Arachne declared to be willing to develop the upload and download software for IACS data.

In relation to the paying agencies that declared not to be using Arachne, none of them had used it in the past, and 7 (70%) of them do plan to use it in the future, out of which 5 for both IACS and Non-IACS. The paying agencies' available technical capacities is a constraint for half of them, being in some cases the reason for only envisaging the use of Arachne for Non-IACS expenditure.

Finally, half of all the paying agencies contributing to the survey declared to use other data-mining tools at national level or to have risk factors integrated in other IT systems of the paying agency. Some of these paying agencies enhance the availability of national-relevant historical data of their tools in contrast to Arachne.

Overall satisfaction with the use of Arachne (CAP) ([8])

These summarized results allow for a deeper understanding of the challenges and obstacles that Member States encounter in the use of Arachne for the EU Agricultural Funds. Several of these issues are already being addressed either through the Commission wide project for the Arachne tool (e.g. the improvement of the interface, the increased functionalities, the

---

([8])   Source: Commission survey on the use of Arachne – July 2024

efficiency of the data upload or the enhancement of Arachne reports) or through the on-going developments of Arachne by the Commission (e.g. the SME module).

Interoperability issues and technical capacities have been identified as relevant hurdles that Member States and DG AGRI need to address to enable the efficient use of Arachne (see also further analysis in this respect in chapter 5). This is also a Commission priority established in Article 36 (6) of Regulation (EU, Euratom) 2024/2509 of the European Parliament and of the Council ([9]).

At the same time, the survey shows a clear positive message on the current usefulness and satisfaction with the use of Arachne. This will be significantly enhanced through the mandatory provision of data also provided for in the regulation as referred to above. The availability of the information from all Member States will significantly enrich the Commission data-mining tool and will address the issues that paying agencies encounter in relation to incomplete and non-updated data. As in a virtuous circle, this is expected to foster a generalized use by the Member States both for IACS and Non-IACS expenditure. In line with the referred provision and with the survey results, the Commission will, as a priority, work closely with the paying agencies to dig into the potential functionalities of Arachne for IACS expenditure and to promote the interoperability of the national systems with the Commission data-mining tool.

5. INTEROPERABILITY ASSESSMENT

5.1. Technical interoperability

Arachne is designed to exchange data with other systems and data sources using the xml-format. This format is widely used and accepted, facilitating the integration of the tool with other systems. The tool's technical architecture allows the transmission of data fields in line with the required scope of Arachne.

The tool's ability to interact with other systems and data sources is further enhanced by the Commission services' provision of technical support for the initial installation of the Arachne risk scoring tool, as well as technical support for enabling the paying agency to send data in the required xml-format.

5.2. Semantic interoperability

Arachne's ability to understand and interpret data from different sources is key for its effective use. The tool uses a risk scoring approach to analyse data, which requires the harmonization and standardization of data from different sources.

The tool's semantic interoperability is facilitated by the use of external data sources, Orbis, sanction lists and World Compliance. These data sources are officially published and publicly available, ensuring a high level of data quality and reliability.

([9]) Regulation (EU, Euratom) 2024/2509 of the European Parliament and of the Council of 23 September 2024 on the financial rules applicable to the general budget of the Union (recast) (OJ L, 2024/2509, 26.9.2024).

The Commission services have also established a dedicated website (^{10}) to explain the process and purpose of data analysis, which includes information on data protection and the rights of data subjects. This website provides a common understanding of the data used in the tool, facilitating the harmonization and standardization of data from different sources.

However, the tool's semantic interoperability could be further enhanced by the development of common data standards and formats for the exchange of data between different systems and data sources. This would facilitate the integration of the tool with other systems and ensure the consistency and accuracy of data used in the risk scoring approach.

Overall, the Arachne Risk Scoring Tool demonstrates a good level of technical and semantic interoperability.

5.3. Organizational interoperability

The integration of Arachne with existing workflows and processes is crucial for its effective adoption and use by managing authorities. This section evaluates the tool's organizational interoperability and identifies any organizational or cultural barriers to adoption.

Integration with existing workflows and processes

Arachne is designed to support paying agencies in their management verification processes, as outlined in Article 125 (4) (c) of Regulation (EU) No 1303/2013 of the European Parliament and of the Council (^{11}). The tool's integration with existing workflows and processes is facilitated by the Commission services' provision of support and guidance to paying agencies.

The tool's user manual and training materials are designed to help paying agencies integrate the tool into their existing workflows and processes. The Commission services also provide continuous support to facilitate the efficient use of the tool, including advice on how to integrate the tool into daily management verification processes.

Organizational or cultural barriers to adoption

Despite the tool's design and support available for integration with existing workflows and processes, there may be organizational or cultural barriers to adoption. For example, paying agencies may need to adapt their existing workflows and processes to accommodate the tool's risk scoring approach.

(^{10}) European Social Fund Plus (ESF+) - Employment, Social Affairs & Inclusion - European Commission

(^{11}) Regulation (EU) No 1303/2013 of the European Parliament and of the Council of 17 December 2013 laying down common provisions on the European Regional Development Fund, the European Social Fund, the Cohesion Fund, the European Agricultural Fund for Rural Development and the European Maritime and Fisheries Fund and laying down general provisions on the European Regional Development Fund, the European Social Fund, the Cohesion Fund and the European Maritime and Fisheries Fund and repealing Council Regulation (EC) No 1083/2006 (OJ L 347, 20.12.2013, p. 320)

Additionally, the tool's use may require changes to the organizational culture of the paying agencies, such as a greater emphasis on risk management and data-driven decision-making.

Benefits of adoption

Despite the potential barriers to adoption, Arachne offers several benefits to paying agencies, including:

– Improved efficiency and effectiveness in management verification processes

– Enhanced risk management and data-driven decision-making

– Better compliance with EU regulations and requirements

Overall, Arachne demonstrates a good level of organizational interoperability, with a design and support that facilitate its integration with existing workflows and processes. However, paying agencies may need to address organizational or cultural barriers to adoption, and invest time and resources in training and capacity-building to ensure the effective adoption and use of the tool.

6. FURTHER STEPS AND PERSPECTIVE

6.1. Further steps

(1) <u>Further exchange of practices between the paying agencies</u> – Member States that started using Arachne should actively share their experience and advise how to effectively use the tool. These exchanges can be done at the occasion of meetings of the expert groups organized by the Commission, via dedicated surveys but also in the framework of the Learning Network of paying agencies (subgroup for antifraud and conflict of interest).

(2) <u>Use of the tool by the certification bodies</u> – The certification bodies should also be encouraged to use the tool to have consistency across the audit of the control and management systems.

(3) <u>Automatic integration with the paying agencies databases</u> – Member States and the Commission should reinforce resources for accomplishing automatization of data transfer to Arachne from national databases that will streamline administrative processes and reduce the burden on Member States.

(4) <u>Availability of complete and accurate data</u> – Ensuring continuous updates of high quality, complete and accurate data is essential for Arachne's effectiveness, which depends on the roll-out of Commission Arachne project. Apart from the Commission continuous efforts in further developing the tool, the overall accomplishment of the project depends on the data upload by the Member States, which should gradually be provided by all of them.

(5) <u>Adaptation of the tool to the EU Agricultural Funds</u> - Along with more Member States using Arachne, the functionalities should progressively be tailored for EU Agricultural Funds as a response to the needs and feedback from Member States. This includes determining the risk factors most relevant to the EU Agricultural Funds. Such further developments will have to be based on regular exchanges of

best practices through the continued workshops and other fora organised at EU level or at the Member States' request bilaterally.

(6)   <u>Technical improvements of the tool</u> – Improvements in user interface and user experience should be considered (like on-screen tutorials, tooltips, help sections, use of chatbot supported by AI) in the overall Commission Arachne project.

(7)   <u>Enhance further interoperability</u> <u>between Arachne and other data mining tools used at national level</u> – Member States should actively engage in this development to profit from the added value of Arachne that allows to identify cross-border connections as well as detect previous EU financing involved that may not be easily available via other data mining tools.

The Commission is of the view that Member State authorities, mostly the paying agencies, can substantially improve their current risk analysis and fraud prevention procedures by adopting and systematically using Arachne. The outcome of the expert group meeting on 20 September 2024 showed the possible efficiency and effectiveness of this tool in the prevention and detection of irregularities and identification of the risk of fraud for CAP. However, its use could be expanded and improved.

6.2.   Long-term perspective

In accordance with Article 36 (6) and Article 277 (5) of Regulation (EU, Euratom) 2024/2509, Member States will have to feed Arachne with data - amongst other on the CAP expenditure - as from the post-2027 programmes at the latest. The integrated use of Arachne as an essential tool in the management and control systems of the CAP at Member State level, for enhancing risk management, compliance monitoring, and data-driven decision-making, is a logical and inevitable choice by the national administration in charge of the EU expenditure under the shared management EAGF and EAFRD. By leveraging Arachne, the authorities can automate the detection of potential risks, ensuring faster and more accurate assessments. Additionally, by using Arachne, the national authorities can gain access to diverse and large datasets. This could further mitigate the risk of fraudulent attempts in accessing to EU funds.

In view of the joint responsibilities in protecting the Union's financial interests the Commission will continue to collaborate with Member State authorities to reach full - fledged use of Arachne. In that respect the implementation of the further steps identified in this report will be monitored and if necessary, will be further developed or revised during the overall roll-out of the Commission Arachne project.