Audit Report

20/07

Funds spent on information and communication technologies at the Ministry of Agriculture

The audit was included in the audit plan of the Supreme Audit Office (hereinafter the "SAO") for 2020 under number 20/07. The audit was headed and the Audit Report drawn up by the SAO Member Ing. Jan Vedral.

The objective of the audit was to verify whether the Ministry of Agriculture and the State Agricultural Intervention Fund were spending the state budget funds for the acquisition, operation and development of information and communication technologies effectively and economically.

The audit was conducted with the audited entities between May and November 2020.

The audited period was from 2016 to 2019; where relevant, the preceding period and the period up to the end of the audit were also scrutinised.

Audited entities:
Ministry of Agriculture (hereinafter the "MoA"),
State Agricultural Intervention Fund, Prague (hereinafter the "SAIF").

The ***SAO Board*** at its 5th meeting held on 15 March 2021

approved by Resolution No 9/V/2021

the ***Audit Report*** as follows:

ICT of the Ministry of Agriculture

16
Number of public administration information systems administered by the MoA

1
Number of public administration information systems administered by the SAIF

CZK 453 million
Average annual expenditure on ICT by the MoA in 2016-2019

CZK 750 million
Average annual expenditure on ICT by the SAIF in 2016-2019

CZK 47.5 million
Average annual expenditure of the MoA on the information system with the highest expenditure on operational support and development in the administration of the MoA

CZK 514 million
Average annual expenditure spent by the SAIF on the IS administered by the SAIF; this system is the most financially demanding information system of the agriculture sector

I. Summary and Evaluation

The SAO audited state funds spent on information and communication technologies (ICT) at the MoA. The objective of the audit was to verify whether the MoA and the SAIF were spending the state budget funds for the acquisition, operation and development of information and communication technologies effectively and economically.

In the audited period, the MoA spent on average more than CZK 453 million on ICT per year and the SAIF on average more than CZK 750 million per year.

The SAO identified a number of shortcomings and risks in the area of economy. The SAO assessed the most serious risk in the area of economy as the fact that the SAIF was heavily dependent on its main provider of support for the operation of the application infrastructure and the development of its information system, i.e., the information system of the State Agricultural Intervention Fund (hereinafter the "IS SAIF").

The SAIF spent more than CZK 500 million per year to support the operation and development of the IS SAIF. This is approximately ten times more than the amount spent by the MoA on its most financially demanding information system. The SAIF paid to its provider not only very high total amounts but also high unit prices for the development and support of the operation of the IS SAIF, as the SAO's comparison of unit prices shows.

The SAO also found shortcomings with an impact on economy in the audit of public procurement, in the monitoring of hardware infrastructure utilisation and in the audit of licence utilisation.

The SAO assessed the strategic and conceptual materials for ICT both in relation to economy and effectiveness. Effectiveness was also tested on a sample of selected public contracts.

The overall assessment is based on the following findings of the audit:

1. The SAIF is heavily dependent on the main provider of support for the operation and development of the IS SAIF (the so-called vendor lock-in position with a number of risks for economy). The SAIF paid more than CZK 500 million per year to its provider. In total, for the years 2016-2019, the SAIF paid CZK 2,057 million to support the operation and development of the IS SAIF.
2. The IS SAIF was significantly more economically demanding compared to other departmental systems. Expenditure on the IS SAIF per employee averaged more than CZK 417 thousand and four times exceeded the amount of CZK 100 thousand, which is the average expenditure of public administration authorities on ICT per employee.
3. When comparing the unit prices of ICT suppliers, the unit price negotiated by the SAIF with its main supplier is many times higher than comparable services of other suppliers at the MoA.
4. There is a risk of further high ICT expenditures in connection with the expected transition of the IS SAIF to a new version of the application platform used, or building a new IS after the end of support for the existing platform on which the IS SAIF currently runs. The support of the current platform is only guaranteed for the SAIF until 2027.

5. The SAO identified several shortcomings in public procurement at the MoA. The MoA violated Act No 137/2006 Coll., on public contracts (hereinafter "Act No 137/2006 Coll."), or, Act No 134/2016 Coll., on public procurement (hereinafter "Act No 134/2016 Coll."), when in two cases it set the technical qualification requirements in a discriminatory manner and in one case it unlawfully divided the subject-matter of the public contract.
6. The SAIF does not have information on the hardware infrastructure utilisation and therefore cannot evaluate the cost-effectiveness of the contract worth CZK 326 million.
7. In the period of 2016-2019, the SAIF paid almost CZK 417 million for the purchase and maintenance of SAP licences. However, the SAIF does not monitor the utilisation of these licences.
8. The MoA monitors the utilisation of SAP licences and is gradually optimising the portfolio of SAP licences it owns.
9. The SAIF violated Act No 365/2000 Coll., on public administration information systems and on amendments to certain other acts (hereinafter "Act No 365/2000 Coll."), by failing to prepare and issue an information concept. Due to the absence of basic conceptual documents for the ICT area at the SAIF, there is a risk of non-conceptual development of ICT at the SAIF with a possible negative impact on both economy and effectiveness.
10. For most of the audited period, the MoA had the required conceptual and strategic documents for ICT. The SAO found partial shortcomings in this area and assessed the risk of non-conceptual development in the area of ICT at the MoA as low with unlikely negative impact on economy and effectiveness.
11. A risk in the area of strategic ICT management is the reduction in the number of professional internal ICT staff both at the SAIF and the MoA. Some key positions, such as the Chief Architect, were externally sourced at the MoA throughout the audited period.
12. The sample of public contracts audited and the audit of the utilisation of information systems did not reveal any ineffective spending.
13. Based on the results of previous SAO audits, the MoA implemented a number of corrective measures, including in the area of public procurement.

II. Information on the Audited Area

The **MoA** is the central state administration authority especially in matters of agriculture, water management, food industry, forestry, hunting and fishing, always with certain exceptions provided for by law.[1]

The MoA as the administrator of the state budget chapter is responsible for the management of the state budget funds and other state funds in its chapter.

For the performance of its agendas, the MoA uses a number of information systems, both operational information systems and public administration information systems, which are primarily intended for the performance of individual agendas and the rules for them are regulated by Act No 365/2000 Coll.

[1] Section 15(1) of Act No 2/1969 Coll., on the establishment of ministries and other central state administration authorities of the Czech Republic.

The MoA is the administrator of a total of sixteen public administration information systems. Their list is given in Annex 1. Five systems managed by the MoA are listed among the significant information systems according to Decree No 317/2014 Coll., on significant information systems and their determining criteria (hereinafter "Decree No 317/2014 Coll.").

The **SAIF** is a state fund[2] and a legal entity. The SAIF was established by Act No 256/2000 Coll., on the State Agricultural Intervention Fund and on amendments to certain other acts (hereinafter "Act No 256/2000 Coll.") and falls within the competence of the MoA. Among other things, the SAIF is certified as the paying agency for the implementation of EU Common Agricultural Policy measures and is responsible for the administration of most national agricultural subsidies.

The SAIF administers a single public administration information system, the IS SAIF (sometimes also referred to as ISPA – information system of the paying agency). The IS SAIF is registered as a significant information system in Annex 1 to Decree No 317/2014 Coll.

Each year, the SAIF pays out about CZK 38,000 million to farmers and other beneficiaries of aid.

ICT expenditure at the MoA

Table 1 shows the amount of expenditure on selected budget items related to ICT[3], which the SAIF[4], the MoA and other organisational units of the state drew from budget chapter 329 – *Ministry of Agriculture* in individual years of the period of 2016-2019. The most significant budget item in all years and across institutions was the budget item "*data processing and services related to ICT*".

Table 1: Expenditure on selected ICT-related budget items (in CZK thousand)

	2016	2017	2018	2019	Total	Average
MoA	462,583	481,809	432,415	433,854	**1,810,661**	**452,665**
SAIF	708,649	705,791	880,371	706,111	**3,000,922**	**750,231**
Other OUS*	138,997	89,890	113,939	186,727	**529,553**	132,388
Total	**1,310,229**	**1,277,490**	**1,426,725**	**1,326,692**	**5,341,136**	**1,337,302**

Source: information portal MONITOR, SAIF Annual Reports for 2016-2019; own elaboration of the SAO.

* OUS = organisational units of the state from chapter 329 except for the MoA, i.e., the Czech Agriculture and Food Inspection Authority, the State Veterinary Administration of the Czech Republic, the Central Institute for Supervising and Testing in Agriculture and the Czech Breeding Inspectorate. The MoA is listed separately in Table 1 in the first row.

The highest expenditure on ICT in the agriculture department in the period under review was made by the SAIF, in the amount exceeding CZK 700 million in each year, CZK 750 million on

[2] Pursuant to Section 28 of Act No 218/2000 Coll., on budgetary rules and on amendments to certain related acts (the Budgetary Rules).

[3] In particular, the following budget items: "*electronic communications services*", "*data processing and services related to information and communication technology*", "*software*" and "*computer equipment*".

[4] The budget of the SAIF is approved by the Chamber of Deputies of the Parliament of the Czech Republic together with the State Budget Act, and the SAIF as a state fund uses a breakdown into budget items for its expenditure. In each year of the period of 2016-2019, the MoA provided the State Agricultural Intervention Fund with a non-investment subsidy for administrative expenditure, from which the SAIF covered, among other things, its ICT expenditure. The total annual administrative expenditure of the SAIF in the audited period was around CZK 1,800 million.

average. The institution with the second highest expenditure on ICT in the agriculture department was the MoA with an average annual expenditure of CZK 453 million.

Selected public administration information systems of the MoA

- The IS SAIF is an information system accredited by the European Commission and certified by the Ministry of Finance for the reception, administration, control, reimbursement and reporting of agricultural subsidy applications financed from EU funds and the state budget of the Czech Republic. A large part of the IS SAIF is based on the SAP platform (about 98%), a smaller part (about 2%) runs on the AGIS platform. The SAP platform has been the basis of the IS SAIF since 2004. The SAIF paid to its SAP platform provider more than CZK 8,678 million for the period of 2004-2019.
- *Land registration according to user relationships*, better known by the abbreviation LPIS[5], is a key component of the *Integrated Administrative and Control System*, which is used for the control and administration of support applications under the EU Common Agricultural Policy, selected national programmes and for other related agendas resulting from European and national legislation[6]. The LPIS system indicates who is using the land parcel in question (regardless of whether it is the owner or the tenant), and includes other data, such as information on the degree of erosion risk to the land. Without a functional LPIS system, it would not be possible to disburse area-related agricultural subsidies.
- The *Integrated Agriculture Register* (hereinafter the "IAR") is the central register for all agendas related to the central livestock register maintained pursuant to the provisions of Section 23 et seq. of Act No 154/2000 Coll., on the breeding and registration of livestock and on amendments to certain related acts (hereinafter "Act No 154/2000 Coll."). Act No 154/2000 Coll. uses only the term central livestock register. The IAR is the internal name for the central livestock register, according to the MoA. The IAR provides basic data to many state institutions for their control activities. It also provides data for the administration of some subsidies.
- Details of the selected information systems are given in Annex 2 to this Audit Report.

III. Scope of the Audit

The objective of the audit was to verify whether the MoA and the SAIF were spending the state budget funds for the acquisition, operation and development of information and communication technologies effectively and economically.

The audit of both the audited entities focused mainly on strategic management and planning of ICT, i.e., on the creation and existence of an ICT information concept and attestation of long-term ICT management, as well as on the specific functionality and use of selected information systems (e.g., IS SAIF, LPIS, IAR). The audit also focused on the area of public procurement related to the acquisition and subsequent operation and development of specific information

[5] LPIS – *Land Parcel Identification System*.

[6] The basic requirements for the Integrated Administrative and Control System and the LPIS are based on Regulation (EU) No 1306/2013 of the European Parliament and of the Council and the implementing regulations of the European Commission.

systems of the MoA and the SAIF. The audit compared the total expenditure on individual information systems as well as the unit prices paid by the MoA and the SAIF to their providers. During the audit, the SAO evaluated the corrective measures taken by the MoA on the basis of previous SAO audits. The audit also focused on assessing the impact of the transfer of the agricultural national subsidies agenda from the MoA to the SAIF on ICT expenditure and savings.

The period audited was from 2016 to 2019, and the preceding and subsequent periods where materially relevant.

A sample of 11 public contracts with a total value of CZK 1,354 million (including VAT) was selected for audit at the MoA. A sample of three public contracts with a total value of CZK 2,434 million (including VAT) was selected for audit at the SAIF. The sample examined whether the public procurement had been carried out in accordance with the applicable legal regulations.

Note: The legal regulations indicated in this Audit Report are applied in their wording valid and effective for the audited period.

IV. Detailed Findings of the Audit

1. The SAIF is heavily dependent on one provider (vendor lock-in)

The audit examined whether any of the business relations of the MoA and the SAIF fulfilled the characteristics of vendor lock-in or proprietary lock-in with its negative consequences. Vendor lock-in is not addressed in the legislation, but its existence is a major risk to economy, as it imposes high long-term expenditure on the customer and entails significant barriers to switching to another provider.

The audit found that the SAIF was heavily dependent on its provider which developed and supported the operation of the IS SAIF on the SAP platform. In the audited period, the SAIF paid an average of CZK 514 million per year to that provider. In total, for the years 2016-2019, the SAIF paid CZK 2,057 million for application support for the operation and development of the IS SAIF on the SAP platform, which represents more than 68% of the total SAIF expenditure on ICT. The SAIF had been spending funds in excess of CZK 500 million per year for the services of its SAP platform provider since 2004, which is the year since which the SAP platform has been the basis of the IS SAIF. Comparisons with expenditure on other departmental systems and unit price comparisons are provided in other parts of this Audit Report (subsections 2 and 3).

The SAIF is aware of the vendor lock-in position vis-à-vis its provider and has therefore set as its strategic objective[7] to reduce dependence on that provider. In an effort to meet this strategic objective, in 2015 and 2016 the SAIF prepared two public contracts to secure the operation and development of the IS SAIF. However, neither of these contracts could be completed. In 2015, only one tenderer submitted a tender and in 2016 no tenderer or even the existing provider submitted a final tender. The reason for the failure of both public contracts, according to the SAIF, was that any change to the current contractual relationship was not attractive to the existing provider, particularly because of the potential reduction in prices and the possibility of greater control over the system by the contracting authority.

[7] Strategic objective 3 given in the document *SAIF ICT Strategy and Development Concept for the period of 2015-2018*.

It was only on 25 April 2019 that the SAIF concluded with its provider Amendment 5 to the existing contract[8] for work dated 2010. The amendment provides for the first time for the possibility of partial termination of some services (specifically for DMS[9] and the SAIF Portal), which allows the SAIF to start limiting the scope of performance and implement parts of the IS SAIF outside the competence of the provider while ensuring the provider's necessary cooperation. The SAIF has not yet implemented the DMS project due to the lack of sufficient budgetary resources and has therefore not given notice of partial termination of that service. The SAIF did not give notice of partial termination to its provider even for the Portal area, which was justified by the fact that some related projects had not yet been implemented. Thus, the possibility of partial release from dependence on the SAP service provider formulated in Amendment 5 was not used by the SAIF and thus it failed to start with the gradual weakening of the vendor lock-in position vis-à-vis the SAP platform provider. The above-mentioned strategic objective was therefore not met by the SAIF.

2. High expenditure on the IS SAIF

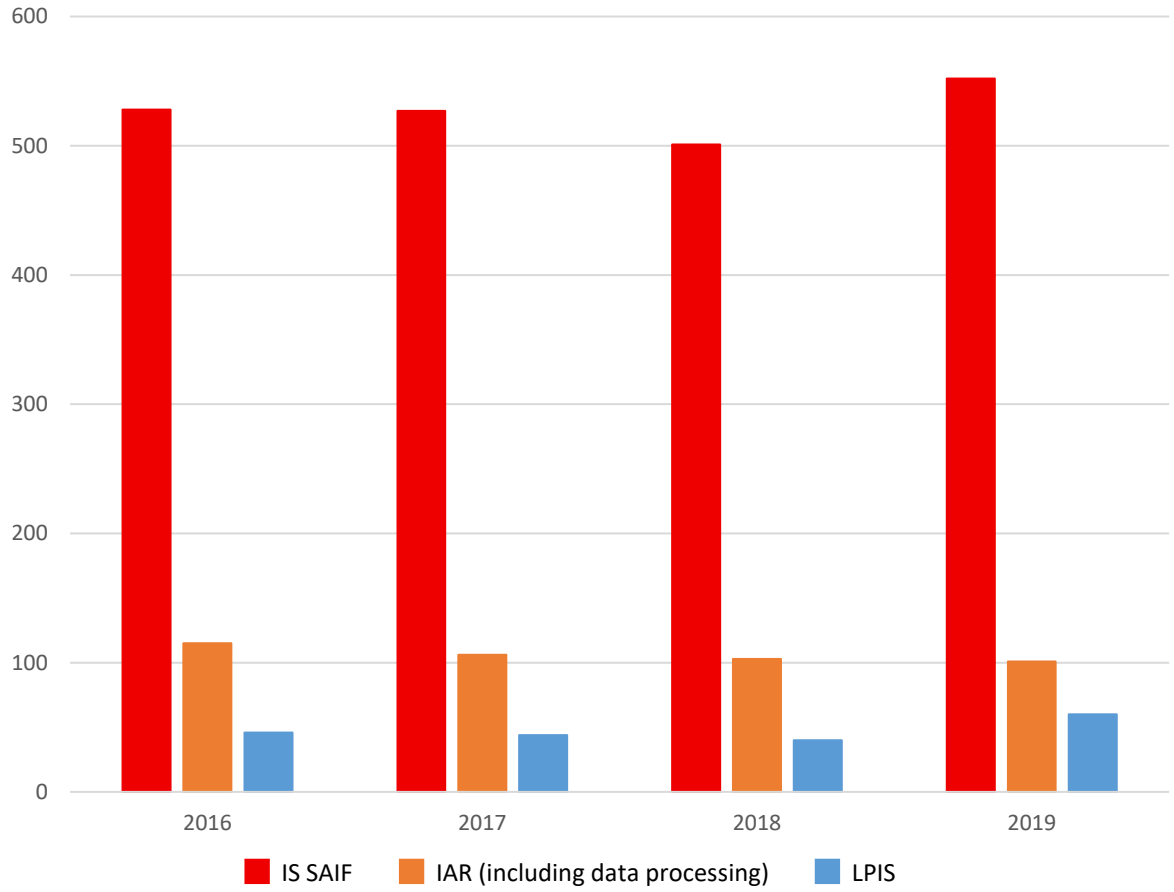
As part of the audit, the SAO compared expenditure on selected information systems of the Ministry to verify which system the agriculture department was spending the most on.

Chart 1 shows the annual expenditure on the three most financially significant systems of the agriculture department, i.e., the IS SAIF, LPIS and IAR. Each of these systems has its own specificities, each of them was used by at least 42,000 end users in the audited period, and without any of them the payment of agricultural subsidies would not have been possible. Details of the individual systems are set out in Annex 2 to this Audit Report.

[8] Amendment 5 to the Contract for the provision of the services of technical and application support, development and integration of the information system of the SAIF paying agency for the period from 1 January 2011; contract number: 4200001280_SML-05.

[9] *Document management system*.

Chart 1: Expenditure on selected information systems of the agriculture sector (in CZK million)



Source: information from the audited entities; prepared by the SAO.

In addition to the expenditure on application support for the operation and development of the information system, the total expenditure on the IAR also includes expenditure on external data processing, which is specific to the IAR. Expenditure on the IS SAIF and LPIS includes only expenditure to support the operation and development of these information systems. The data processing in the LPIS and IS SAIF is carried out by permanent employees of the MoA and the SAIF.[10]

Expenditure on the IS SAIF significantly exceeds expenditure on other information systems of the Ministry. For example, the annual expenditure on application support for the operation and development of the LPIS was in all the audited years about ten times lower than the expenditure on application support for the operation and development of the IS SAIF. Expenditure on the IAR (including expenditure on external data processing) was roughly five times lower than expenditure on the IS SAIF. In addition, it is necessary to point out that the expenditure on application support for the operation and development of the IAR was on average 26 times lower than the expenditure on application support for the operation and development of the IS SAIF.

[10] Individual employees do not usually perform data processing in one particular information system, but have a broader agenda, so the SAO did not allocate the expenditure on the salaries of these employees (and thus data processing) to the individual systems.

The unusual level of expenditure on the IS SAIF is also evidenced by the fact that, according to the document *Summary Report on the Digitalisation of Public Administration in the Czech Republic*, published by the SAO in 2019, in 2018 central state administration authorities spent approximately CZK 100 thousand per systemised government or other job on the acquisition and operation of information and communication technologies. Expenditure on the IS SAIF alone exceeded this amount fourfold, averaging more than CZK 417 thousand. The total expenditure of the SAIF on ICT per employee exceeded this amount by almost six times. The several times higher expenditure of the SAIF was not due to the upgrade of the IS SAIF, but to the maintenance of long outdated versions of SAP products in operation and the fact that more than 80% of the application environment used was implemented by custom development.

3. The SAIF shows high unit prices for ICT services

During the audit, the SAO also focused on the unit prices of the ICT providers' services, as unit prices represent a suitable comparison for different volumes of work and an unusually high unit price may point to the risk of uneconomical conduct.

A common part of ICT contracts are so-called ad hoc services, i.e., services that cannot be defined in detail in advance, their price is usually set as a price for one man-day (which usually includes eight man-hours), or prices are agreed for the work of certain IT specialists.

Chart 2 shows prices for ad hoc services or per day of work for some IT specialists. Only the prices and work of highly qualified specialists, such as system architect, Java specialist, information security analyst and architect or SAP specialist, are listed. Some contracts contain more than one type of IT specialist with different prices, so some contracts are listed more than once in Chart 2. All prices include VAT. All the contracts listed in Chart 2 have been published under the same number in the Register of Contracts.

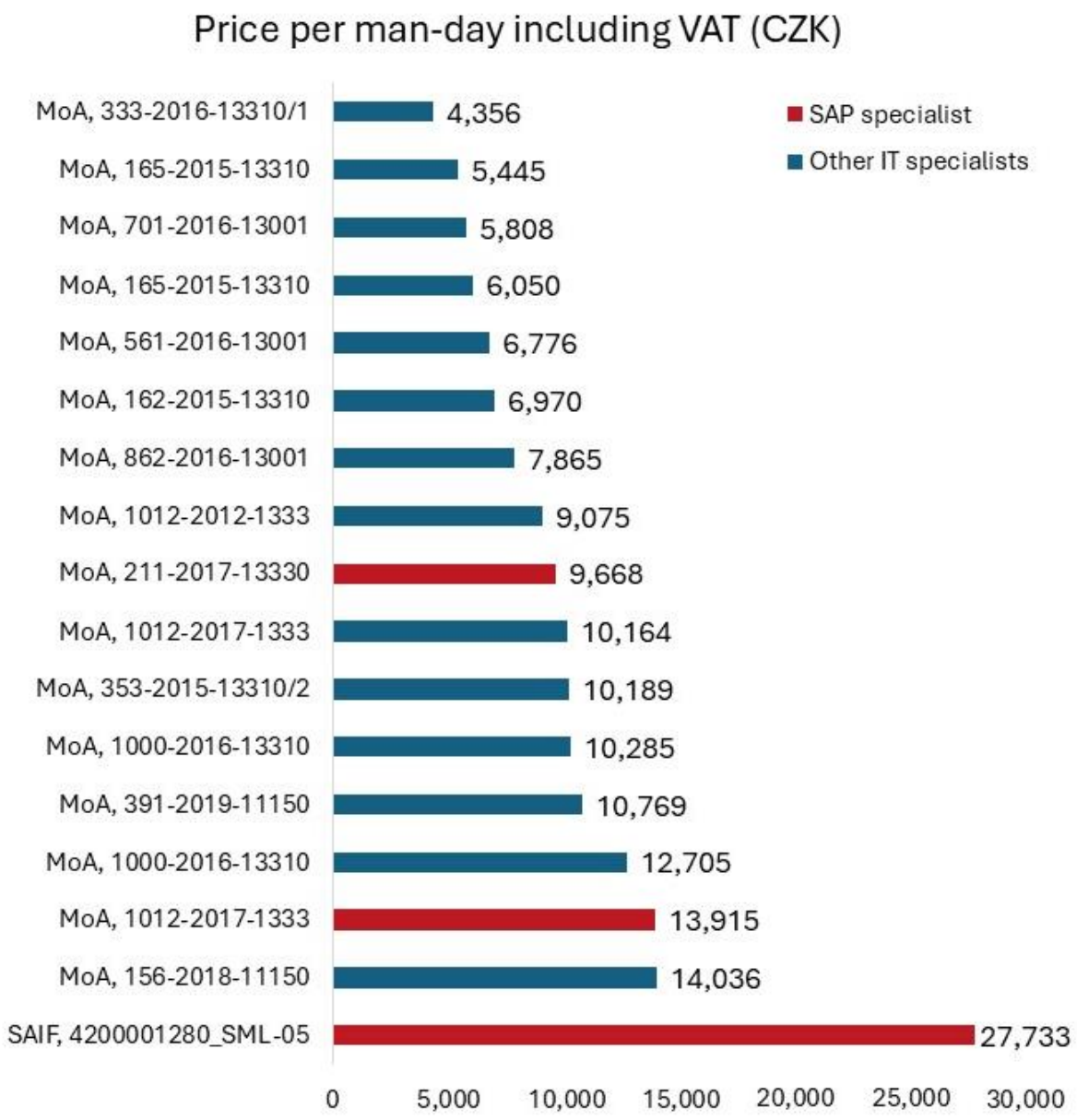
Chart 2 shows that the prices per day of work of an "IT specialist" or per day of ad hoc services at the MoA ranged from CZK 4,356 to CZK 14,036 per man-day. The MoA paid the highest amount, i.e., CZK 14,036, for one man-day of ad hoc services in the case of contract No 156-2018-11150, i.e., for the contract for the provision of DMS, followed by CZK 13,915 for one day of work of the "SAP specialist" for contract No 1012-2017-1333; the price for ad hoc services for the provision of operation, support and development of the SAP system in the framework of contract No 211-2017-13330[11] did not even reach CZK 10,000 per man-day.

The price of the work of the "SAP specialist" is highlighted in red in the chart, it appears in two contracts at the MoA and one at the SAIF. The price negotiated by the SAIF in Amendment 5 to contract No 4200001280_SML-05[12], which amounted to CZK 27,733 per man-day, is a significant outlier. That price is more than twice as high as the prices negotiated by the MoA for the work of the "SAP specialist" in the above-mentioned contracts. It follows from the above that the vendor lock-in situation found at the SAIF has a clear negative impact on economy, in particular because of the unusually high unit prices per day of work of the "SAP specialist" that the SAIF pays to its provider.

[11] Contract for the provision of services for the operation, support and development of the SAP system for the years 2017-2021, concluded by the MoA in 2017.

[12] Amendment 5 to the contract for the provision of the services of technical and application support, development and integration of the information system of the SAIF paying agency for the period from 1 January 2011.

Chart 2: Unit prices of ICT works including VAT



Source: Register of Contracts; prepared by the SAO.

4. There is a risk of high expenditure on ICT in connection with the termination of support for the current application platform of the IS SAIF

The SAO's audit focused on identifying risks associated with the strong dependence of the SAIF on its SAP platform provider.

The audit found that the current SAP R/3 platform at the SAIF was technologically outdated and was not compatible with the current versions of SAP products. Switching to the new SAP/4HANA platform would mean repeated development of 80% of the application core (due to the large volume of custom development of the IS SAIF carried out in recent years) with hardly estimable expenditure. Similarly, it would be difficult to estimate the expenditure on acquiring a completely new information system based on a different platform/technology. In addition, the SAIF has not contractually secured the cooperation of the existing provider in the transition from the current system to another system (except for the DMS and Portal sub-sections as mentioned in clause 1 of Part IV of this Audit Report). The support of the SAP provider for the outdated SAP R/3 platform (*SAP Business Suite 7*) is ensured for the SAIF on the basis of the SAP provider's declaration only until the end of 2027, with the possibility of extension until 2030. However, the extension from 2028, according to the provider's statement, will be associated with an increase in the cost of maintaining the product.

As the main and long-term objective of solving this situation, the SAIF[13] set itself the goal of implementing a new solution and contractual arrangement of the IS SAIF for the new programming period / the new EU Common Agricultural Policy implemented as of 2021. However, this new solution has not yet been implemented by the SAIF.

5. Shortcomings of the MoA in public procurement

The audit verified whether the MoA and the SAIF had followed the legal regulations and their internal procedures when awarding public contracts. A correct setup of public procurement is a prerequisite for achieving economy.

A sample of 11 public contracts with a total value of CZK 1,354 million (including VAT) was selected for audit at the MoA. A sample of three public contracts with a total value of CZK 2,434 million (including VAT) was selected for audit at the SAIF.

The audit revealed the following:

- The MoA repeatedly outsourced the role of chief architect[14] in the form of a small-scale public contract. If the MoA were to award a framework contract for a longer period, it would have to proceed in a more transparent manner according to Act No 137/2006 Coll. (e.g., according to the provisions of Section 27 for open procedures). However, the MoA divided the subject-matter of the contract in order to reduce the estimated value below the financial limit set by law, thereby violating Act No 137/2006 Coll.[15] On the basis of the concluded contracts, the MoA paid funds, which the SAO assessed as a breach of the budgetary discipline up to CZK 6,534,835 and notified the competent tax authority.[16]

[13] In the document *Information on the further procedure concerning the IS SAIF after the cancellation of the major public contract "Provision of the operation and development of the IS SAIF"* for the years 2018-2021, which the SAIF prepared for the MoA in December 2017.

[14] Contract numbers: 476-2016-13310, 678-2017-13330, 475-2018-11150.

[15] Section 13(3) of Act No 137/2006 Coll., on public contracts.

[16] Section 44(1)(a) of Act No 218/2000 Coll.

- The MoA set requirements in the tender documentation for the public contract *Operation and development of application infrastructure and services at the MoA*[17] (PRAIS, Czech acronym) that significantly limited the range of potential tenderers and preferred the existing provider. Specifically, these were technical qualification requirements (e.g., the requirement to demonstrate more than 9 specific significant ICT services or the requirement to demonstrate at least 26 specific ICT experts in the project team) and some contractual conditions (e.g., the required bank guarantee of CZK 10 million or liability insurance of at least CZK 300 million for the entire duration of the effectiveness of the contract). The MoA set technical qualification requirements that restricted competition[18], and thus the MoA violated the principle of non-discrimination[19].
- Amendment 6 to the contract *Operation and development of application infrastructure and services at the MoA*[20] was concluded due to the late start and subsequent delay in the follow-up tender procedure. This delay was caused by the MoA's own actions. The concluded Amendment 6 extended the effectiveness of the contract by seven months, increased the volume of work and increased the total price by more than CZK 45 million (including VAT). The amendment was concluded on the basis of the procedure referred to in Section 222(5) of Act No 134/2016 Coll.
- The MoA proceeded in violation of Act No 134/2016 Coll.[21] for the public contract *Operation and development of application infrastructure and services 2019+*[22], as it set tender conditions that created unjustified barriers to competition. This favoured the existing provider of operation and development of the application infrastructure and services. Specifically, this was a technical qualification requirement in the form of a requirement to demonstrate 55 specific ICT experts in the project team.

6. The SAIF does not have data on hardware infrastructure utilisation

The audit verified whether the SAIF had information on the utilisation of the hardware infrastructure, which it had acquired in 2018-2019 on the basis of the contract *Provision of the operation and infrastructure of the IS SAIF* in the value of CZK 326,375,701 including VAT. Knowledge of hardware infrastructure utilisation is a tool to assess the cost-effectiveness of the purchased solution.

The audit found that, during the preparation of the contract in 2018, the performance parameters of the intended hardware infrastructure had been defined by the operator of the application layer of the IS SAIF (i.e., the provider on which the SAIF is heavily dependent). The SAIF does not have information on the utilisation of the relevant physical hardware infrastructure ensuring the operation of the IS SAIF on the SAP platform. The SAIF is therefore unable to demonstrate whether or not the infrastructure it has purchased is disproportionately oversized in terms of performance.

[17] Contract No 353-2015-13310.
[18] Section 50(4) of Act No 137/2006 Coll., on public contracts.
[19] Section 6(1) of Act No 137/2006 Coll., on public contracts.
[20] Contract No 353-2015-13310.
[21] Section 36(1) and Section 6(1) and (2) of Act No 134/2016 Coll., on public procurement.
[22] Contract No 391-2019-11150.

7. The SAIF does not monitor and evaluate the utilisation of SAP licences

The audit of the SAIF focused on both the total expenditure spent on SAP licences and the level of utilisation of SAP licences. Expenditure on the purchase and maintenance of unused licences may be an ineffective and uneconomical expenditure.

The audit revealed the following:

- The SAIF owns various types of SAP licences, which are used by its employees, developers of its provider, some employees of the MoA and also end users of the system (applicants for subsidies).
- In the period of 2016-2019, the SAIF paid a total of almost CZK 417 million for maintenance and licences, i.e., approx. CZK 104 million per year.
- For the access of external end-users of the system (applicants for subsidies), the SAIF maintains a total of 59,200 SAP licences. The purchase price of these licences was CZK 44.4 million and their annual maintenance amounted to CZK 9.8 million.
- The SAIF did not carry out an analysis of the user usage of SAP licences; this was carried out only by its provider. Thus, the SAIF does not have information on the level of utilisation of individual SAP licences. The absence of that information makes it impossible to assess the effectiveness and economy of the funds spent by the SAIF on SAP licences.

8. SAP licences at the MoA

The audit of the MoA focused on the total expenditure spent on SAP licences and the level of utilisation of SAP licences.

The audit revealed the following:

- The MoA owns various types of SAP licences used by its employees. The MoA paid CZK 7.8 million per year for the maintenance of SAP licences (in the period of 2017-2019). The MoA uses SAP as an operational information system (unlike the SAIF, where the SAP platform is the basis of its agenda information system). The MoA's agenda systems are not based on the SAP technology, so the MoA does not pay any fees for SAP licences for end users of its systems.
- The MoA monitors the actual utilisation of licences. The average licence utilisation in 2020 was 43%, varying across licence types. The MoA informed that it was preparing an amendment to the Licence Agreement to optimise the portfolio of licences held.
- Partial optimisation of the portfolio of licences held by the MoA also occurred in the past, when the MoA concluded amendments to the Licence Agreement, based on which part of the licences was transferred from the ownership of the MoA, for example, to the SAIF or the Ministry of Labour and Social Affairs. The MoA thus saved considerable funds for maintenance (in the total amount of approximately CZK 19.7 million for the period from 1 October 2013 to 30 September 2020). The organisations to which the MoA transferred the licences saved money on the purchase of these licences.

9. Non-conceptual development of ICT at the SAIF

The SAO's audit verified whether the SAIF had conceptual documents and fulfilled other obligations set out in Act No 365/2000 Coll. The absence or shortcomings of conceptual and strategic documents may have an impact on both economy and effectiveness.

The audit found the following shortcomings:

- The SAIF did not have an approved information concept and operational documentation for the entire audited period (2016-2019) and until the end of the audit (i.e., until October 2020), and did not have an attestation for long-term management of public administration information systems, thus failing to meet the requirements of Act No 365/2000 Coll.[23] The SAIF stated strategic objectives for ICT management in various internal documents, such as the *SAIF ICT Strategy and the Development Concept for 2015-2018*. However, the aforementioned strategy was not updated or evaluated by the SAIF. After the expiry of the strategy, i.e., from 2019 onwards, no similar separate document was prepared for the ICT area.
- The SAIF did not meet one of the strategic objectives, namely "*reducing dependence on external providers*", set out in the *SAIF ICT Strategy and Development Concept for 2015-2018*. The technological dependence on the SAP platform provider has not yet been reduced as mentioned in clause 1 of Part IV of this Audit Report.
- Due to the absence of basic conceptual documents, there is a risk of non-conceptual development of ICT at the SAIF with a possible negative impact on both economy and effectiveness.

10. Shortcomings of the MoA in the area of strategic management

The audit examined whether the MoA had conceptual documents and fulfilled other obligations as required by Act No 365/2000 Coll.

The audit revealed the following facts and shortcomings:

- For most of the audited period, the MoA had a valid information concept, but as of April 2020 it no longer has a valid information concept, which is contrary to Act No 365/2000 Coll. At the time of the audit (October 2020), the MoA had only submitted a draft information concept.
- In the period from 24 June 2015 to 13 June 2017, the MoA did not have a valid attestation of long-term management of public administration information systems; therefore, the MoA did not comply with the obligation arising from Act No 365/2000 Coll. in that period.
- The MoA did not carry out a regular evaluation of the information concept valid for the period from 24 April 2017 to 25 April 2020 within the set deadlines.
- The objectives defined by the MoA in the information concept were general, without more detailed specification of individual objectives and measurable outputs.
- Methodological documents for ICT developed by the MoA are in accordance with binding documents and methodologies under the responsibility of the Office of the Chief eGovernment Architect of the Ministry of the Interior.
- The MoA has several other strategic and conceptual documents in the field of ICT. In the document *Development of registers 2020-2022*, the MoA listed the existing

[23] Section 5a(2) to (4) of Act No 365/2000 Coll.

shortcomings of the system and proposed specific solutions to these problems, including deadlines.

Given the temporary nature of most of the above-mentioned shortcomings of the Ministry of Agriculture in this area and the existence of other strategic and conceptual documents, the SAO assesses the above-mentioned facts as partial shortcomings. The SAO assessed the risk of non-conceptual development in the field of ICT at the MoA as low.

11. Risks related to ICT staffing at the MoA and the SAIF

The audit examined the evolution of the number of internal ICT positions, their occupancy, the use of the possibility of designating key positions and whether the systemisation included key positions in terms of ICT issues.

The audit revealed the following:

- The MoA reduced the number of internal ICT staff despite the recommendations of an external audit and despite findings from internal MoA documents[24], which show that internal staff are more than three times cheaper than external sourcing.
- The MoA did not make use of the possibility to designate key positions or key staff within the current systemisation and remuneration system. The use of these remuneration options could help to recruit internal staff for some key roles that the MoA did not provide internal resources for during the period under review.
- Some key positions from the perspective of ICT, such as the position of chief architect, were not included in the systemisation of the MoA. This implies the risk of taking key strategic knowledge and comprehensive information on the future direction of ICT out of the MoA. The role of chief architect was externally sourced throughout the audited period.
- In 2017, the SAIF abolished the entire ICT Architecture Department in the ICT Section due to the long-term inability to maintain and fill the positions based on specific pay grades. This made it completely impossible to continue to address the enterprise architecture as a whole and interconnect all its layers.

12. Effectiveness of funds spent and use of information systems

The SAO audit focused on the effectiveness of ICT spending in the agriculture department. The SAO verified, on a sample of audited public contracts, whether the implementation of individual contracts had been based on planned needs, related to strategic objectives in the field of ICT, and whether the purpose of the public contracts had been met. The SAO also examined the functionality of selected information systems and the extent to which these systems were used by end users (applicants for subsidies, farmers, breeders).

The audit revealed the following:

- The contracts were based on planned needs and funds were spent effectively.
- The IS SAIF was used by approximately 59 thousand end users (applicants for subsidies).
- The LPIS was used by approximately 42-47 thousand end users (farmers, land users).
- Approximately 109 thousand livestock farmers and beekeepers used the IAR. Data entry into the IAR is mandatory for farmers and breeders. Between 2015 and 2020, the number of livestock farmers submitting reports to the IAR on paper forms dropped

[24] For example, the *Overview of recommendations resulting from the IT audit at the MoA*.

significantly; for example, for cattle farmers the proportion of submitters using paper forms fell from almost 60% in 2015 to around 38% in 2020.

- In 2016-2019, expenditure on the IS SAIF per end user ranged from CZK 8,463 to CZK 9,331 per year. The expenditure on the LPIS and IAR per end user of these systems was around CZK 1,000 per year. This fact again demonstrates the high economic intensity of the IS SAIF.

More detailed information on the expenditure on the individual systems as well as on their utilisation is provided in Annex 2 to this Audit Report.

13. Corrective measures taken on the basis of previous SAO audits

The audit examined the corrective measures implemented by the MoA on the basis of SAO Audit No 12/04[25] and SAO Audit No 18/08[26]. Audit No 12/04 drew attention to a number of irregularities in the area of public procurement, while Audit No 18/08 drew attention to shortcomings in the administration of national agricultural subsidies.

The audit found that, as a measure to improve public procurement, the MoA had established a separate public procurement department, set up a public procurement committee and established binding internal procedures for public procurement.

The audit also found that the MoA had applied several measures to eliminate the risk of dependence on a single ICT service provider (especially in the area of application infrastructure support), for example:

- information systems including source codes and documentation are owned by the MoA;
- the MoA issued guidelines for standardising documentation, thereby ensuring that its quality was improved;
- the MoA established a department for monitoring and controlling the delivery of services from the providers of the systems being audited;
- the MoA standardised contracts in order to have tools to control providers.

Despite the adoption of these measures, the MoA remains significantly dependent on the original providers of ICT services, to which it paid a total of more than CZK 964 million in the audited period (2016-2019). This represents more than 53 % of the total expenditure of the MoA on ICT and data processing.

The audit focused on the spending of ICT funds during the transfer of the administration of national agricultural subsidies from the MoA to the SAIF. This change was implemented by Act No 208/2019 Coll., amending Act No 252/1997 Coll., on agriculture, as amended, and Act No 256/2000 Coll., with effect as of 1 January 2020.

The audit revealed the following:

- Neither the MoA nor the SAIF had an analysis of the expected expenditure and savings in ICT related to the transfer of the national agricultural subsidies agenda from the MoA to the SAIF. The lack of detailed analyses and background documents for such major changes may have a negative impact on the effectiveness and economy of the implementation of these changes.

[25] Audit No 12/04 – *Management of the state property and state funds allocated to information and communication technology projects at the Ministry of Agriculture*.

[26] Audit No 18/08 – *Funds spent to support animal production*.

- A rough estimate of the expenditure associated with the modification and creation of the software tool on the SAIF side of CZK 20 million and an estimate of savings (reduction of costs of the MoA for the support of the information system of national subsidies) of CZK 5 million were listed in the explanatory memorandum to Act No 208/2019 Coll. However, the document does not provide details, e.g., which period the estimate covers, nor detailed information on the expected scope of the changes.
- The MoA achieved savings totalling approximately CZK 1.3 million in 2020. That is about CZK 3.7 million less than the above-mentioned rough estimate of savings. In the same period, the SAIF spent a total of CZK 28 million on modifications to the information system related to the transfer of the national subsidies agenda. This is CZK 8 more than the above-mentioned rough estimate.

List of terms and abbreviations

AGIS	agriculture information system for the common market organisation
CAFIA	Czech Agriculture and Food Inspection Authority
CBI	Czech Breeding Inspectorate
CEI	Czech Environmental Inspectorate
chapter 329	state budget chapter 329 – *Ministry of Agriculture*
CISTA	Central Institute for Supervising and Testing in Agriculture
ČMSCH	Českomoravská společnost chovatelů, a.s. (Czech-Moravian Breeders Association) (Czech acronym)
CR	Czech Republic
CRI	Crop Research Institute
CRO MoA	Central Register Office of the Ministry of Agriculture
CSO	Czech Statistical Office
DMS	Document management system
EPO	report to the IAR from the herd register on the *Farmer Portal*
ET	electronic report to the IAR
EU	European Union
GFD	General Financial Directorate
IAEI	Institute of Agricultural Economics and Information
IAR	*Integrated Agriculture Register*
IAS	Institute of Animal Science
ICT	information and communication technology
IS SAIF	information system of the State Agricultural Intervention Fund
IT	information technology
KEZ	KEZ o.p.s. (Czech acronym derived from the phrase “regulation of organic farming” in Czech)
LPIS	land registration according to user relationships (*Land Parcel Identification System*)
MoA	Ministry of Agriculture

NCA CR	Nature Conservation Agency of the Czech Republic
NH Kladruby	Národní hřebčín Kladruby nad Labem, s.p.o. (National Stud) (Czech acronym)
OGRPA	Office for Government Representation in Property Affairs
Organic farming	environmentally friendly (organic) farming
PLS	cattle passport (Czech acronym)
PUL	reporting to the IAR via the *Farmer Portal*
RDP	Rural Development Programmes
RISWC	Research Institute for Soil and Water Conservation
River basin authorities	state river basin enterprises (Povodí Labe, state-owned enterprise; Povodí Vltavy, state-owned enterprise; Povodí Ohře, state-owned enterprise; Povodí Odry, state-owned enterprise; Povodí Moravy, state-owned enterprise)
SAIF	State Agricultural Intervention Fund
SAO	Supreme Audit Office
SAP	information system of the German software company SAP
SGFFF	Podpůrný a garanční rolnický a lesnický fond, a.s. (Support and Guarantee Farm and Forestry Fund)
SLO	State Land Office
SVA	State Veterinary Administration of the Czech Republic
VAT	value added tax
WS	reporting to the IAR using the web service

Short titles of laws and regulations

Act No 2/1969 Coll.	–	Act No 2/1969 Coll., on the establishment of ministries and other central state administration authorities of the Czech Republic
Act No 154/2000 Coll.	–	Act No 154/2000 Coll., on the breeding and registration of livestock and on amendments to certain related acts (the Breeders Act)
Act No 218/2000 Coll.	–	Act No 218/2000 Coll., on budgetary rules and on amendments to certain related acts (the Budgetary Rules)
Act No 256/2000 Coll.	–	Act No 256/2000 Coll., on the State Agricultural Intervention Fund and on amendments to certain other acts (the State Agricultural Intervention Fund Act)
Act No 365/2000 Coll.	–	Act No 365/2000 Coll., on public administration information systems and on amendments to certain other acts
Act No 137/2006 Coll.	–	Act No 137/2006 Coll., on public contracts
Act No 134/2016 Coll.	–	Act No 134/2016 Coll., on public procurement
Act No 208/2019 Coll.	–	Act No 208/2019 Coll., amending Act No 252/1997 Coll., on agriculture, as amended, and Act No 256/2000 Coll., on the State Agricultural Intervention Fund and on amendments to certain other acts (the State Agricultural Intervention Fund Act), as amended
Decree No 317/2014 Coll.	–	Decree No 317/2014 Coll., on significant information systems and their determining criteria

Annex 1 to the Audit Report on Audit No 20/07 – Funds spent on information and communication technologies at the Ministry of Agriculture

List of public administration information systems (agenda information systems) administered by the MoA

- VODA information system
- Cross Compliance
- Land registration according to user relationships (LPIS)
- Integrated Agriculture Register (IAR)
- Common Agriculture Register (CAR)
- Special registers
- eAgri (web portal)
- EPO MoA – electronic filing room of the Ministry of Agriculture of the Czech Republic
- Central register of small-scale aid
- Document management system (DMS)
- Information system for the registration of agricultural holdings
- IS National subsidies
- Information system for the recording of statistical data on plant protection products (STATPOR)
- Information system for the recording of reproductive material (ERMA)
- CRVE – central register of water law records
- IS VaK – information system of water supply and sewerage

Annex 2 to the Audit Report on Audit No 20/07 – Funds spent on information and communication technologies at the Ministry of Agriculture

Selected information systems of the MoA

IS SAIF

The IS SAIF is an information system accredited by the European Commission and certified by the Ministry of Finance of the Czech Republic for the reception, administration, control and reimbursement of agricultural subsidy applications financed from EU funds and budgetary resources of the Czech Republic and also serves for the transmission of information on these applications to the EU authorities.

The most important parts of the IS SAIF are operated on the SAP platform (information system of the paying agency, about 98% of the IS SAIF expenditure) and on the AGIS platform (information system for the common market organisation, about 2% of the IS SAIF expenditure). The exact breakdown of expenditure between the SAP and AGIS platforms is shown in Table 1.

Table 1: Expenditure on the IS AGIS and IS SAP in the period of 2016-2019 (in CZK)

Year	AGIS	SAP	Total
2016	10,902,918	517,375,217	**528,278,135**
2017	12,271,663	514,911,306	**527,182,969**
2018	14,850,971	486,163,776	**501,014,747**
2019	11,880,724	540,510,799	**552,391,523**
Total	**49,906,276**	**2,058,961,099**	**2,108,867,375**

Source: reply of the SAIF to the SAO's request; prepared by the SAO.

When submitting the so-called uniform application and subsequent processing of data from these applications, the SAIF staff use the data held in the LPIS. The number of external users (mainly farmers and other applicants for subsidies) was around 59 thousand in each year. This number consisted of 55 thousand private individuals and legal entities under the uniform application, forestry measures, rural development programme, national agricultural subsidies and the operational programme for fisheries. In addition, this number included 4,200 schools under school subsidy programmes. In total, the SAIF provides services through the IS SAIF to 59,200 external users.

The cost per external user of the IS SAIF in 2016-2019 ranged from CZK 8,463 to CZK 9,331 per year.

The number of external users from different institutions was minimal (about 50 from the MoA). The SAIF also pays licence fees for individual external users, see section IV.7 of this Audit Report for more details.

The IS SAIF on the SAP platform has been implemented and operated at the SAIF on the basis of a contract by the same provider since 2004. From 2004 to the end of 2019, the SAIF paid to that provider approximately CZK 8.7 billion (including VAT).

Table 2: Expenditure on the IS SAIF in individual years

Year	Expenditure on the IS SAIF (in CZK)	Year	Expenditure on the IS SAIF (in CZK)
2004	409,105,413	**2013**	534,179,261
2005	411,296,522	**2014**	520,961,816
2006	617,879,443	**2015**	523,893,478
2007	717,713,655	**2016**	528,278,135
2008	616,816,583	**2017**	527,182,969
2009	631,984,046	**2018**	501,014,748
2010	590,771,840	**2019**	552,391,523
2011	493,740,096	**Total**	**8,678,156,179**
2012	500,946,652	**Average**	**542,384,761**

Source: reply of the SAIF to the SAO's request; prepared by the SAO.

According to the *Summary Report on the Digitalisation of Public Administration in the Czech Republic*, prepared by the SAO in 2019, in 2018 the central state administration authorities spent approximately CZK 100 thousand on information and communication technologies per systemised government or other job. When taking into account the expenditure on the IS SAP and IS AGIS, the SAIF exceeds this amount four times; see the following table for details.

Table 3: Expenditure on the IS SAIF in individual years and recalculation per employee

Year	Number of employees	Costs of the IS SAIF (SAP+AGIS)	Costs recalculated per 1 employee
2016	1,198	CZK 528,278,135	CZK 440,967
2017	1,250	CZK 527,182,969	CZK 421,746
2018	1,299	CZK 501,014,748	CZK 385,693
2019	1,307	CZK 552,391,523	CZK 422,641
Average	**1,264**	**CZK 527,216 844**	**CZK 417,762**

Source: replies to the SAO's requests, SAIF Annual Reports for 2016-2019; prepared by the SAO.

LPIS

The LPIS is an information system that manages selected data on land, its use and protection. It is primarily designed to verify data in subsidy applications granted in relation to agricultural land. It also supports the agendas related to land registration (inspections, ecology, localisation of diseases, etc.). It is a modular system for individual user groups. The fLPIS module is used for the administration of the RDP forestry measures and, in connection with the IS ERMA, also for the administration of measures related to the support of the forest tree gene pool.

From the ICT perspective, the LPIS is a collection of applications, modules and functionalities run from a single environment using components such as map, search, export, details, etc. The most important applications and modules include:

- LPIS (the main application for internal staff of the MoA and the SAIF),
- iLPIS (application for registered farmers),
- pLPIS (free application for the general public without prior registration),
- preprints of subsidy applications – agricultural land,
- fLPIS (forest stand group registration application),
- preprints of subsidy applications – forest land,
- ENVIRO (grassland community delineation application),
- the control module of the SAIF,
- applications for the CISTA, SVA, module for organic farming, records of location of establishments, etc.

The purpose of the LPIS is therefore to ensure the operation of land registration-related agendas through web services. The expenditure of the MoA on application support for the operation and development of this system is shown in the following table.

Table 4: Expenditure on the LPIS including VAT **(in CZK)**

	2016	2017	2018	2019
Operation of the LPIS	14,157,810	18,496,225	20,205,207	20,272,966
Development of the LPIS	31,508,854	25,942,707	19,299,150	40,188,459
Total	**45,666,664**	**44,438,932**	**39,504,357**	**60,461,425**

Source: reply of the MoA to the SAO's request; prepared by the SAO.

Table 5 shows the total number of user-farmers (i.e., private farmers and legal entities) who have access rights to the LPIS. The table shows that the number of user-farmers in the LPIS has been steadily increasing slightly. Table 5 does not include data on other users; for example, it does not include users of the fLPIS module (their number as of October 2020 was 150 entities), nor does it include LPIS users from various institutions (these are listed below in Table 7). One entity may have more than one access.

Table 5: Evolution of the number of users-farmers in the LPIS over time

	2017	2018	2019	2020
Private individual	36,185	37,297	38,670	39,582
Legal entity	6,295	6,567	7,216	7,412
Total	**42,480**	**43,864**	**45,886**	**46,994**

Source: reply of the MoA to the SAO's request; prepared by the SAO.
Note: This is the year-end figure for 2017-2019 and the figure for September 2020.

The annual expenditure on the LPIS (sum of the application support for operation and development) per user-farmer in 2017-2019 was around CZK 1,000 per year. This data is given in more detail in Table 6.

Table 6: Total annual expenditure on the LPIS and overview of the number of user-farmers

	2017	2018	2019
Total expenditure in CZK	44,438,932	39,504,357	60,461,425
Number of LPIS users	42,480	43,864	45,886
Ratio indicator	**1,046**	**901**	**1,318**

Source: reply of the MoA to the SAO's request; prepared by the SAO.

Table 7 shows the number of LPIS users from the different institutions – the numbers of LPIS users from the institutions are shown there, not the numbers of staff from each institution.

Table 7: LPIS – institutional users, 2020

Name of institution	Number of LPIS users	Name of institution	Number of LPIS users
ABCERT	8	NH Kladruby	2
NCA CR	124	SAO	7
BIOKONT CZ	24	Municipalities	201
BIOINSTITUT	1	SGFFF	53
Customs Administration	277	River basin authorities	48
CEI	88	Schools	10
ČMSCH	43	SLO	632
CBI	56	SVA	956
CRO MoA	55	SAIF	1,068
CSO	13	CAFIA	2
GFD	3	CISTA	454
KEZ	28	IAEI	28
Regions	76	OGRPA	7
Ministries	526	RISWC	26
MoA	751	CRI	3
IAS	3	**Total**	**5,573**

Source: reply of the MoA to the SAO's request; prepared by the SAO.

IAR

The IAR processes data on livestock farmers, animal movements, results of marking and registration checks and results of carcass classification (SEUROP).

The system provides information on livestock farming and related issues, including background documents for subsidy administration.

The core of the system consists of the following three modules:

- module recording individually registered animals, their movements, positions, reports, ear tag assignment,
- module recording group-registered animals, their numbers and reports,
- module recording farmers (breeders) and establishments.

Above the core of the system there are applications for creating preprints of subsidy applications, web services, data exchange with the State Veterinary Administration, control module of the Czech Breeding Inspectorate and others.

The expenditure of the MoA on application support of operations, system development and data processing by an external entity (Českomoravská společnost chovatelů, a.s. (Czech-Moravian Breeders Association), hereinafter "ČMSCH") is shown in the following table.

Table 8: Expenditure on the IAR including VAT **(in CZK)**

Expenditure	2016	2017	2018	2019
Operation of the IAR	6,462,813	5,107,627	5,256,756	5,276,116
Development of the IAR	27,213,484	13,746,808	6,159,906	11,860,503
ČMSCH data processing	81,246,484	87,379,666	91,562,312	83,619,895
Total	**114,922,781**	**106,234,101**	**102,978,974**	**100,756,514**

Source: reply of the MoA to the SAO's request; prepared by the SAO.

Note: The estimated expenditure of CZK 6 million per month for the months of January to March 2016 was used for the data processing expenditure of ČMSCH. For the other months of the audited period (i.e., April 2016 to December 2019), the actual invoiced expenditure was used.

All farmers and breeders must enter data on their animals into the IAR; the entry of animal data can be done in different ways, details of the different methods of data entry are given in Table 9. The column "Clarification" describes the basic activities carried out by ČMSCH based on the individual assignment methods[27]. The audit examined the reporting methods used by farmers and how the proportion of different reporting methods had changed over time.

[27] Other activities (not only those listed directly in Table 9) are also part of the subject-matter of the contract between the MoA and ČMSCH, for example: to provide breeders with instructions on how to provide data after they have been approved by the MoA and to provide ongoing information and advisory services, to motivate breeders (e.g., by training, issuing promotional documents, etc.) to use the Farmer Portal. The contract also states, inter alia: "*In keeping the central register of animals, the performance provided by the provider also includes, in particular, the storage of reports, the administration of reports, including the printing and distribution of error slips, keeping records of the allocation of identification means, keeping the central register of breeding males, processing, publishing and recording the results of testing and assessment, carrying out qualified estimates of breeding values, issuing cattle passports and their duplicates, and returning passports abroad to the issuing authority.*"

Table 9: Methods of entering data into the IAR

Code	Method of reporting	Clarification
PAP	Paper report	ČMSCH enters into the system, goes into bulk processing, prints and sends the PLS for cattle[28]
ET	Electronic report	ČMSCH downloads the electronic report and imports it into the system, goes into bulk processing, prints and sends the PLS for cattle
EPO	Report from the herd register on the *Farmer Portal*	Online processing, the PLS for cattle is printed and sent by ČMSCH
PUL	Report made on the *Farmer Portal*	Online processing, the PLS for cattle is printed and sent by ČMSCH
WS	Reporting by web service	Online processing, the PLS for cattle is printed and sent by ČMSCH

Source: reply of the MoA to the SAO's request; prepared by the SAO.

The most important group of individually reared animals is cattle (both in terms of the number of farmers and the total number of animals). Table 10 shows the number of cattle farmers as well as the different ways of reporting animals in 2015 and 2020. It shows that the share of paper reports decreased from 59% in 2015 to 38%, while the share of electronic input to the IAR increased from 41% to 62%. In 2020, most farmers used the reporting from the herd register on the *Farmer Portal* (EPO).

Table 10: Number of cattle farmers and different ways of entering data into the IAR

Cattle	Paper reports	Online and electronic reports				Total
		ET	EPO	PUL	WS	
Number of breeders in 2015	9,444	1,320	4,076	1,010	131	15,981
Share of breeders in 2015	59.10%	8.30%	25.50%	6.30%	0.80%	100%
Number of breeders in 2020	5,620	754	7,242	1,054	232	14,902
Share of breeders in 2020	37.70%	5.10%	48.60%	7.10%	1.50%	100%

Source: reply of the MoA to the SAO's request; prepared by the SAO.

Similarly to cattle farmers, the share of paper-based reporting also decreased for the category of keepers of individually registered animals (in addition to cattle farmers, this includes sheep and goat farmers), from 62% in 2015 to just under 42% in 2020; in contrast, the share of electronic input to the IAR increased from just under 38% to 58% (see Table 11).

[28] PLS = cattle passport (Czech acronym) (according to Act No 154/2000 Coll.).

Table 11: Number of breeders of individually registered animals and different ways of entering data into the IAR

Individually registered animals	Paper reports	Online and electronic reports				Total
		ET	EPO	PUL	WS	
Number of breeders in 2015	13,944	1,636	5,459	1,237	136	22,412
Share of breeders in 2015	62.20%	7.30%	24.40%	5.50%	0.60%	100%
Number of breeders in 2020	8,401	883	9,373	1,271	237	20,165
Share of breeders in 2020	41.60%	4.40%	46.50%	6.30%	1.20%	100%

Source: reply of the MoA to the SAO's request; prepared by the SAO.

The situation was different for group-reared animals, which include mainly pigs. In that group, there was both an increase in the total number of breeders sending reports to the IAR and an increase in the proportion of paper reports. This was due to a change in the rules, whereby, as of 25 January 2019, everyone who keeps one or more pigs is obliged to register as a pig farmer; in addition, as of 1 August 2019, an amendment to Decree No 136/2004 Coll. introduced the registration of household pig farms (small farmers, keeping pigs for meat). The specific evolution of group-reared animals is shown in Table 12.

Table 12: Number of breeders of group-registered animals and different ways of entering data into the IAR

Group-registered animals	Paper reports	Online and electronic reports				Total
		ET	EPO	PUL	WS	
Number of breeders in 2015	1,621	175	359	204	0	2,359
Share of breeders in 2015	69%	7%	15%	9%	0	100%
Number of breeders in 2020	4,485	102	1,240	376	0	6,203
Share of breeders in 2020	72%	2%	20%	6%	0	100%

Source: reply of the MoA to the SAO's request; prepared by the SAO.

For beekeepers, there has been a large increase in the number of reports submitted via the web form since 2018, with no reports submitted via the web in 2018 and 52% in 2020. Conversely, the share of paper reporting fell from 99% in 2018 to 47% in 2020, see also Table 13.

Table 13: Methods of entering data into the IAR – beekeepers

Year	Paper report		Reporting via web form		Reporting from the *Farmer Portal*		Total
2018	51,861	99%	0	0%	337	1%	52,198
2019	39,213	72%	14,665	27%	453	1%	54,331
2020	22,008	47%	24,340	52%	461	1%	46,809

Source: reply of the MoA to the SAO's request; prepared by the SAO.

The IAR is used only by part of the MoA staff, but the IAR is also an important source of information for other institutions. For example, the SAIF uses information from the IAR in the performance of certain subsidy-related agendas. Table 14 summarises the specific numbers of

people with access to the IAR for each institution. A total of 2,636 users from the institutions listed in Table 14 use the IAR for their work. The total number of farmer/breeder users of the IAR has been increasing since 2018. The MoA reported the number of active entities (farmers/breeders) with at least one active access to the IAR, with the total number exceeding 42 thousand in 2018 and equalling almost 45 thousand in 2020. The expenditure on the IAR per user-farmer exceeds CZK 2,300 per year. Beekeepers are also among the users of the IAR; according to the MoA, the number of active beekeepers in the IAR was 63,763 (as of 10 November 2020). The total number of end users of the IAR, i.e., the sum of the total number of farmers/breeders and active beekeepers, amounted to almost 109 thousand entities (this total does not include users from the institutions listed in Table 14). The expenditure on the IAR, converted to the total number of end users of the IAR, was approximately CZK 1,000 per user per year.

Table 14: Number of institutional users of the IAR (2020)

Organisation	Number of users	Organisation	Number of users
MoA	122	Organisations providing organic farming inspection	67
SAIF	1,041	ČMSCH	58
CBI	56	CISTA	160
SVA	954	CEI	81
SGFFF	47	IAS	3
		Total	**2,636**

Source: reply of the MoA to the SAO's request; prepared by the SAO.