Český úřad zeměměřický a katastrální

ANNUAL REPORT 2024

Annual Report
of the Czech Office for Surveying, Mapping and Cadastre
for 2024

Prague, 2025

CONTENT

INTRODUCTION

The Czech Office for Surveying, Mapping and Cadastre manages the bodies of state administration of surveying and cadastre, which are cadastral offices, surveying and cadastral inspectorates and the Land Survey Office. Having commemorated the 30th anniversary of the successful reform of the state administration of land surveying and real estate cadastre of the Czech Republic in 2023, we have entered the next decade in 2024 with a determination to continue the quality of our services and with an effort to modernise and improve these services.

Even in 2024, all tasks of the state administration of the cadastre of real estate and land surveying were completed within the given deadlines and in high quality. Due to the high level of digitisation of the real estate cadastre, almost all requests for information were handled electronically and the number of electronic submissions to indicate changes in legal relations and other technical data increased.

In 2024, cadastral offices received 809 thousand proposals for the registration of ownership and other material rights to immovable property. Compared to 2023, this is an increase of approximately 4 % and suggests that there is a slight recovery in the real estate market associated with a slight reduction in interest rates on mortgages. The provision of data was mainly electronic, using remote access to the real estate cadastre. In total, more than 28 million requests for the provision of data from the real estate cadastre were processed, which is again a double-digit increase year-on-year. The fact that 99.5 % of the cadastre's outputs are currently provided by the systems administered by ČÚZK in electronic form clearly shows that the cadastre is now a fully digitised agenda.

The quality of the data recorded in the real estate cadastre is not only continuously increasing on the basis of individual actions of specific owners, but especially through the systematic activities of cadastral offices, which have long been engaged in improving the quality of data in information systems, as well as in cadastral revisions and renewal of cadastral documentation. In 2024, it was possible to renew the cadastral documentation by new mapping or by taking over the results of land consolidations in 251 cadastral units or parts thereof and to check the conformity of the technical cadastral data with reality by revisions in 669 cadastral units.

I dare to say that ČÚZK is currently already a key manager of basic spatial data of public administration in the Czech Republic. The year 2024 was very significant in this respect, because in the middle of the year the system of digital technical maps was successfully put into operation, which is covered by the information system of digital maps of public administration, whose administrator is ČÚZK. This is the most architecturally complex system launched in the field of spatial data in our modern history.

The state administration of land surveying has also had a successful year. In addition to the long-term activities (acquisition and processing of aerial photography and scanning data, management of our geodetic control, performance of land surveying activities at the state borders, maintenance of the Fundamental base of geographic data of the Czech Republic or the maintenance of the Central Archives of Land Surveying and Cadastre), the Land Survey Office managed to deal successfully with the publication of the new state map series and opening of most of the datasets produced by the Land Survey Office to the free of charge open data mode. A new major task is currently being prepared for the Land Survey Office, which will be the acquisition of a full-scale basic information model of the built environment. The choice of the appropriate technology will be crucial for the task and we are therefore trying to create good conditions for the following testing, analysis and preparation work for the Land Survey Office.

The staff of the state administration of land surveying and real estate cadastre have had a successful year of teamwork. The present annual report provides information that is more detailed.

1. Administration of the Real Estate Cadastre

The real estate cadastre of the Czech Republic is a set of data about real estate in the Czech Republic, including their inventory and description and their geometric specification and position. Parts of it are records of property and other material rights and other legally stipulated rights to real estate.

Current Czech real estate cadastre was established in 1993 by the Act No. 344/1992 Coll., on the Real estate cadastre of the Czech Republic, and integrates the function of Land Registry Book (registration of rights) and former Cadastre of Lands (records of real estate) into one tool. On January 1, 2014 the Act No. 256/2013 Coll., on the Real estate cadastre (Cadastral Act) came into force, having replaced not only the Cadastral Act No. 344/1992 Coll., but also the Act No. 265/1992 Coll., on Registration of rights into the real estate cadastre. Both issues - real estate cadastre and registration of rights to the cadastre - are now regulated in one act.

Real estate cadastre in the Czech Republic is administered with help of the information system. Information system of the real estate cadastre (ISKN) is an integrated information support system for state administration of the real estate cadastre and for providing user services of the cadastre.

Since 2012 ISKN has been interconnected to the Information system of territorial identification (ISÚI) together representing the key agenda information systems serving for editing of the Register of territorial identification, addresses and real estate (RÚIAN), which is one of the four basic registers of state administration. Launch of the system of basic registers has brought tangible results into the administration of real estate cadastre particularly in the area of checking up data on physical and legal persons compared to the registries of inhabitants and persons so as in the possibility of taking over the data changes from these registries (changes of addresses, surnames etc.).

ISKN is interconnected via web services to other registers, such as the insolvency register, which enables verification of the participants of the proceedings. ISKN utilizes also the interconnection with the Document management system (DMS), which stores all documents for registration in the real estate cadastre, not only documents sent electronically, but also traditional (paper) submissions that are scanned.

1.1. Main Tasks of Cadastral Offices

The main task of the cadastral offices is to carry out the registration of ownership rights and other property rights to real estate by entry or recording, the registration of notes and other data. The cadastral offices and the Czech Office for Surveying, Mapping and Cadastre then provide a wide range of extracts and electronic services from the updated database, working with both technical data on land and buildings, including graphical information, information on rights to real estate, notes and notices of important legal facts. Copies of the documents based on which the rights were registered are also provided, and private surveyors also have access to the measurement documentation needed to draw up survey sketches for land subdivision, survey new buildings or refine the data recorded in the cadastre on land boundaries.

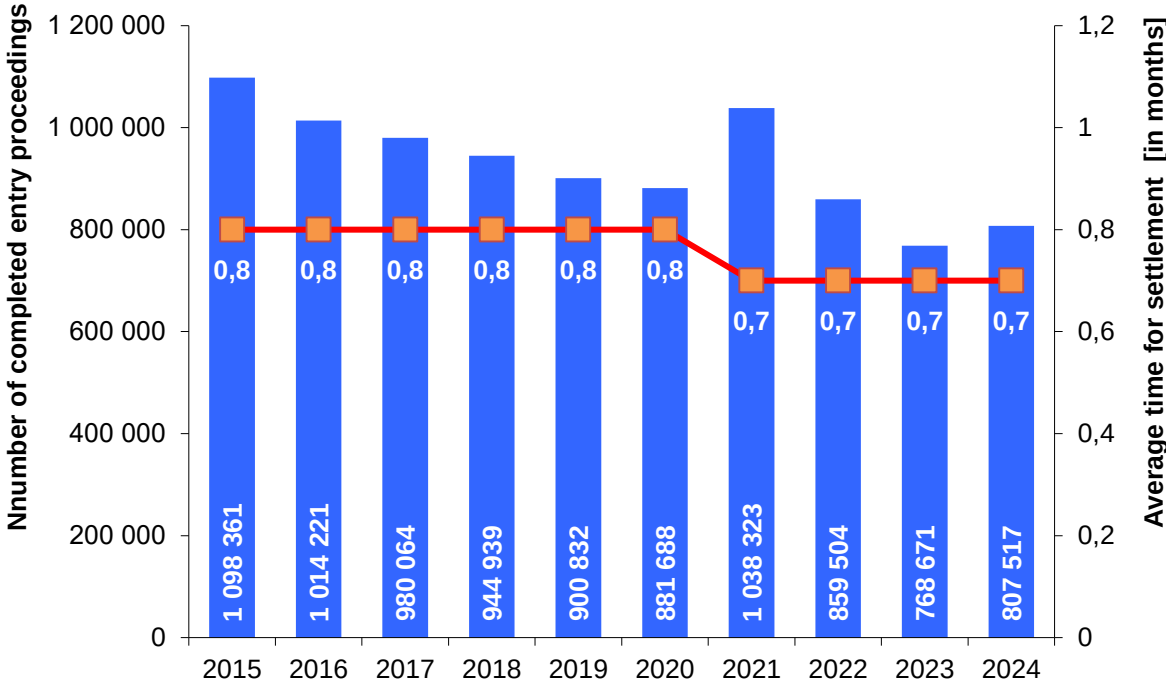
Entries of Proprietary Rights into the Real Estate Cadastre

Registration of all material rights, rights agreed as material so as lease and tenure are being performed in the way of entry regardless of its constitution – based on either the contract, or other way.

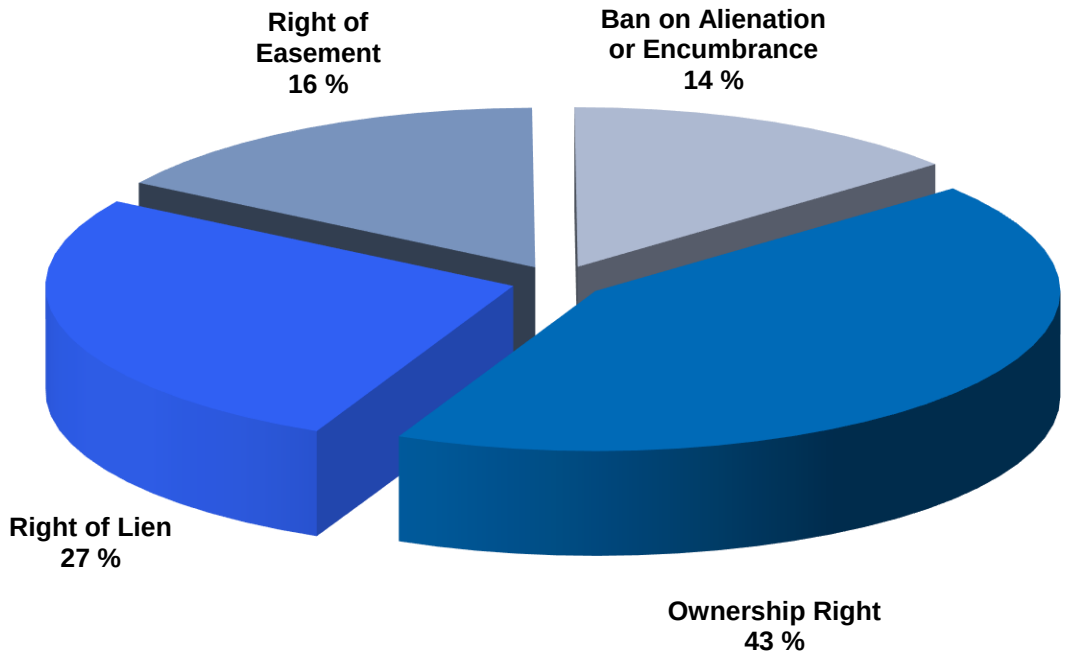
In 2024, the number of accepted proposals for entries of rights by cadastral offices was 809 070, which means mild increase of 4 % in comparison to 2023. Number of completed proposals for entry of proprietary right was 807 517 and yearly average time for completing of application remained the same.

From the total number of yearly requests for entry in 2024, 96 % entries of rights were approved, the rest of administrative proceedings were refused or interrupted.

Registration of Rights to the Cadastre



Share of Different Types of Rights Recorded by Entry into the Cadastre

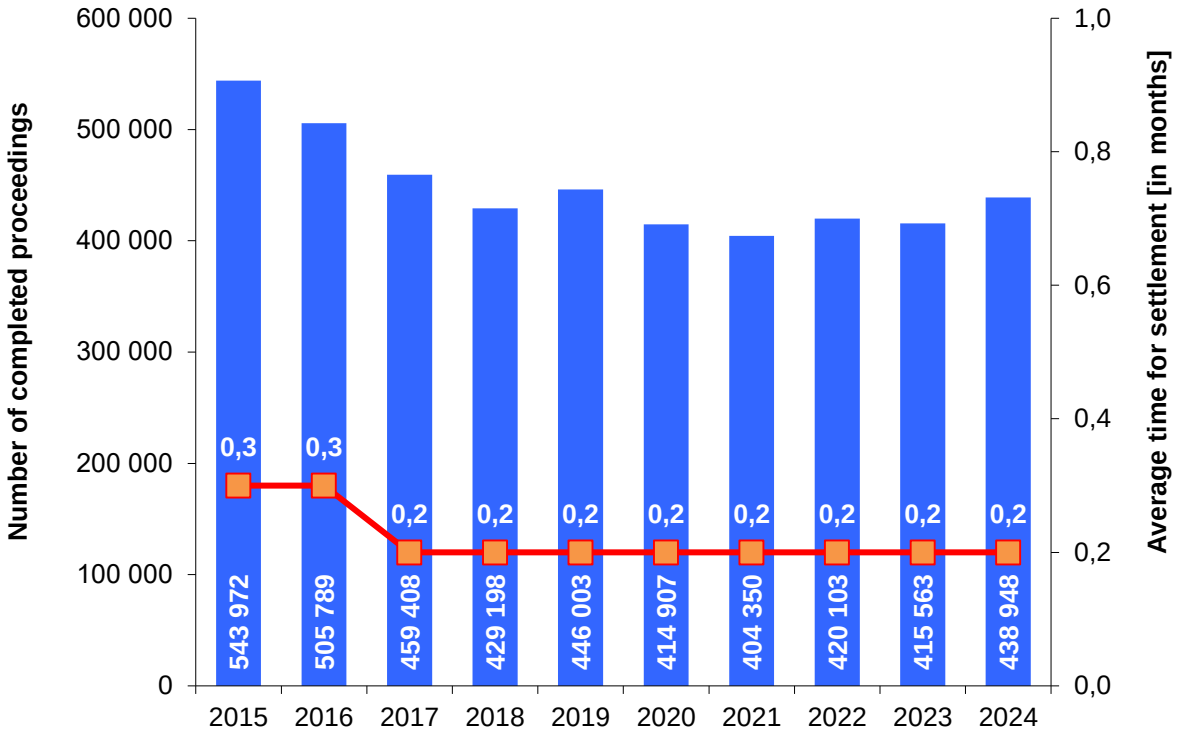


Registration by Record and Note and Others

Cadastral offices performed also other registrations in the real estate cadastre. The number of completed registrations by record and by note increased yearly by 6 %.

432 887 submissions for registration were delivered to cadastral offices and 438 948 submissions were completed, and the average time for its completing remained the same.

Other Registrations in the Real Estate Cadastre



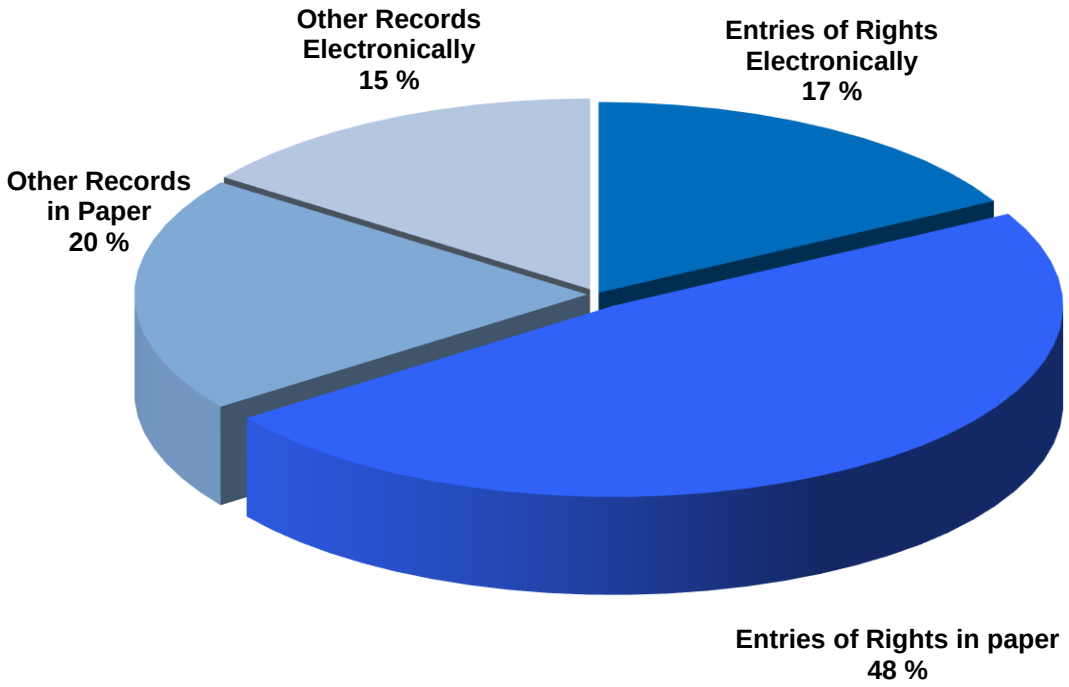
Digitization of the Entry Proceeding and Registrations to the Cadastre

Cadastral offices are ready to process proposals for the registration of rights, entry documents and other documents in digital form. However, in 2024, only 26 % of proposals for entry and related documents and 42 % of submissions for records, notes and other data were delivered electronically. Overall, therefore, 33 % of the total number of submissions for registration were delivered electronically. The main obstacle to a greater spread of digital entry procedures is the low availability of citizens' electronic signatures based on a qualified certificate, so that in most cases participants in real estate legal transactions cannot conclude a contract electronically.

However, when preparing proposals for the entry of rights, most claimants use a departmental application to create a proposal for entry either in an interactive form or via web services. In 2024, more than 600 thousand (75 %) of entry proposals were created and subsequently submitted through this application. The input data from these entry proposals are available to the cadastral offices and used for administrative activities during the entry proceeding.

In early 2024, a pilot run of electronic signing of mortgage contracts using qualified electronic signatures was carried out in cooperation with the banking sector. This is a significant step towards digitising the mortgage process without the need to visit the cadastral office in person. Until now, banks have only submitted electronically the confirmation of the termination of the mortgage to cadastral offices; it means unilateral declarations. This has not been possible for mortgage contracts because the banks' clients did not have the required level of electronic signatures. For this reason too, this is an important step in the computerisation of the activities of cadastral offices.

Share of Electronic Submissions for Registrations in the Real Estate Cadastre



The advanced digitisation of the cadastre brings the possibility to make some of the changes previously based on the owners' submissions by taking them from the basic registers of the public administration. These are mainly changes to data on natural persons taken from the Register of inhabitants (ROB) and on legal persons taken from the Register of persons (ROS). In 2024, 130 076 changes to permanent addresses and registered offices of legal persons and changes to names and titles were taken from ROB and ROS. In addition, 236 636 parties to administrative proceedings were verified in ROB and ROS in 2024 and their data used in the real estate cadastre. In 2024, 28 417 changes to real estate data were taken from the Register of territorial identification, addresses and real estate, mainly due to revisions of the cadastre.

Users of cadastral services who have material right to the real estate concerned or are parties to proceedings conducted by the cadastral office can use the service for monitoring changes to real estate data. The service automatically informs the user that there has been a change in the cadastre for the monitored property. The number of users of the service in 2024 was 46 085. Some individuals, legal entities and banks, for example, to keep them informed about transactions with real estate securing their loans, use the service.

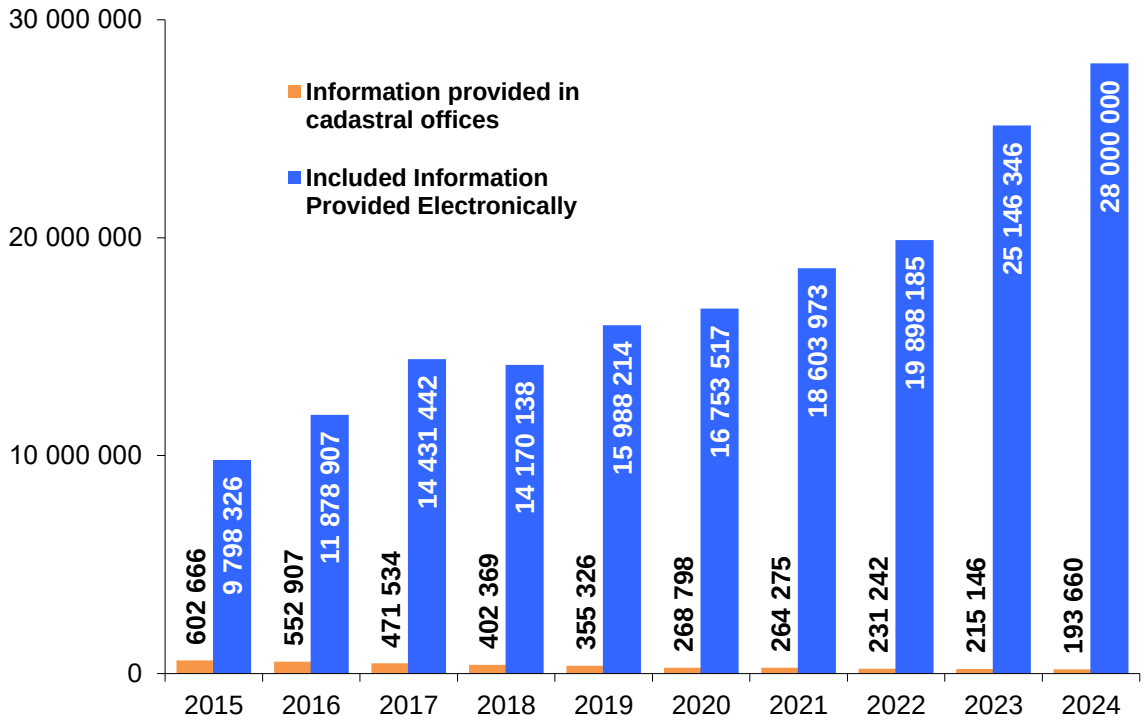
Provision of Information from the Real Estate Cadastre

Due to advanced digitisation, information from the real estate cadastre is mainly provided in electronic form. Only a small percentage of the outputs are provided by cadastral offices directly to clients in paper form during office hours. All outputs from the ISKN database (extracts from the cadastre, copies of the cadastral map, and copies of documents from the collection of deeds) are provided by cadastral offices throughout the country. More than 99 % of the information requests are satisfied by the internet services allowing obtaining extracts from the cadastre by using the service Remote access to the cadastre without visiting the cadastral office (https://cuzk.gov.cz/aplikace-dp). Application allows obtaining extracts not only by entering basic parameters, but also by supports visual searches using digital cadastral maps, as well as using the Orthophoto of the Czech Republic and topographic maps as a navigation tool.

The outputs are stamped with an electronic seal and have the same legal effects as public documents. Outputs for which it is necessary to prove the identity of the applicant can also be obtained using identification via the Portal of the National Identification and Authentication Point (https://www.identitaobcana.cz). These services now satisfy the majority of the ever-increasing demand for cadastre information.

The number of requests for the provision of information at cadastral office counters decreased slightly in 2024. In contrast, the number of applicants for cadastral information satisfied by electronic services increased again in 2024, with more than 99 % of applicants obtaining information electronically. Bailiffs, notaries, municipalities, regions and organisational units of the state, which have remote access to cadastral data free of charge, consistently provide a large share of this high number of electronically provided services.

Information Provision from the Cadastre



On contact points of public administration (Czech POINT), more than 98 thousands outputs from the real estate cadastre and more than 2800 map copies were issued in 2024. Another 62 thousands outputs were created via the CzechPOINT@office service. At present, it is possible to publish the following verified outputs on CzechPOINTs: an extract from the real estate cadastre, an overview of the rights registered for a specific person, a snapshot of the cadastral map, and the copies of documents. In the digital part of the document collection nearly 31 million documents are at disposal (all documents from 2014-2024 are available). In case, the document has not been scanned yet, it is possible to ask for it via a request form. This procedure takes two working days and the applicant has it in digital form.

The number of remote access users continues to grow. State budget revenues for providing data in this way increased by CZK 30 million year-on-year in 2024 and exceeded CZK 227 million. Of the paying users, the banking sector uses the services most for obtaining the documents needed for mortgage lending. Approximately 91 % of all outputs were provided to the public administration. Free remote access is available to not only state organizations, municipalities and regions, but to notaries, bailiffs and insolvency administrators. Executors were provided with outputs worth CZK 1 555 million in 2024. The extent of use of the service by bailiffs is clearly disproportionate to the agenda they provide; yet no effective measures have been taken yet to reduce it.

An important role in satisfying the demand for cadastral information plays the application **Consultation of the Real Estate Cadastre** (https://nahlizenidokn.cuzk.gov.cz/), which allows obtaining selected data on real estate and proceedings and thus contributes to increasing the transparency of individual administrative proceedings. The application also provides access to the records of detailed measurement of changes (ZPMZ) to the preparers and verifiers of survey sketches, of which more than 624 thousand were downloaded in 2024. Access to the real estate cadastre is one of the most visited government websites in the Czech Republic. In 2024, the number of reports provided increased again compared to 2023, to more than 576 million.

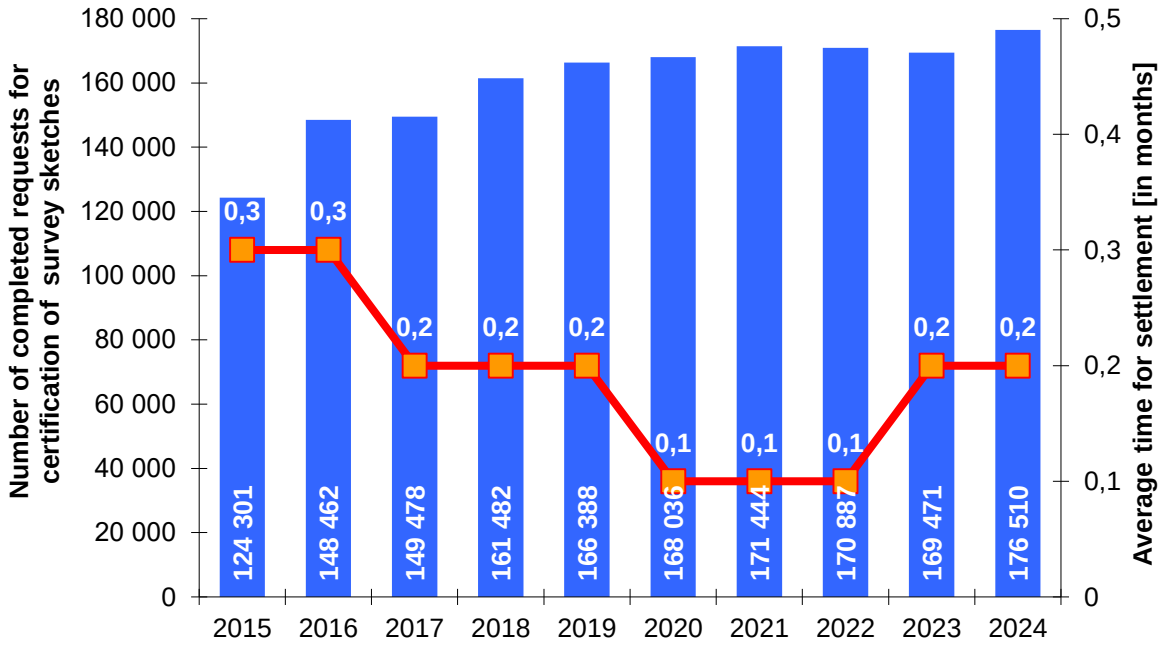
Web map services for cadastral maps (https://wms.cuzk.gov.cz/) represent another possibility to work with cadastral maps, so that the users can combine the cadastral map layer on their computers with other thematic datasets. This way, they have access to completely up-to-date data via the Internet and do not have to worry about storing copies of the maps in their data storage or updating them. This service is also free of charge.

Certification of Survey Sketches

Survey sketches represent land parcel division, position of a building or change of its external outline in the real estate cadastre and some other changes depicted in cadastral maps. Mostly private geodetic companies make them. Every survey sketch has to be certified by an experienced surveyor - authorised land surveying engineer, because it is very important document for cadastral maps administration. The Czech Chamber of Surveyors started to provide the authorization since July 1, 2023. Survey sketch is created in electronic form; for the purpose of document creation the paper counterpart is created according to the before mentioned Act on Land Surveying and Mapping. Survey sketch is subject to authorization of the cadastral office.

The number of survey sketches is still very high in the Czech Republic (in 2023 mild decrease in comparison to 2022) and despite it, the average time for checking and certification of survey sketches by the cadastral offices mildly increased in comparison to 2022. Since 2016, web services are available enabling automatic acquisition of documentation for survey sketch creation, which has to be delivered into ISKN in electronic form.

Completed Requests for Certification of Survey Sketches

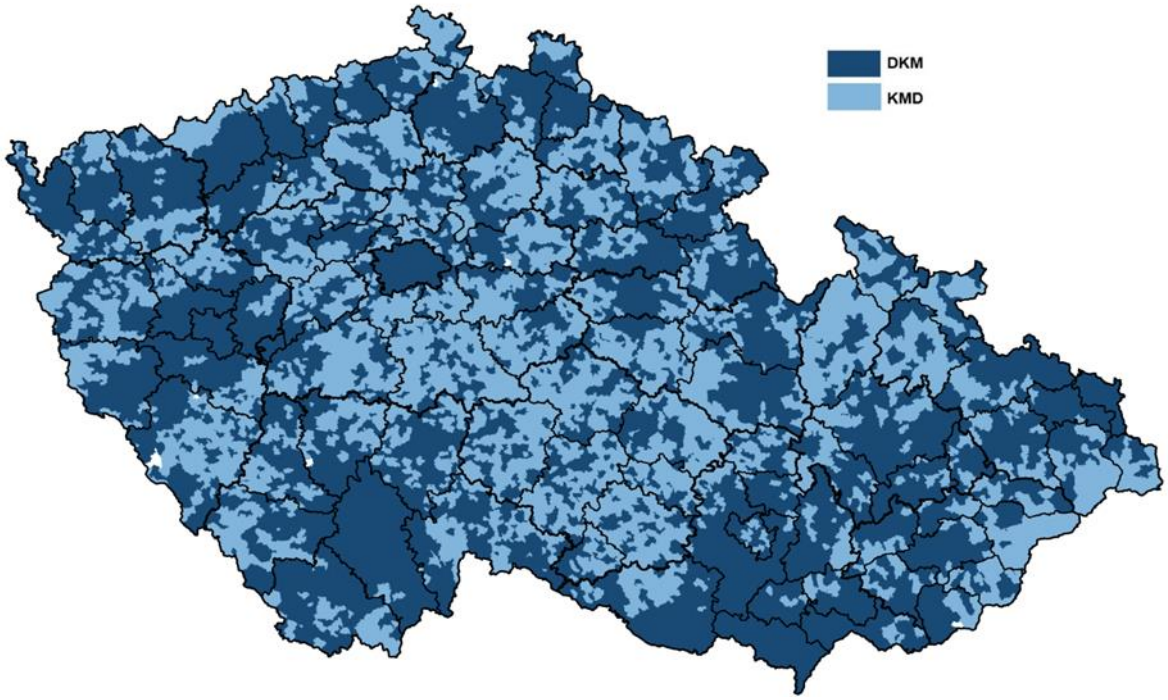


The web services for creators of survey sketches and verifiers are a software interface for access to land registry data, allowing geometric planners to request documents for the preparation of survey sketches via the Internet. It gives their verifiers the possibility to send the verified survey sketch directly to the relevant cadastral office for confirmation. As of 31 December 2024, 1874 customers´ accounts have been set up for these free services. The agenda of the cadastral offices related to the provision of documents and the receipt of the resulting survey sketch is thus digital.

1.2. New Cadastral Mapping and Cadastre Revision

Digitization of the real estate cadastre is a basis for effective operation and administration of the real estate cadastre and for operative satisfaction of the users of the cadastral information. Cadastral maps in digital form are fundamental for administration and area decision-making. They serve not only for overview on the territorial range of material rights, but they are important as a basis for creation of information systems and applications relating to the territory as f. i. digital technical maps, spatial plans, price maps etc.

Cadastral Maps Quality on 31. 12. 2024



As of 31 December 2024, the digital form of the cadastral map was not available only in 3 cadastral territories out of a total of 13 076 cadastral territories. As of 2018, the cadastral maps are being digitised only in localities with the ongoing renewal of the cadastral documentation by new mapping and land consolidation, which will soon be completed, and the results of which will replace the current cadastral map. At the end of 2024, this will apply to 106 more cadastral units where the digital cadastral map is available only for part of the territory. The number of these cases has decreased by 44 year-on-year and full coverage of the national territory should be achieved within two years.

New Mapping and Use of Land Consolidation Results

The new cadastral mapping also solves the problems pointed out by many users of cadastral information. Especially it is the lack of accuracy of registered land boundaries in areas where are still used cadastral maps digitised on the basis of original maps with a geometric basis from the first half of the 19th century, and the lack of timeliness of registered technical data, such as the type of land, its use or property protection.

The lack of accuracy of registered land boundaries complicates the preparation of buildings for investors and the activities of building authorities in zoning and construction procedures, and brings problems in real estate transactions, as the area, which is an important parameter for setting the price, is called into question. It is also not conducive to good neighbourly relations, since if it is necessary to draw the boundary according to the cadastral data, the possible results can vary by several metres. The untimeliness of technical data complicates the use of cadastral data, especially in some decision-making processes of public administration, property valuation and property tax administration.

In the process of updating the cadastre with new mapping, the actual boundaries of the land are investigated in the field with the participation of the owners, and the boundaries are accurately surveyed. At the same time, other cadastral data, such as the type and use of the land, are updated in consultation with the owners and the relevant public authorities. In 2024, the new mapping was carried out in 117 cadastral territories, usually in parts of them covered by poor quality cadastral maps or in areas excluded from land consolidation (usually built-up areas).

The cadastral register is also renewed based on the results of complex land consolidation. The perimeter of the latter is usually investigated in a similar way to the new mapping, and the new land layout is used for the cadastral documentation renewal within the area to be modified. This procedure was used in 128 cadastral units (on the parts included in the land consolidation) for the cadastral documentation renewal in 2024.

Cadastral Revision

Real estate cadastre is based on the principle of data registration according to the submitted documents. Moreover, the constitutional principle applies for registration of legal rights (the right arises only after registration) as well as Bona fide protection is applied on these registrations and so the owners´ motivation not to postpone the registration is very strong. For other records (nature of land, its mode of use, preservation), only simple registration principle applies and so up-to-datedness of this information is negatively influenced because real estate owners do often not fulfil their notification duty. Sometimes it is even more advantageous for the owners not to update this information in the cadastre (f. i. because of lower property tax). It limits use of the cadastral data for many activities, which should reflect the situation in the terrain. During cadastral revision, cadastral offices find the discrepancies between cadastral data and real situation in the terrain, and remove them in cooperation with relevant public institutions and owners.

In 2024, the cadastral revision was completed in 669 cadastral units and more than 237 thousands discrepancies were improved. The most often discrepancies were merging of superfluously registered parcels and changes in the mode and nature of land use. Information about another 26 thousands found discrepancies was recorded into the cadastre in 2024, because the owners did not submit necessary documents to the cadastral office. Information about these discrepancies are freely published on internet.

It would be possible to complete revisions in all cadastral units not included in renewal of the cadastral documentation by new mapping or based on land consolidation results by the end of 2035. Time schedule will be designed focusing on territories with greatest development.

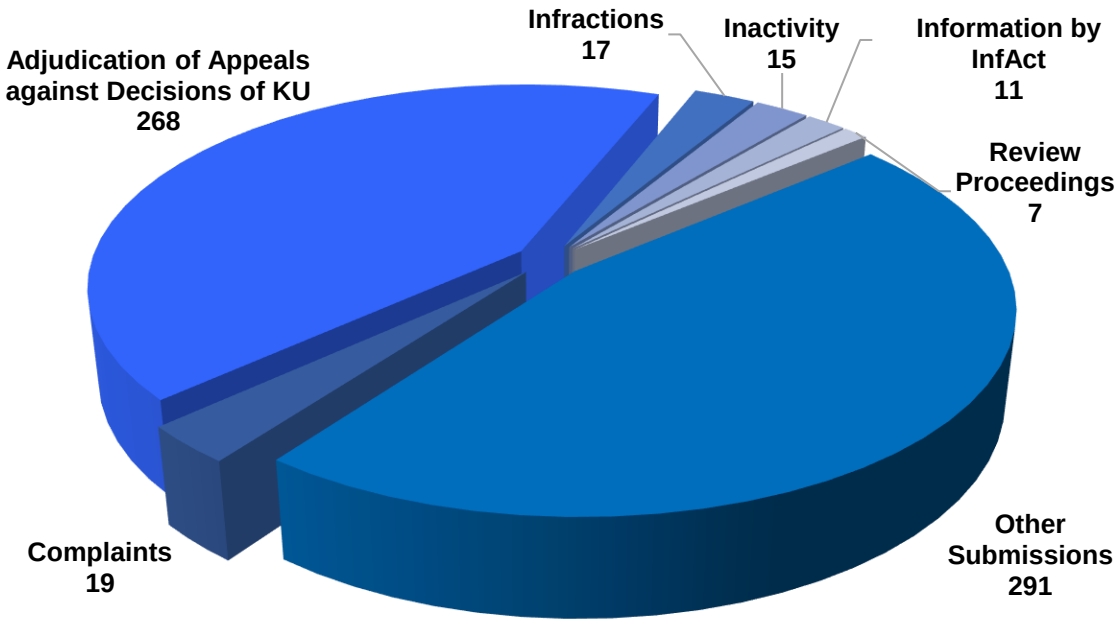
1.3. Control, Supervision and Administrative Penalties

Control of the state administration of the real estate cadastre, supervision of the verification of the results of surveying activities used for the real estate cadastre and the state map series, administrative punishment in the field of surveying and decision-making on appeals against decisions of cadastral offices are entrusted by law to 7 surveying and cadastral inspectorates.

In 2024, under Act No 255/2012 Coll., on Control (Control Regulations), as amended, the ZKI carried out 925 inspections of the performance of state administration and 158 supervisions on the verification of the results of surveying activities. At the same time, they carried out 317 monitoring actions focused on specific irregularities in cadastral administration or verification of the results of surveying activities.

A relatively large agenda of the ZKI is the adjudication of appeals against decisions of cadastral offices, and the number of other submissions dealt with is significant, too. The following chart shows the distribution of other activities of the ZKI in 2024 by the number of cases handled for each agenda.

Further ZKI Activities except for Control and Supervision

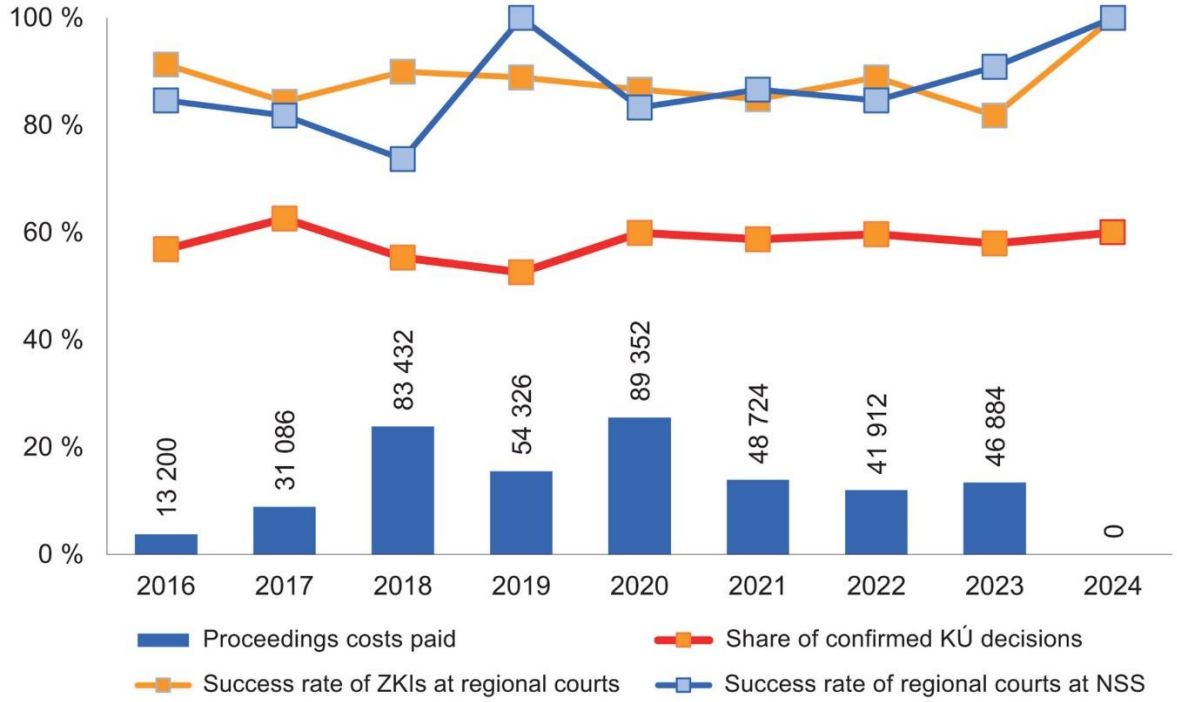


In 2024, the ZKI decided in 17 cases of committing an offence in the field of land surveying with a total fine of CZK 483 thousand.

As an appellate body, the ZKI also acts as a defendant in administrative proceedings against decisions of administrative authorities. In 2024, 21 actions were decided by regional courts and the Supreme Administrative Court decided on 15 cassation complaints.

The success rate of the cadastral offices´ decisions in appeal proceedings before the ZKI has long been around 60 %, the success rate of the ZKI before the regional courts has long been around 90 %, and similarly, in subsequent appeal proceedings, the regional courts have been able to uphold their judgments before the Supreme Administrative Court (NSS).

The Success of the Decision-making Activities of the KÚ, ZKI and Regional Courts



In addition to the above activities, the ZKIs have engaged in a single fact-finding exercise. Its focus was on the control of the registration of notes based on actions. Furthermore, the results of the uniform tasks for the ZKIs in 2023 were followed up, and the results of land surveying activities suspected of incorrect handling of image and position coordinates were the subject of follow-up surveillance and, where appropriate, infringement proceedings.

The summary and analysis of the findings of the individual ZKIs for the whole year were summarised in the yearly analyses of the control, supervision and other activities of the ZKIs, which are further used for planning further control actions as well as for methodological management of the cadastral offices, organisation of training events, or preparation of legislative changes.

In 2024, the ČÚZK, as the competent central administrative authority, carried out inspections of the performance of delegated competences entrusted to the authorities of regions and the capital city of Prague in the area of the Register of territorial identification, addresses and real estate. In 2024, 5 inspections were carried out at the regional offices (in the regions of Hradec Králové, South Moravia, Pardubice and Olomouc) and at the Prague City Hall. In 2024, the ČÚZK also carried out a collective inspection action, where all the ZKIs were examined for their decision-making on appeals against the resolutions on suspension of deposit procedures issued by the cadastral authorities.

Information on the results of the inspections of the ZKIs and the ČÚZK for 2024 is published on the website in accordance with Section 26 of the Control Regulations.

2. Register of Territorial Identification, Addresses and Real Estate (RÚIAN)

ČÚZK is the administrator of the Register of territorial identification, addresses and real estate (https://cuzk.gov.cz/ruian/RUIAN.aspx), which is one of the four basic registers of the public administration. The content of basic registers defines the Act No.111/2009 Coll., on Basic registers, stating also rights and obligations connected with creation, use and operation of basic registers. RÚIAN is edited by ČÚZK in cooperation with municipalities, building offices, Czech Statistical

Office (ČSÚ), cadastral offices and others. Editing takes place through the agenda information systems ISÚI (Information system of territorial identification) and ISKN.

Number of Selected Subjects of RÚIAN Database

Elements	Number 2023	Number 2024
Municipality	6 258	6 258
Part of municipality	15 106	15 106
Building object in total	4 179 309	4 209 787
Building object with the orientation/registry number	2 911 988	2 924 981
Address point	2 985 036	2 998 347
Streets	85 155	85 427
Special purpose territorial elements	149 830	149 696

In 2024, the development focused on improving user-friendliness for municipal and building authority users. Functionality was added to the ISÚI for the needs of regional authorities, which, in cooperation with ČÚZK, carry out checks on the exercise of delegated competences in the field of data entry in RÚIAN. At the end of 2024, the transition of RÚIAN, ISÚI and VDP to the single state domain gov.cz was implemented. The functionality enabling building authorities to transmit information on technical and economic attributes of building objects for the purposes of statistical surveys was also implemented. This will reduce the administrative burden on the staff of building authorities, who will no longer have to fill in the statistical form Status 7-99.

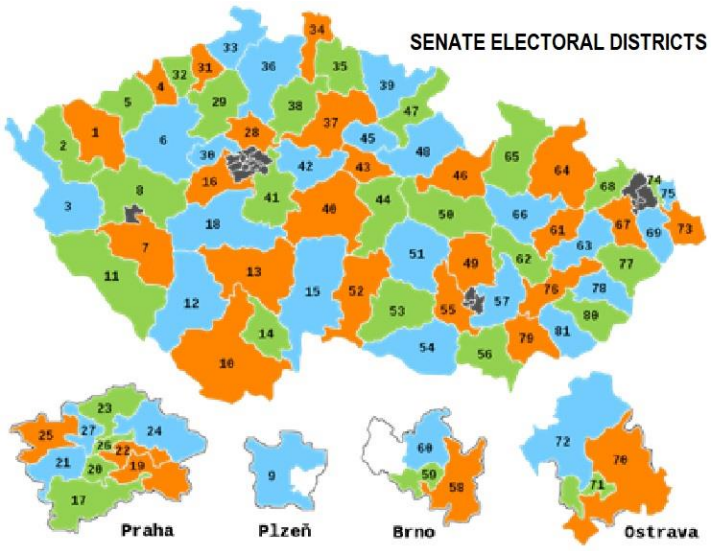
In 2024, based on a government resolution, a risk analysis of the possible transfer of RÚIAN to the substantive and technical administration of the Digital and Information Agency was prepared. The analyses assessed that the most advantageous option for the further operation and development of eGovernment in the Czech Republic is to leave RÚIAN and ISÚI in the administration of the ČÚZK.

Special Purpose Territorial Elements

The data content of the registry is gradually expanded, especially by adding other special purpose territorial elements, technical and economic attributes of buildings and measures to improve data quality.

In 2024, in accordance with the amendment to the Act on the State Land Office, the data on the quality of agricultural land was prepared for the introduction of special purpose territorial elements, estimated pedologic-ecological units (BPEJ), which are freely available to all users in RÚIAN from 1st January 2025. In the second half of 2024, the Agency for Nature and Landscape Conservation continuously filled in the special purpose territorial elements of nature and landscape protection, and from 1st July 2025, it would be possible to make information on the territory affected by nature and landscape protection available in RÚIAN and provide it to users in accordance with the legislation.

In 2024, the legislation was approved and the preparation of the introduction of data on special purpose territorial elements of monument protection (monument reserves, zones and protection zones) into RÚIAN, whose editor will be the National Heritage Institute, was started. The introduction of these special purpose territorial elements into the RÚIAN will be announced by 1st September 2027, at the latest.



At the end of the year, in connection with the amendment to the Act on Elections to the Parliament of the Czech Republic, preparatory analytical work was carried out for the introduction of Senate electoral districts into the RÚIAN from 2027 at the latest.

Negotiations are also underway on the introduction of spa protection (natural medicinal resources and natural mineral water sources, the first-degree protection zone and the internal territory of a spa site) into the RÚIAN, the editor of which will be the Czech Inspectorate of Spas and Springs. Similarly, to BPEJ for agricultural land, data on forest typology and categories should be introduced into RÚIAN for forestland, where the National Forestry Institute is proposed to be the editor. Discussions have also been ongoing for some time, on the introduction of school catchment districts with editors in municipalities and regions.

Data Quality and Further Enlargement of Data Content

In cooperation with regional authorities, building authorities and municipalities, ČÚZK continued to check the completeness and accuracy of RÚIAN data in 2024. The outputs of the checks for municipalities and building authorities are available in the application https://kontrolyruian.cuzk.cz/ that has been extended to include checking for duplicate landmark numbers in a street and checking the position of the defining point of a building object in a polygon of another building.

The data content of RÚIAN has been substantially improved following the migration of data on technical and economic attributes of buildings from the Census of Population, Houses and Flats 2021 (SLDB), which was carried out in accordance with Section 66(4) of Act No. 111/2009 Coll., the Act on Basic Registers. The migration of data from the SLDB 2021 affected 2.4 million buildings and the most frequently added data were the date of completion and built-up area.

During 2024, the possibility of creating a reference data source for data on dwellings was discussed, which would be linked to the registration of buildings and their technical and economic attributes in RÚIAN. An inter-ministerial working group was formed consisting of representatives of the ČÚZK, Czech Statistical Office, Ministry for Regional Development and Ministry of Finance, which prepared the documents for further discussion. Currently, a non-legislative material is being prepared for the Government. Amendments to the Basic Registers Act and other regulations will be necessary to enshrine the housing register in legislation. A new unit of registration "flat" should be defined, with a link to the building and the address place. Editing should be done through the ISÚI, where the editors will be building authorities, municipalities and possibly other statutory editors.

Public Remote Access to RÚIAN Data

Application Public remote access (https://vdp.cuzk.gov.cz/) to RÚIAN data (VDP) enables to view and acquire data from the basic register RÚIAN via exchange format so as some data from editing agenda information systems ISÚI and ISKN.

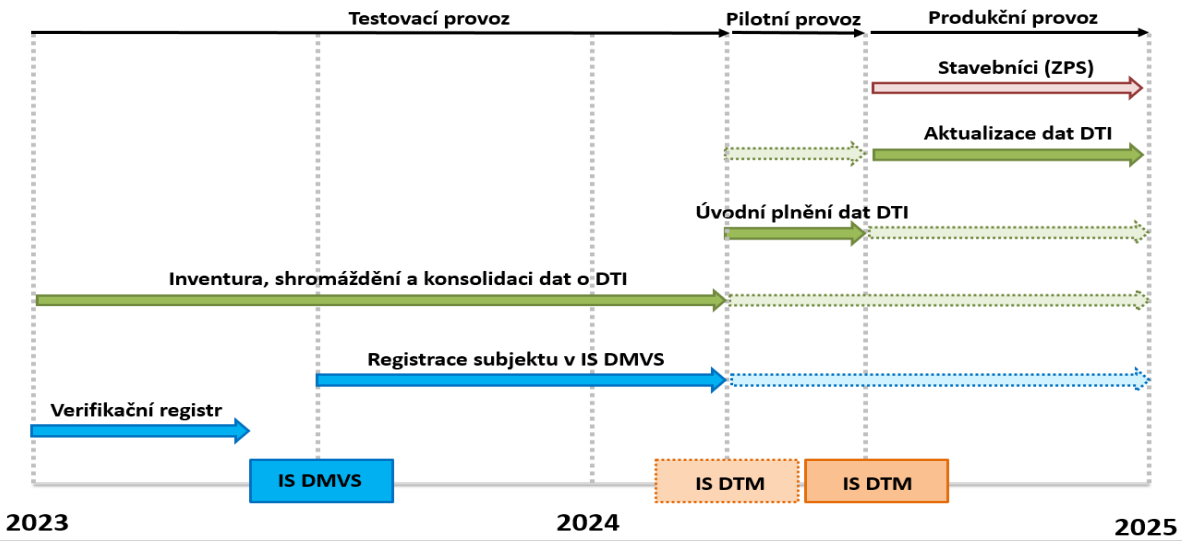
Access to the VDP application does not need any registration. Provided VDP data are free of charge and serve solely for information. Only the data shared through the basic registers information system via its web service are of a reference nature.

3. Digital Map of Public Administration (DMVS)

In 2024, the information system Digital Maps of Public Administration (DMVS), which ČÚZK built and manages based on the Land Surveying Act, was put into routine operation. The DMVS is a central system covering 14 information systems of Digital Technical Map (DTM) built by regional authorities. The aim of the creation of regional DTMs according to uniform rules throughout the country (including the DMVS umbrella) is significantly contribute to the simplification of spatial planning and the preparation, permitting and operation of buildings. DTMs make available up-to-date data on transport and technical infrastructure (DTI) in the territory. The DMVS is a guaranteed source of data on owners, managers and operators of DTI, allowing access to DTM data through a single location, both for displaying and downloading it and for sending changes. The DMVS also provides a common publishing interface for the display of cadastral maps, orthophotos and DTMs.

DMVS was launched in the production environment in July 2023, when the registration of owners, managers and operators of DTIs, including their territorial scope, started. In May 2024, a pilot was launched in 13 counties and owners, custodians and operators were invited to submit DTI data to the county DTMs. Production operation with full DTI editing and submission of the base spatial situation (ZPS) editing documents commenced by the statutory deadline of 1st July 2024.

Timetable for the Gradual Start of Operation of the DTM / DMVS

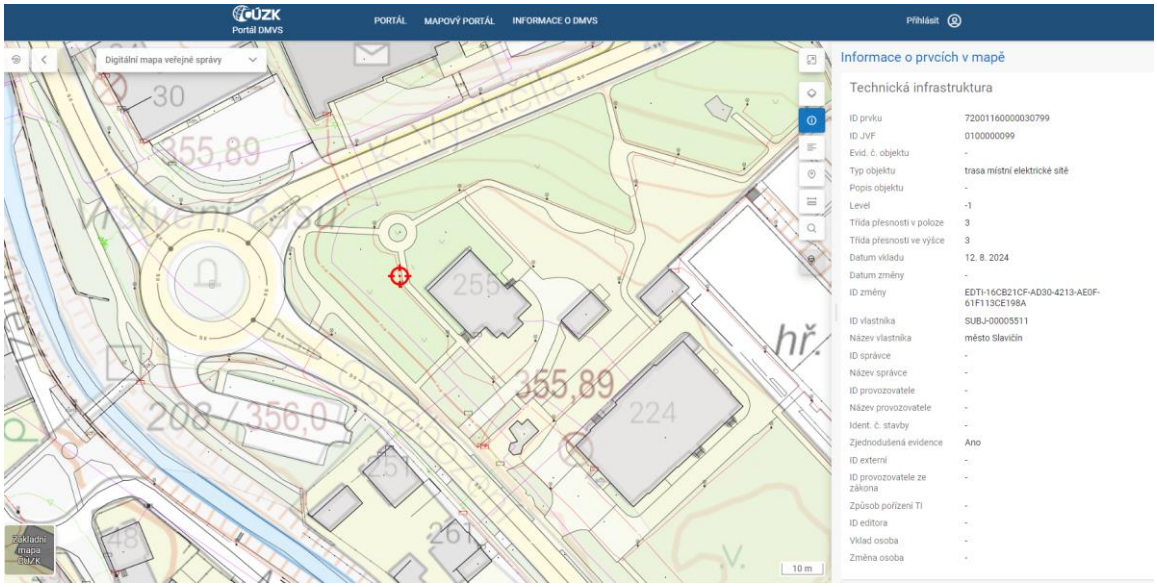


By the date of the start of production operation, the system was filled with data from large DTI owners and administrators who had been preparing for the start of operation for a long time, and ZPS data that the regions had consolidated and newly mapped in the preparatory period. In total, the regions acquired and imported ZPS from an area of 589 thousand hectares, 55 thousand km of transport infrastructure and 23 thousand km of technical networks into the DTM. The DTI of the administrators of smaller networks is continuously being filled so that the database is as complete as possible and corresponds to the situation in the field. Data stabilisation and fine-tuning of the functionality of the whole system is estimated to take approximately 2 years. In 2024, work has started on supplementing the DTM content with data acquired in the second wave of DTM funding from the National Recovery Plan, which primarily targets mapping of municipally owned DTIs. With respect to security threats, validation of the critical infrastructure elements, which are the content of the DTMs, is ongoing to ensure that they are protected, but that the purpose of the creation and existence of the DTMs is not negated, as they are intended to be a guaranteed source of data for a range of public administration agendas. With the start of production operations and the growing awareness of

new obligations, unregistered owners, managers and operators of DTIs, as well as users of DTI data are also supplementing the DMVS IS database.

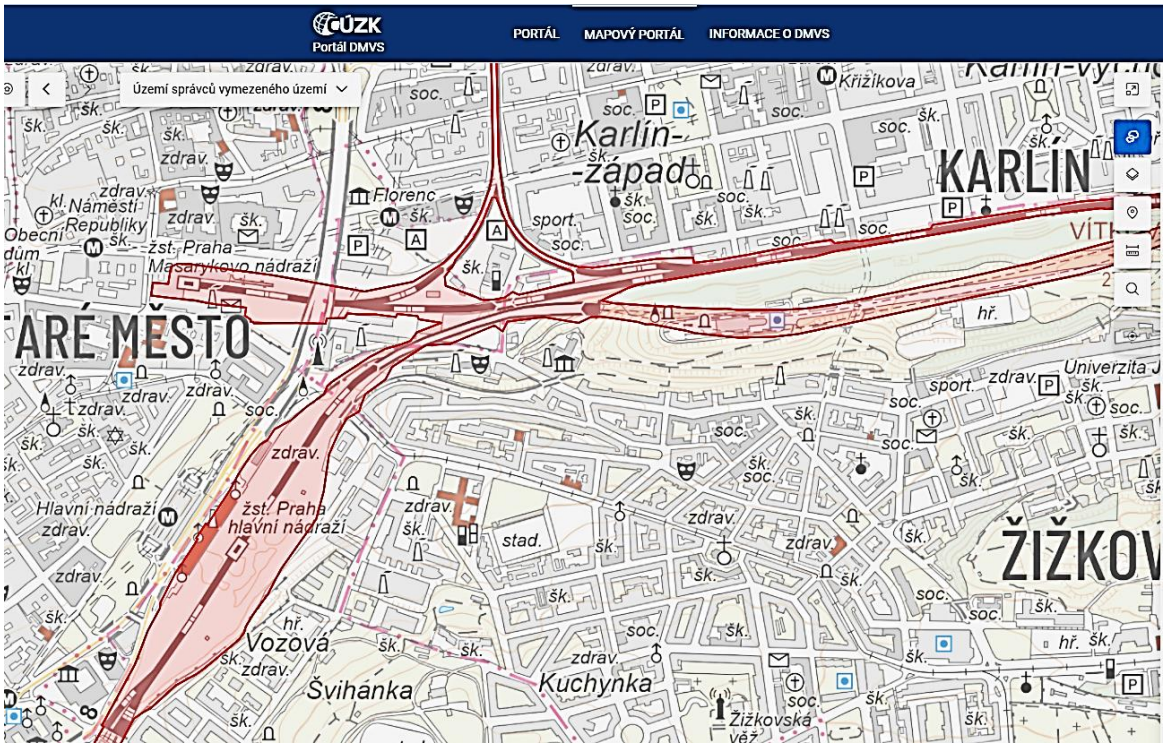
The owners, administrators or operators of the DTI update the DTM content via the web services of the DMVS single interface. The geospatial data of the ZPS, i.e. non-network data, are entered into the DTM by the regions based on documents from developers.

Example of Technical Infrastructure Display in the DMVS Map Portal



The law allows the region contractually delegating the duty of updating ZPS data to another entity. This is done in the agreed and precisely defined area of motorway and class I road corridors, where the ZPS data is managed by the Directorate of Roads and Motorways, and in the corridors of railway lines, which is provided by the Railway Administration, through a single interface of the IS DMVS to the regional DTMs.

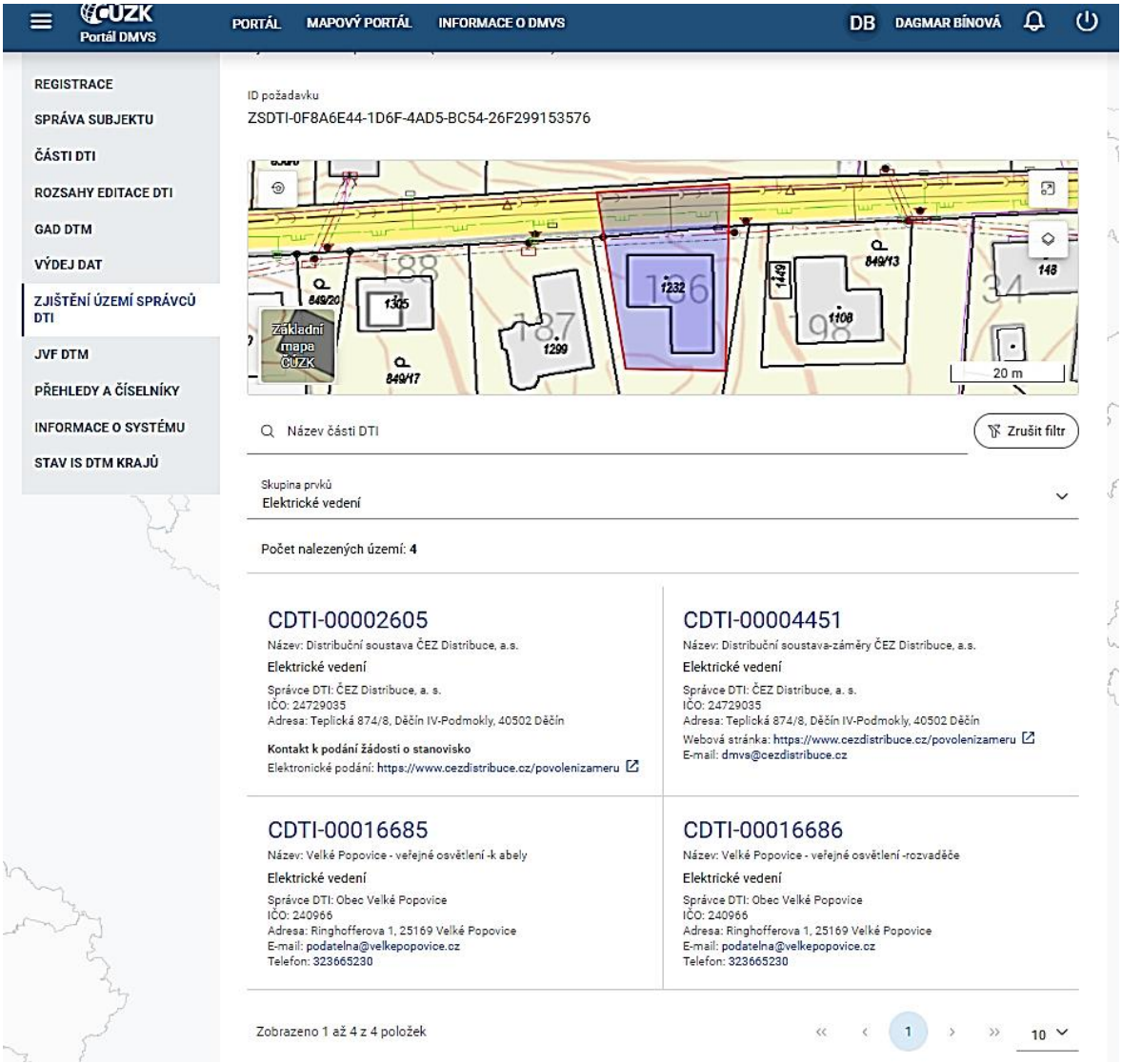
Sample of the Defined Area of the Railway Administration



In the first six months of production operation, the central DMVS system processed almost 150 thousands requests, 60 % of which were related to changes in the content of the DTM, 23 % to the release of public and non-public DTM data, and 16 % to the update of data on entities with access rights to the DMVS/DTM system.

The DMVS IS is a guaranteed source of data on owners, managers and operators of DTIs, including spatial information on their territorial coverage. The output from the DMVS information system will provide a list of all DTI managers (including their contact details) whose representations the developer must provide as part of the development consent process. The output can be freely filtered by element group or infrastructure type.

Example of Identifying the Range of DTI Administrators in an Area based on the Infrastructure Type



The establishment of the DMVS was co-financed by the Integrated Regional Operational Programme (IROP), call for Digitalization of Construction Proceeding. The aim of the project was to build a DMVS IS and to acquire up-to-date aerial surveys and a system for their storage. To update the altimetry data, an ultralight vortex and an unmanned aerial vehicle with a laser scanner were acquired within the project. In total, ČÚZK spent CZK 227 309 thousand from IROP. In the second half of 2024, an audit of the Supreme Audit Office took place. The final audit report states that no facts were found that would suggest that the ČÚZK acted ineffectively and that the requirements for the DMVS IS information system were set in accordance with the law.

4. Land Surveying Activities in the Public Interest

Main task of the state land surveying service is administration of national geodetic control and creating basic standardized geographic datasets and map products particularly for support of activities of the state and local administration of the Czech Republic. Fulfilling this task in the ČÚZK branch is in responsibility of the Land Survey Office (ZÚ).

4.1. Geodetic Control

Geodetic control of the Czech Republic includes fundamental geodetic control points (ZBP) and the network of permanent stations GNSS CR (CZEPOS).

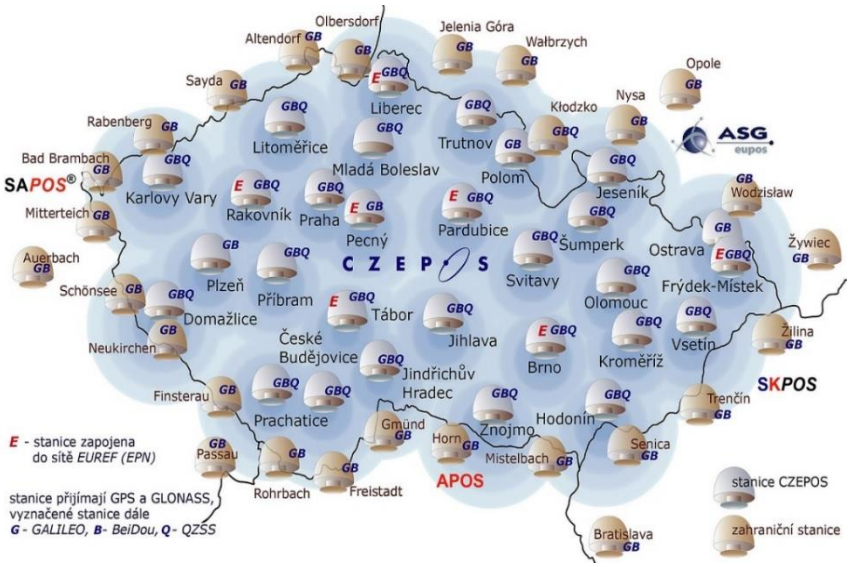
By the end of 2024, ZÚ registered 69 100 centres of trigonometric (ZPBP) and densification points, 1 313 levelling lines of the Czech state levelling network (ČSNS) being in total 24 725 km long, 82 437 levelling points of ČSNS and 462 gravity points in the geodetic control points database.

In 2024, periodic maintenance of 539 points and dynamic maintenance of 60 ZPBP points were performed. The unified gravimetric network was supplemented with the results of relative gravity measurements of the gravimeters at the main gravimetric base. The maintenance of the ZTBP was carried out in the range of 70 points. As part of the development of the basic height point field - ČSNS points - 5 polygons of the basic geodynamic network were surveyed by the method of very precise levelling and 5 points of this network were surveyed by GNSS, very precise levelling and gravimetric methods.

The geodetic data on the points of the position, height and gravity point fields can be searched on the Geoportal ČÚZK using the Geoviewer application or via the web map service (WMS) or the download service (WFS) for point fields.

Czech Positioning Network GNSS – CZEPOS

CZEPOS (https://czepos.cuzk.gov.cz/) is a network of permanent GNSS stations spread over the territory of the Czech Republic. CZEPOS stations carry out GNSS observations 24 hours a day at a time interval of 1 second, which are provided to users in the form of correction data in order to refine GNSS measurements. Correction data are provided for all currently available GNSS frequencies, namely the US NAVSTAR GPS, Russian GLONASS, European Galileo, Chinese BeiDou and regional Japanese QZSS.



The current configuration of the CZEPOS network consists of 29 stations located in the Czech Republic. The network is complemented by 27 stations of foreign networks. During 2024, a new CZEPOS station was installed at the KÚ for the Olomouc region. The number of CZEPOS users increased by 206 year-on-year and by the end of 2024 there were already 2 835 registered CZEPOS users.

4.2. Maintenance and Documentation of the State Border

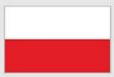
Surveying activities in the maintenance and testing of the state border are carried out in agreement with the administrator of the documentary work of the state border, which is the Ministry of the Interior.

Federal Republic of Germany, Free State of Bavaria	 	**Border length 359,4 km**

Field boundary documents were drawn up for the state border with the **Federal Republic of Germany - Free State of Bavaria** and work continued on the creation of a new boundary documentary work.

Federal Republic of Germany, Free State of Saxony	 	**Border length 459,5 km**

At the border with the **Federal Republic of Germany - Free State of Saxony**, the 4th joint examination of the border markers continued with the surveying of watercourses in border sections I and II. The centreline of the Golden Brook in border section II was assessed based on terrestrial measurements. The work was carried out in border section I for 10 km and in border section II for 18 km. Maintenance was carried out on 815 boundary markers.

Polish Republic	 	**Border length 795,8 km**

Work continued on the creation of a new border documentary. Relevant border documents from the second joint examination of the state and location of border signs on the **Czech-Polish state border** were prepared.

Slovak Republic	 	**Border length 251,8 km**

Work has been carried out on the preparation of new border documents with **Slovakia**.

Austrian Republic	 	**Border length 460,4 km**

The fifth joint testing and maintenance of border markers in border sections II, V and VII, 76 km long with **Austria**, continued. Maintenance was carried out on 935 border markers. Work also continued on the production of the new border documentary work.

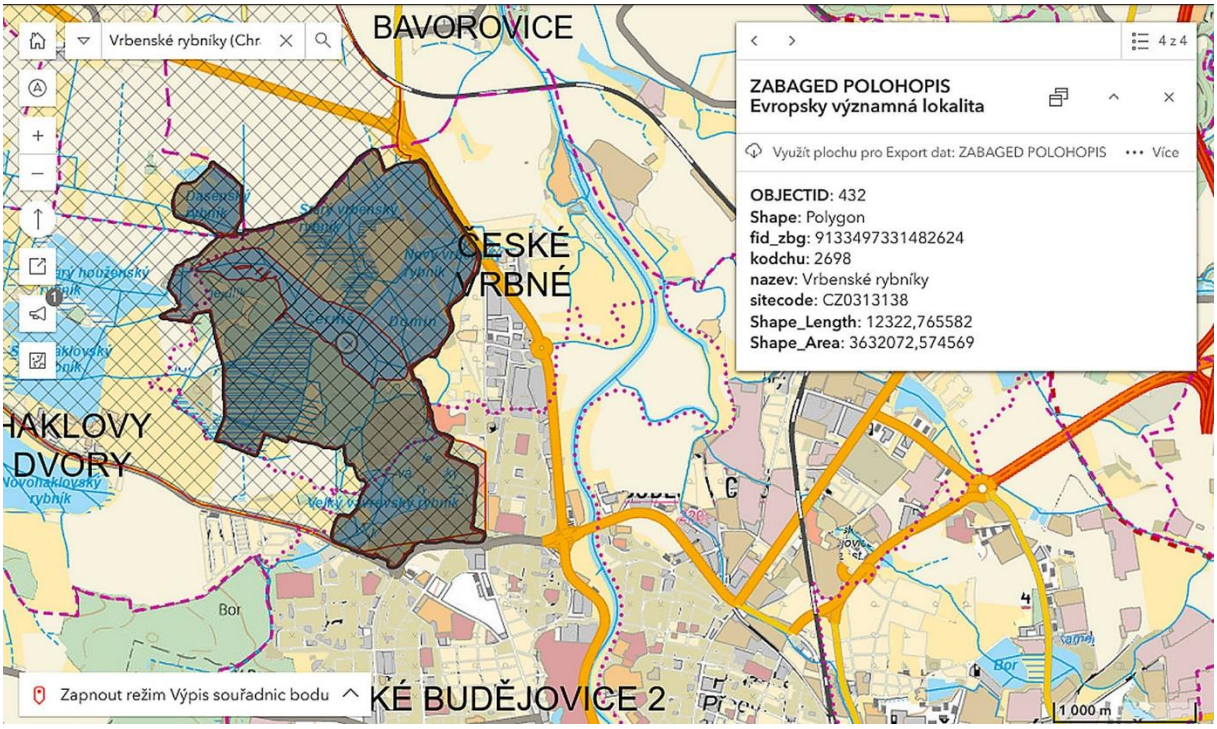
4.3. Fundamental Base of Geographic Data (ZABAGED®)

ZABAGED® is a digital geographic model of the territory of the Czech Republic. In 2024, ZABAGED® contained 142 types of geographical features (included 3 types of ZABAGED® elevation part) represented by vector graphic and descriptive part with more than 400 types of descriptive and qualitative attributes. Selected types of features (hydrography, communications) contain in its descriptive part the identifiers (integration keys) for the connection to the databases of their expert administrators.

Regular updating of ZABAGED® at the whole territory of the state using Orthophoto ČR and aerial photos went on together with investigation of selected information at the public administration bodies and field investigation. The updating cycle of ZABAGED® is maximum six years; in 2024, the sixth cycle was completed, based on the principle of so-called areal update. It means that the territory with quicker dynamics of change is updated at shorter interval than the standard one. Together 1 013 map sheets of the Base topographic map CR in the scale of 1 : 10 000 (ZTM 10) were updated in this way.

Similarly as in previous years, the continuous updating went on. The significant types of features have been updated in the area of the whole Czech Republic at least once a year, some of them even more times a year. Within the framework of this updating method, 960 proposals for new and changed streets were prepared in the past year according to the documents received from the municipalities.

In 2024, cooperation with the administrators of the Information Systems of Public Administration (ISVS) continued. Attention was paid to finding additional sources for updating or developing ZABAGED®, especially from external systems of other ministries or data from information systems of other entities. Active participation in the ISVS-WATER project of the Ministry of Agriculture and the Ministry of Environment continued, with the focus on the creation of a single harmonised watercourse layer. New types of objects were published: foreign embassy - from the data of the Ministry of Foreign Affairs, bird area and site of European importance - from the data of AOPK (Nature Conservation Agency) - see the following figure.



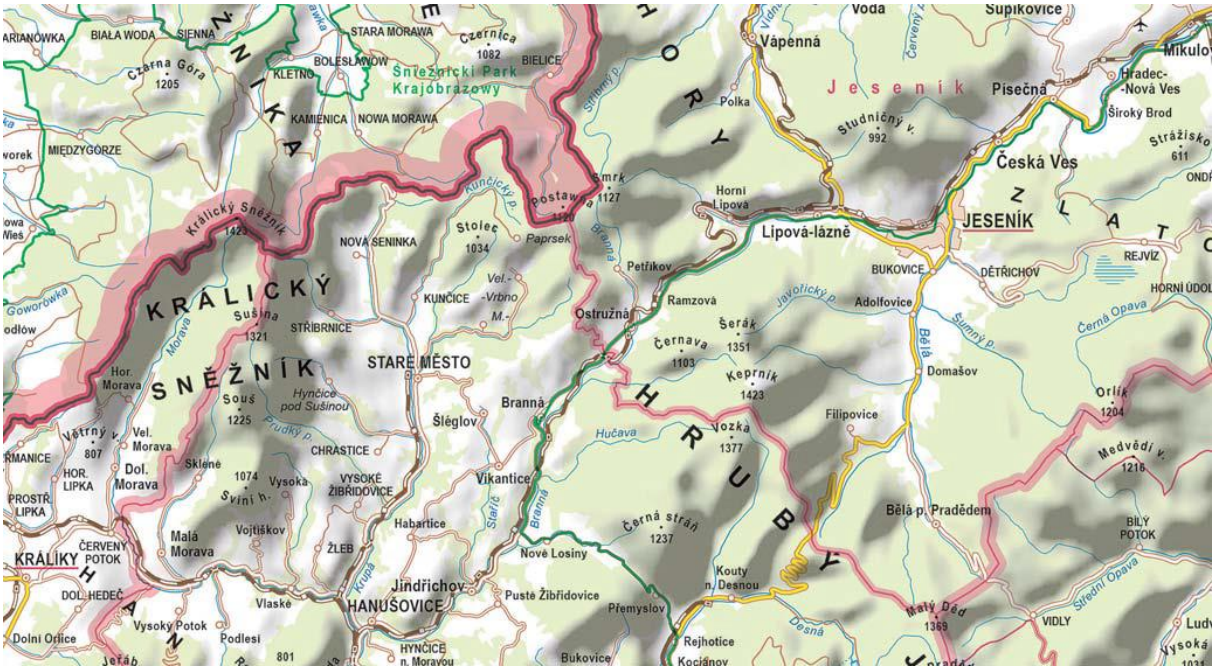
Altimetry

ZABAGED® includes also altimetry data. Currently, altimetry is being published, the primary source of which is data from airborne laser scanning (LLS), which took place between 2009 and 2013. The altimetry is available in several forms: Digital terrain model of the 4th generation (DMR 4G), Digital terrain model of the 5th generation (DMR 5G), Digital surface model of the 1st generation (DMP 1G), and contour lines with the basic interval 1 m. The elevation data are updated locally, e.g. in areas affected by major construction activity. The updating of the elevation data is based on data obtained by LLS or special aerial surveying (LMS) in cooperation with the Ministry of Defence.

4.4. State Map Series

After the successful completion of the first edition of the new form of the basic state map series (ZTM) of medium scale - the Basic Topographic Map of the Czech Republic (ZTM CR) - in 2023, the ZÚ proceeded to its regular updating and creation of thematic maps derived from the new ZTM. The first maps to be produced were the Trigonometric and Densification Points Overview 1 : 50 000 and the Elevation Network Overview 1 : 50 000. The next thematic map was the Map of Municipalities with Extended Jurisdiction 1 : 50 000. The completion and updating of the ZTM 250 was followed by the production of the first edition of the Map of Regions of the Czech Republic 1 : 250 000 and the Map of the Administrative Division of the Czech Republic 1 : 250 000. These cover the territory of the Czech Republic and the border areas of neighbouring countries in 13 map sheets of different formats, according to the extent and shape of each region.

Sample of the Map of Regions



In 2024, the data of the geographical models of the territory of the Czech Republic, Data50, corresponding to the scale of 1 : 50 000, and Data250, corresponding to the scale of 1 : 250 000, were updated and published again. Both of these products can be used for various analyses of the entire territory of the Czech Republic, in addition to regular cartographic production and visualisation.

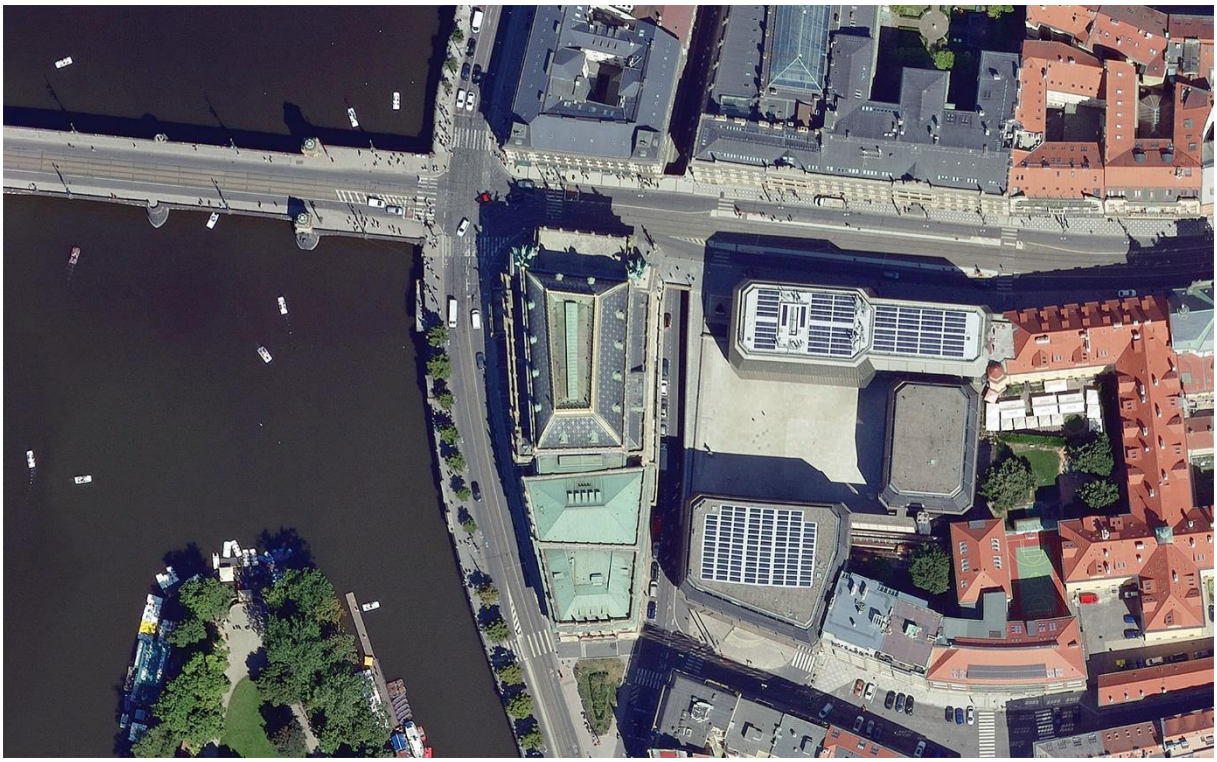
Several years of efforts in the preparation, creation and publication of the new ZTM series have had a positive response also among the professional public. For ZTM CR set of maps won the Map of the Year 2023 competition organised by the Czech Cartographic Society in the categories Atlases, Map Files and Editions and Digital Cartographic Products and Applications on the Internet.

2023 Map of the Year Award

4.5. Orthophotographic Representation of the Czech Republic

Orthophoto CR is created by the orthogonalization of aerial photographs. The private subjects based on the frame agreement are carrying out aerial photography and orthophoto processing is ensured by the ZÚ in cooperation with the Military Geographic and Hydro-meteorological Office (VGHMÚř).

In 2024, the eastern half of the CR was completed, starting so already seventh edition of aerial photographs and Orthophoto CR in two-year period covering the whole territory of the state.



The Orthophoto ČR dataset with pixel size 12.5 cm was updated on 7958 map sheets of ZTM 5. Orthophoto ČR is provided in datasets, further via viewing services and based on individual orders in the printed form. Data are in raster format JPEG and are georeferenced in the coordinate system S-JTSK and ETRS89-TMzn.

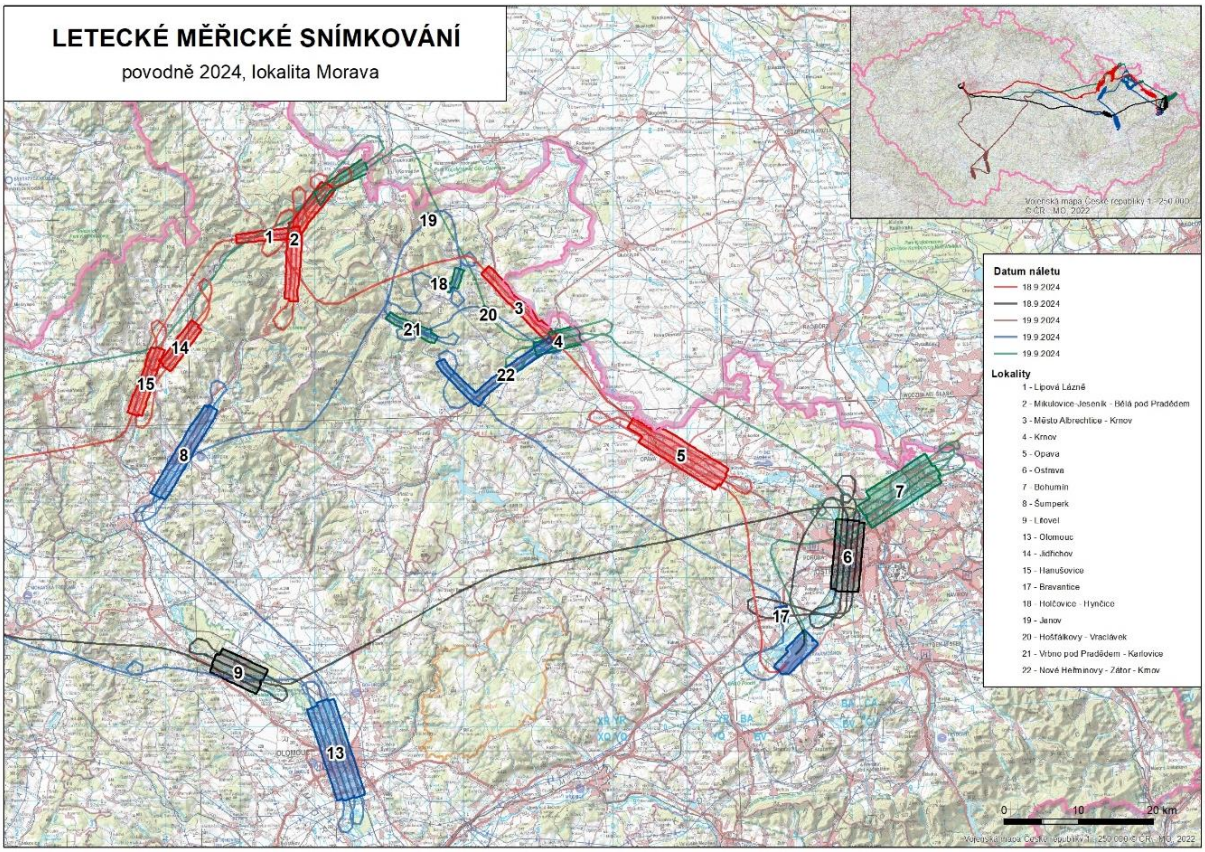
Orthophoto ČR is used as a geographic orientation basis for various projects, in map portals, in the revision of the real estate cadastre, for updating ZABAGED®, in the creation of DMRs, etc. The ZÚ is very careful about the accuracy of the orthophoto, a number of control measurements confirm

that the mean positional error of the Orthophoto ČR with a resolution of 12.5 cm reaches a value of 0.18 m at ground level at well identifiable points.

Beside the up-to-date orthophoto also file data of the archival black-and-white orthophotos from years 1998 – 2001 and colour orthophotos from 2002 are provided. Archival orthophotos are published via WMS viewing service as well. Scanned photographs together with newer photos taken already by the digital cameras can be viewed in the application Archives https://ags.ČÚZK.cz/archiv/ and can be distributed as the raster datasets. By the end of 2024 aerial photographs from years 1936-1938, 1940, 1942, 1946-1969, 1971-1975 and 1992-2024 were available to users.

A major task of the ZU was to provide special aerial surveying of the areas affected by the floods in September 2024, in cooperation with the Ministry of Defence following an emergency request from the Ministry. The area of 177 km^2 were operationally surveyed. The acquired data was subsequently used for design activities related to the construction of temporary bridges and for the organisation of the damage repair.

Special LMS 2024 – Floods Moravia



4.6. Standardization of Geographical Names

The results of standardization activities in the area of geographical names in the Czech Republic are kept in the information system Geonames and in the information system World Names with standardized Czech names of states and further names outside the Czech Republic.

In 2024, updating of the Geonames database was going on, harmonized with updating of ZABAGED® together with digitization of cadastral maps in 612 cadastral units in cooperation with cadastral offices. In accordance with ZABAGED® updating, geographic names were updated on 782 map sheets of ZTM 10 and on 37 map sheets of ZTM 50 in 2024.

At the end of 2024, the leadership of the Central and South-Eastern Europe Division (ECSEED) of the United Nations Group of Experts on Geographical Names (UNGEGN) ended. The Division

has 18 member states. In 2024, the harmonization of geographical names maintained in Geonames and in the cadastral map was also completed throughout the territory (6254 municipalities).

4.7. Central Archives of Land Surveying and Cadastre

Central archives of land surveying and cadastre (ÚAZK) is a public specialized archive, the main activity of which is taking over and registration of branch archival documents, their proceeding and systematic digitization which enables making them public in the largest range both to the professional and non-professional public. Metadata on the contents of all archive funds and collections are stored in a unified database during archival processing, and archives are systematically scanned for remote access purposes. In 2024, 44 423 raster maps and non-map material were scanned. Selected parts of the archival database, even scans in some cases, are published in the Digital research room https://uazk.cuzk.gov.cz/badatelna/, the most requested sets of archival maps´ scans are available even in the application Archive https://ags.cuzk.cz/archiv/, common both for archival maps and historical aerial photographs.

4.8. Provision of Data, Services and Open Data

ČÚZK provides data, which are collected based on legal obligations in various formats and coordinate systems. It also provides data according to open format standards for open data and through viewing and downloading services.

All published datasets are updated continuously. Updates of data and services for publication are performed continuously for data sets of the real estate cadastre and RÚIAN, quarterly for ZABAGED® data and medium-scale map works, and annually for other data sets. The data is provided based on a license, in most cases it is the standardized license CC-BY 4.0. The license associated with a given data file is always part of the metadata.

All data files, services, applications and map compositions provided by ČÚZK are equipped with metadata, information about data or services, according to which it is possible to search, compare and subsequently decide on the appropriate use of data or services. Metadata are available on the Geoportal ČÚZK, from where they are harvested to the National Geoportal INSPIRE and further provided to the European INSPIRE Geoportal (europa.eu).

If the data is provided as open data, i.e. in a machine-readable format without restrictions on use (except information about the source), the metadata is also published in the National Open Data Catalogue (Portál o datech České republiky (gov.cz) in accordance with the Act on Free Access to Information.

Datasets are provided in the form of standardized services. Viewing data through browsing services - WMS and optimized pre-packaged tiles for faster responses in WMTS format. Download of vector data is enabled in on-line mode for direct access to data in the publication database via Web Feature Services (WFS), and for raster data via Web Coverage Services (WCS). ATOM download services for on-line access to data enable machine download of data in the form of pre-

packaged files. The above browsing and downloading services are available at https://atom.cuzk.gov.cz/ and at https://services.cuzk.gov.cz/,https://geoportal.cuzk.gov.cz/ . The search service over RÚIAN data allows achieving uniform search and localization results in different mapping applications according to the current RÚIAN data. The source data of the service is updated daily. The use of the service in applications is still growing, with about half a million queries to the service per day last year.

The online coordinate transformation service allows digital geospatial data to be converted with high accuracy between national and European coordinate reference systems, including the transformation of heights.

INSPIRE

ČÚZK branch is a key provider of basic datasets for the Infrastructure for spatial information in the EU-INSPIRE (see Directive 2007/2 / EC). According to the Act No. 123/1998 Coll., and § 4 of the Act No. 200/1994 Coll., ČÚZK provides basic data sets, which are harmonized in accordance with the INSPIRE data specification in GML format. Above these datasets network services have been created, which enable searching, viewing, downloading or transformation of data and their provision via Geoportal ČÚZK. Data are provided in the coordinate systems S-JTSK and ETRS89.

Based on the approved strategy of INSPIRE implementation, ČÚZK is a gestor of one third of INSPIRE national data sets. The theme Parcels (CP) is published from ISKN, the themes Buildings (BU), Addresses (AD) and Administrative units (AU) are published from RÚIAN. From ZABAGED® we publish Transport network (TN), Hydrology (HY) and Land use (LU) themes, from Geonames it is the Geographical names (GN), from DMR 4G and DMR 5G it is the theme Elevation (EL) for GRID and TIN data models, and Orthoimagery (OI) is published from the Orthophoto ČR database. All datasets are continuously updated.

In the extended data model corresponding to the scope of data provision at national level, the CPX Extended Parcels dataset is provided for the Parcels theme.

INSPIRE services are implemented to the same extent as national services, i.e. WMS, WFS, ATOM, WCS.

Data download services are implemented in the form of WFS and WCS services, which allow direct access to data, and from ATOM services, which are used to download pre-prepared data available as open data. In 2024, the compatibility of INSPIRE download services was supported to meet validation tests on the European portal, to increase the quality of services, which is regularly monitored by the European Commission.

Open Data

Data sets are also provided in accordance with the requirements of the Act on Free access to information, in machine-readable format without significant restrictions on use, i.e. as open data. Based on the amendment to the Land Surveying Act, from July 1, 2023 the range of open data provided was enlarged to include products of the Land Survey Office. In particular, it is State map series, Orthophoto ČR, ZABAGED® data including altimetry data, Geographic names database and ground control database.Thus, 66 series of datasets and more than 427 thousand data files are provided. Metadata exists for each file.

In 2024, 3.5 million data files in the total amount of 46 TB were provided to the users.

5. Economics and Human Resources

5.1. Employees and Education

By December 31, 2024 together 4 762 persons were employed in the ČÚZK branch, 4 414 out of them were civil servants and 348 ordinary employees. Neither educational and age structure nor the share of women in the branch has significantly changed in the long-term perspective. Traditionally prevailing share in educational structure have employees, who reached the

secondary school education (54.0 %), second place belongs to the employees with University degree (41.9 %).The most numerous age group was created by the employees aged 51-60 (37.2 % from all) and further by employees aged 41-50 (31.7 % from all). The age structure shows gradual aging of the workforce.

Physical State of Employees by 31.12. 2024

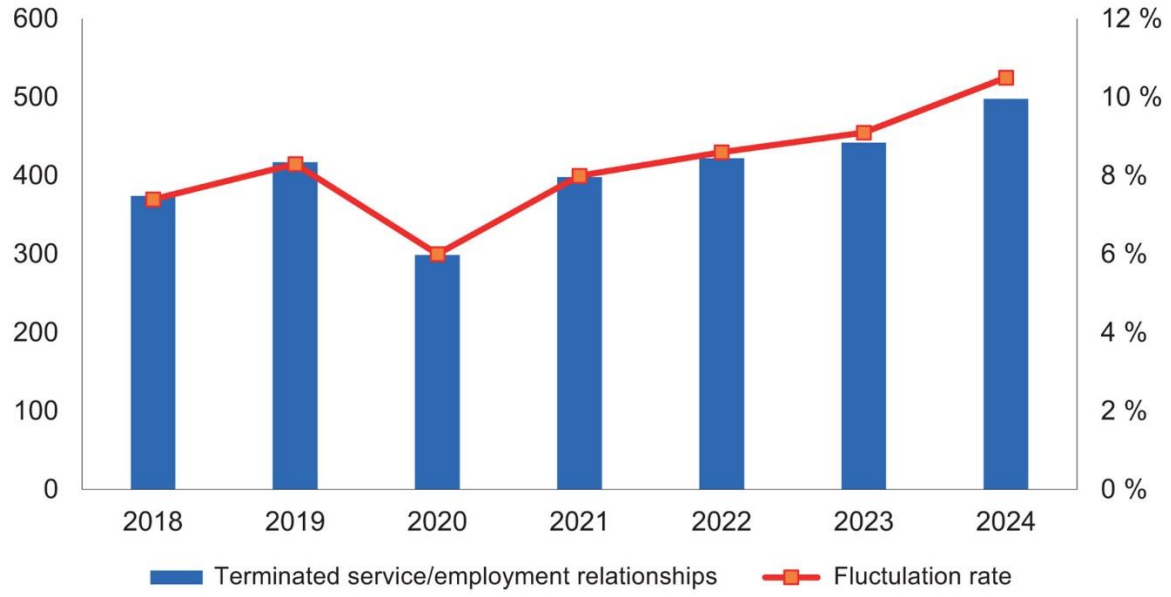
ČÚZK Branch	Age Structure						Women	Graduated
	to 30	31-40	41-50	51-60	61+	In total		
Civil Servants	191	623	1 411	1 652	537	4 414	76,7 %	43,9 %
Employees	11	29	97	121	90	348	71,8 %	17,5 %
Total	**202**	**652**	**1 508**	**1 773**	**627**	**4 762**	**76,3 %**	**41,9 %**

One of key tasks in the management of human resources was carrying out tenders for civil service vacancies. In 2024, in total 809 tenders were prepared in the ČÚZK for vacant service positions, based on which 448 successful candidates for civil service were chosen either for civil service position or appointed to the civil service position head; 29 tenders were due to be completed in the beginning of 2025. Together 55.4 % of all tenders for service position carried out in 2024 were successful and the applicant was chosen. Some civil servant positions were successfully occupied based on ordinary employee transfer without tender in accordance with the Act on Civil service, and the final successful number is then 58.7 %. The number of carried out tenders was significantly higher than in 2023 (by 87) and the success rate increased by 5.7 %. In 2024, the obligation to so-called re-competition of heads of all offices in the branch was reflected in the total number of implemented tenders for the filling of civil servant positions.

Civil service positions can be temporarily occupied by the ordinary employees according to the section 178 of the Act on Civil service. Together 66 such tenders were carried out in 2024, 71.2 % of which were successful.

During 2024 in total 378 civil servants and 120 ordinary employees terminated their employment. The rate of fluctuation was 10.5 % in 2024 that is 1.4 % higher than in 2023 and during previous years, it has an increasing tendency.

Fluctuation Development



By December 31, 2024 the number of women in managerial positions was 351 (58.5 %) in the ČÚZK branch from the total number of 600.

Another main priority in the area of the human resources was education of employees. It was carried out in 2024 based on the approved Plan of education in the ČÚZK in accordance with stated individual goals for personal development of civil servants. Personnel departments of individual administrative offices prepared many educational activities for their employees focused on the problems of real estate cadastre, human resources management, legislation and law, economics and accounting, IT and other areas of professional education. Moreover, the ČÚZK personnel department prepared or participated in preparation of 21 specialized team workshops for chosen workers from all branch offices as well as for the internal lecturers. Based on the good practices from previous years most workshops were carried out in a hybrid environment, both in person and on-line.

In the period from January 1 to December 31, 2024, in total 135 tests from general part of civil service tests were carried out in the ČÚZK. In the same period, 150 tests were carried out from the professional part of civil service tests namely branch No 55, Land Surveying and Real Estate Cadastre that falls within the scope of ČÚZK. Of the total number, 15 cases involved employees or civil servants who did not have a prescribed requirement for an official examination in the given service branch. Another 4 applicants were not successful in the general part of the test and 6 in the professional part. All 6 unsuccessful applicants from 2023 have repeated the test in 2024, one was repeatedly unsuccessful. The number of tests conducted in both the general and professional parts of the civil service tests was virtually identical to that carried out in 2023. In addition, 28 employees from the branch also took the civil service test in other branches of the civil service at other offices during the year. It was, namely, civil service branches No 1 Finance, No 3 Audit, No 22 Legislation and Legal Activities, No 37 Public Investment and Procurement, No 63 Civil Service Organisational Affairs and Administration of Civil Service Relations, and most frequently from Civil Service Field No 28.

5.2. Economics

The approved state budget for Chapter 346 of the Czech Office for Surveying, Mapping and Cadastre for 2024 set the revenue at CZK 1 420 million and expenditure of CZK 3 743 million. The tax revenue budget included administrative fees of CZK 1 150 million and its implementation amounted to CZK 1 219 million. This represents 106.0 %. Compared to 2023, the collection of administrative fees increased by CZK 142 million. This was due to an increase in the number of

entry proceedings initiated and the abolition of stamps. Non-tax revenue in 2024 was set at CZK 270 million. Due to the increased public interest in the real estate market, they were fulfilled for CZK 288 million, i.e. 106.8 %. Revenue from the European Union budget was adjusted by budgetary measures to CZK 35.6 million. The budget appropriations amounted to CZK 35.5 million for the projects of the National Recovery Plan and IROP 2021+. Actual revenue from the EU budget amounted to CZK 73 million.

The expenditure budget of the branch was adjusted in 2024 by eleven budget measures under the responsibility of the Ministry of Finance. During the year, the total increase in the expenditure budget was CZK 43.5 million. This was mainly due to a corresponding increase in revenue and expenditure for EU projects, for the provision of aerial surveying for CZK 7.8 million from the Ministry of Defence and the Ministry of Agriculture. For the administration of the basic registers, expenditure was transferred from the ČÚZK to the budget of the Digital and Information Agency for the payment of basic registers services in the amount of CZK 0.7 million. The Ministry of Finance approved an increase of CZK 44.5 million for staff salaries. This was due to a reduction in the difference between the average salary in the ministry and the average salary of other state organisations. The funds were transferred on a one-off basis from the operating and investment expenditure of the cadastral offices and the ČÚZK. Within the authorised overrun of the binding indicators, the unspent expenditure entitlements of CZK 99 million were used. The amount of CZK 42 million was used for programme expenditure, including expenditure on EU projects.

The total execution of the 2024 expenditure budget was CZK 3 766 million, CZK 13 million of which was spent on the institutional support for research, development and innovations for the Research Institute for Geodesy, Topography and Cartography, v .v. i. The largest part of the expenditure consisted of funds for salaries of employees in service positions and in employment relationships, including related expenses, in the total amount of CZK 2 929 million. These expenditures accounted for 77.8 % of the chapter's total expenditure. The average monthly income in the branch reached CZK 38 912 in 2024, i.e. a year-on-year increase of 3.1 %. As of 2024, the salary appropriations also covered sickness compensation, which amounted to CZK 25 million.

The second largest part of the expenditure in Chapter 346 of the ČÚZK was operational expenditure amounting to CZK 663 million. CZK 196 million were spent mainly on data processing and services related to information and communication technologies, CZK 138 million on postal services, which decreased compared to 2023 (CZK 145 million) due to a change in client mailing. Operating expenses for the purchase of gas, energy and heat decreased to CZK 94 million (CZK 102 million in 2023). Other operating expenditure was spent on renting buildings and computer equipment (CZK 33 million), repairs and maintenance of buildings (CZK 32 million) and expenditure on the purchase of materials (CZK 33 million). The remainder of current expenditure was spent on building operations, staff catering, staff travel and staff training and education services, data and voice telecommunication services and the membership fee to the international organisation EuroGeographics.

Capital and non-capital expenditure of programme financing for the acquisition and renewal of tangible and intangible assets of the branch amounted to CZK 162 million. This is 4.3 % of the total expenditure. A significant part of this was ICT expenditure, mainly on software (CZK 86 million) and on the acquisition of computer equipment (CZK 15 million), followed by expenditure on machinery and equipment (CZK 35 million), mainly on measuring equipment, on the reconstruction of buildings (CZK 16 million) and on the renewal of transport equipment (CZK 10 million).

Revenues and Expenditures of the State Budget - Chapter 346 ČÚZK

Index/ Year	2020	2021	2022	2023	2024
Revenues of the chapter (in CZK thousands)	1 452 676	1 854 299	1 490 690	1 387 158	1 580 674
Out of it: revenues for administration fees	1 170 170	1 491 282	1 152 849	1 076 816	1 219 355
Income from EU budget	16 547	22 763	44 938	49 188	72 997
Total expenditure of chapter	3 606 067	3 668 161	3 685 598	3 985 714	3 765 933
Out of it: projects co-financed from EU budget	26 165	68 434	61 308	186 654	24 776
Current expenses without non-investment	3 399 240	3 392 578	3 499 054	3 649 756	3 604 192
Including: wage resources	2 058 158	2 044 192	2 091 690	2 159 013	2 179 123
Insurance and FKSP	735 934	730 050	746 105	772 868	749 473
Other material expenditure	571 055	618 336	661 259	704 664	662 564
Expenditure on research, development and innovations	0	0	0	13 211	13 032
Program expenditure	240 920	275 583	186 544	335 958	161 741
Including: non-investment	34 093	52 651	13 949	21 406	762
Investment	206 827	222 932	172 595	314 552	160 979
Number of employees in Sector	4 849	4 847	4 823	4 755	4 657
ČÚZK	137	141	141	141	138
Cadastral Offices	4 261	4 259	4 232	4 168	4 077
Land Survey Office	370	366	368	368	366
Survey and Cadastral Inspectorates	81	81	82	78	76

5.3. Financial Inspection

ČÚZK carries out public inspections in the subordinated bodies according to the Act No. 320/2001 Coll., on Financial inspection in public administration (further only Financial Act) in accordance with the Act No. 255/2012 Coll., on Inspection (Inspection order) based on the ČÚZK president´s credentials.

According to the approved plan and schedule of financial inspections for 2024, the inspection group of ČÚZK carried out complex public administration inspections at following 5 inspected bodies:

KÚ for the Region Vysočina and for the Region Plzeň, ZKI in Plzeň, Opava and České Budějovice.

The deficiencies identified by the financial inspections were not of a material nature and did not adversely affect compliance with budgetary discipline or the completeness and integrity of the accounting records. They related in particular to non-compliance with procedures for the disposal and environmental disposal of unnecessary computer equipment, errors in carrying out documentary inventories of assets and liabilities and failure to ensure that internal regulations governing accounting and management of State property were updated. The inspected bodies submitted proposals for measures to address the identified shortcomings, specifying the deadlines and persons responsible for addressing these shortcomings.

The results of the inspection reports did not reveal any unauthorised use of public funds or breach of the conditions under which public funds were granted. The internal control system set up by the Inspected bodies is adequate, sufficiently effective and creates appropriate conditions for ensuring efficient, economical and effective performance of public administration.

5.4. Internal Audit

Internal audit is a part of the internal inspection system in the ČÚZK, Land Survey Office and cadastral offices. It involves an organisationally separate and functionally independent review and evaluation of the adequacy and effectiveness of internal inspection system. The internal audit function in all ZKIs is replaced by an annual public-administration inspection carried out by the ČÚZK inspection group.

In 2024, there were performed together 81 audits. Internal audit plans included the implementation of internal reviews of setting criteria for improving the quality management system.

Out of the total number of performed internal audits were

• 16 financial audits, focused mainly on the audit of management and accurate presentation of assets in financial, accounting and other statements,

• 33 system´s audits, which examined the management of public funds and the financing of activities of subordinated offices,

• 17 performance audits that dealt with the effectiveness, economy and expediency of chosen operations and of adequacy of the internal control system,

• 15 other, differently focused audits.

Not one of the audits carried out in 2024 revealed deficiencies with a significant risk for the management of public funds. The reports and received recommendations from the audits were discussed with the responsible employees and the head of the service office. Recommendations from the audits carried out in 2024 will be subject to subsequent internal audit review.

6. International Cooperation

ČÚZK actively participates in the work of international organizations being active in the field of the real estate cadastre, land registration and land surveying administration. Besides, it also actively cooperates with all neighbouring countries in the area of mutual data and information exchange based on bilateral agreements. It systematically ensures the interoperability of spatial data and

related services according to European rules to enable their wide use in cross-border and European projects and solutions (f. i. in EUROSTAT). ČÚZK also prepares professional programs and excursions for foreign students or branch experts. In 2024, conferences, workshops and other professional meetings were held with in-person participation.

ČÚZK is an active member of the organization EuroGeographics, which associates mapping agencies and cadastral offices of European countries. EuroGeographics enables experience exchange and cooperation; it systematically develops the cooperation with the European Union bodies on building of the united infrastructure for spatial data in Europe. EG contributes to it by creating of pan-European products with harmonized parameters for all European countries, f. i. EuroRegionalMap, EuroBoundaryMap, EuroGeoNames, EuroSpec and Core Reference Data (CRD). EG negotiates experts´ involvement from member organizations into modifications of harmonization provisions included implementing rules of the INSPIRE Directive and helps to implement them on the particular member states level. The EuroGeographics General Assembly, the meeting of the heads of European mapping and cadastral agencies, was in 2024 held in Sevilla (Spain) with more than 115 participants from 45 member organizations and another 10 guests. The main theme of the General Assembly was a focus on high-value geospatial data and its role in providing key positional information for finding solutions to global problems. EuroGeographics also organised a series of regular webinars focusing on different areas of interest from the activities of its members. Some webinars were organised in cooperation with EuroSDR or UNGGIM-Europe.

In 2024, the implementation of the INSPIRE Directive continued and ČÚZK representatives took part in both online webinars and the MIG (Maintenance and Implementation Group) technical workshop, which are organized 4 times a year as on-line meetings.

ČÚZK continued its active participation in the European section of UN-GGIM (United Nations Commission for Global Management of Geospatial Information established in 2011). In 2024, the 11th plenary meeting was held in June in Geneva (Switzerland) with an active representation of ČÚZK. The meeting topic were not only the themes connected with the European section jurisdiction, whose goal is mainly the promotion of the Globalization of geodetic foundations and geoinformatics based on reliable and sustainable information of national mapping authorities and agencies.

ČÚZK regularly monitors the activities of the Working Party on Land Administration (WPLA), working under the auspices of UNECE, which is engaged in land and real estate information and related thematic. In 2024, the representatives from the ČÚZK monitored the activities of the working group only on-line.

In the field of geographical names, the 28th meeting of the Division for Central and South-Eastern Europe of the United Nations Group on Geographical Names (UNGEGN) was held in Prague in 2024, hosted by the Land Survey Office. At this meeting, it was agreed to hand over the leadership of the Division, which was held by the Names Commission of the ČÚZK from 2021 to 2024, to Hungary. A meeting of delegates from all Member States, including representatives of all Divisions and Working Groups, is held every two years in New York at the United Nations building (most recently in 2023), and ČÚZK regularly sends a representative.

The first meeting in 2024 of the Permanent Committee for Cadastre in EU (PCC) was held as a hybrid meeting in Bruges (Belgium) with participation of a representative from ČÚZK and more than 60 delegates from other EU member states. The main theme was "Strengthening the cadastre´s competitiveness whilst protecting people and borders". The second meeting was held

virtually in November 2024 in Riga (Latvia), on behalf of Hungarian colleagues who could not take on the role of EU PCC host this time due to institutional changes in the relevant organisations in their country. The meeting was monitored online by a representative of the ČÚZK.

The 39th meeting of the land surveying and cadastral offices of Julian Venice, Croatia, Austria, Slovakia, Slovenia, Trentino, Czech Republic and Hungary was hosted by ČÚZK in 2024, which held the meeting in May in Brno. The topic was "Revision of the cadastre and other tools and methods for updating cadastral content". Both the conference and the accompanying programme were a great success and overall all 30 participants evaluated the meeting as very successful.

There were also bilateral meetings at the highest level with Slovak colleagues (in Bratislava), which are held annually alternately at the ČÚZK and ÚGKK SR. They contribute to the exchange of experience and mutual information about the developments in both offices. Another bilateral meeting was held with Swiss colleagues at the Swisstopo office in Bern, which focused on their experience in dealing with the digital built environment model project being prepared in the branch.

The preparation of the professional magazine Geodetic and Cartographic Review (GaKO) was carried out in a standard mode, with both (Czech and Slovak) editorial boards meeting regularly to prepare each issue, alternately in Prague, Brno and Bratislava.

7. Research and Development

ČÚZK performs the function of the founder of the Research Institute of Geodesy, Topography and Cartography. The main activity of VÚGTK is basic research in geodesy and applied research in surveying and cadastre, within which VÚGTK is engaged in a number of activities aimed at supporting the development of the field. As part of the provision of metrological requirements, VÚGTK operates an accredited calibration laboratory and an authorised metrology centre. VÚGTK is an accredited educational institution and operates the Surveying Library®.

During the year 2024, VÚGTK participated in the main activities of 11 projects in total, including 7 domestic projects (GACR, TACR, Ministry of Education, Youth and Sports, Ministry of Culture, Ministry of the Industry and Trade,) and 4 international projects (GSA, ESA/EUSPA, SIC). One of the most important projects was the project "Refinement of the determination of changes in gravitational acceleration in the Basic Geodynamic Network and at absolute gravity points in the Czech Republic using absolute gravity measurements", within the framework of which the research needs of the ČÚZK were met. Another important project was "GEMOP", which is supported by EUSPA and 26 European research organisations are involved in its solution. At the same time, VÚGTK participated in the MERIT project, under which two long-term internships of foreign researchers were carried out in 2024.

In 2024, the GIS and Cadastre Research Unit was responsible for the development of MicroGEOS and MapOO applications, which are used in the ČÚZK branch in the administration of the real estate cadastre and new mapping.

With its collection and specialization in surveying, geodesy, geography, geodynamics, metrology and cadastre, the Surveying Library® has a unique position in the Czech Republic and internationally. It is involved in a number of interlibrary cooperation activities and the provision of scientific information resources in its field of competence. The library provides facilities for the scientific activities of the professional and general public.

The Geodesy and Geodynamics Research Unit, which is located at the Pecný Geodetic Observatory in Ondřejov, provided basic and applied research in geodesy and geodynamics. Absolute gravity measurements were carried out here as part of an applied research project supported by TAČR, and an international project aimed at independent monitoring of the EGNOS and Galileo navigation systems, supported by EUSPA, was continued. Applied research in geodesy and geodynamics was focused on the development and use of precision data processing for accurate determination of spatial position and other related parameters, on the development of metrological bases for gravity and spatial measurements and on monitoring the stability of the position of reference GNSS stations in the Czech Republic. Within the framework of contract research, the project "Preservation of the State Standard of Gravitational Acceleration" was carried out for the ÚNMZ.

The research unit Metrology and Engineering Geodesy was involved in the project "Preservation of the state standard of length 25 m to 1450 m". In addition to research activities, the operation and development of an accredited calibration laboratory was ensured. Calibration activities were mainly carried out in 2024 for customers from surveying, construction and engineering companies.

VÚGTK ensures extensive international scientific cooperation, the need for which stems from the global nature of geodesy and has long been contributing to international scientific services and programmes. For example, it participates in the activities of the International Geodetic Association by providing data from the Geodetic Observatory and Analysis Centre.

The year 2024 was the second year of the implementation of the long-term development concept of the Institute for the years 2023-2027, which builds on the Institute's development concept for the years 2018-2022.

Annual Report 2024

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