

Report on CZSO Information Services in 2022

Essentially, not only planned activities, but also a number of other works in the field of information services have been achieved in 2022.

Main results for 2022

- One of the main tasks of the information services was to cooperate on the continuous publication of the results of the 2021 Census of Population, Houses and Dwellings.
- At the beginning of 2022, a web-based chatbot application was launched on the www.czso.cz
 website to automatically answer users' questions, both on the results of the statistical surveys
 and on questions related to the completion of statistical reports. Both answered and unanswered
 questions are evaluated on a monthly basis, and the database of questions and answers is
 updated and refined on the basis of this evaluation.
- At the end of January 2022, the CZSO mobile application was made available, which provided users with up-to-date data from individual statistics (including links to the VDB, long-term trends in graphs and brief methodology) and news published on the website and articles from the magazine Statistika&My. During the year, additional groups of statistics and other indicators were added. A completely new feature is the possibility of the users to obtain basic statistical information about the municipality in which they are currently located or about any selected municipality.
- In 2022, almost 9.2 thousand extensive requests and simple customer queries were handled, which was 7.2 thousand fewer than in the previous year; 56% of the queries were handled by information services staff at the headquarters and 44% at regional offices. 95% of customer enquiries were dealt with on the same or next day.
- Requests for information were most often made by citizens themselves, but also by employees of business entities or state and local government bodies. They mainly used e-mail (43%) or telephone (39%) to make these requests. The most frequent questions were focused on the results of price statistics and inflation data (18.5%), questions related to the Register of Economic Entities (17.0%), population statistics (14.0%), and the Census of population, houses and dwellings (9.8%).
- 143 questionnaires from international institutions were processed and 121 European Statistical Data Support (ESDS) questions were answered.
- The Central Statistical Library at the CZSO was visited by 384 users during the year, who borrowed a total of 1,389 publications. As of 31 December 2022, a total of 59,029 volumes of books with a total value of approx. 27.9 million CZK.
- According to the accounting records of the JASU EIS, revenue from information services provided in 2022 amounted to 691,156 CZK, which represented a 39 % decrease in the volume of revenue generated from these activities compared to 2021.
- The CZSO Product Catalogue for 2022 included a total of 319 products at the time of its approval.
 During the year, a further 19 products issued at headquarters and 12 analyses produced at the various regional administrations were added to the list; 150 press releases and announcements were also published. A total of 1,341 outputs (including periodicals and press releases) were published.
- In 2022, the CZSO website recorded almost 6 million visits and over 8 million views. Besides the homepage, the most visited pages included: inflation consumer prices, press releases, 2022 elections, quick information, inflation types, definitions, tables, on-line filling in of reports (DANTE WEB), statistics, elections, product catalogue and classification of economic activities (CZ-NACE). The most searched terms in 2022 were: inflation, elections, unemployment, population, average wage. The traffic data comes from the internal measurement tool of the SIS sub-block DISEMINATION/Monitoring, and only from users who had not prevented the collection of traffic data by rejecting the relevant cookies. Therefore, the data cannot be compared with the data

- presented in the reports for previous years, which came from Google Analytics, which the CZSO discontinued using in 2021.
- At the end of the year, 698 million values were already offered in the VDB. During 2022, their stock was increased by 93 million new values, mostly from the 2021 Census. Traffic increased slightly from the previous year, with users viewing 4.4 million pages. More than 184k exports were made from the VDB, most in xlsx format. In 2022, 293 new sets of open-format statistics were generated from the database. During 2022, users downloaded more than 69 thousand datasets, mostly on the number of deaths by week and the results of the 2021 Census (population composition by age, nationality, religion, education), data on wages, foreigners, employment and consumer prices.

The activities provided by the information services units are twofold: firstly, they are a genuine bespoke service, responding to user requests (see Section A of this report for more details), and secondly, the units themselves actively prepare and publish information and information materials (see Sections B and C for more details).

A. Information services

Contracts - enquiries and requests

During 2022, the employees of the information services units at the headquarters and regional administrations handled a total of 9,174 extensive customer requests and simple enquiries. 56% of the enquiries were addressed to the information services units at the CZSO headquarters, while 44% were received by the regional information services units. In total, 7,273 (i.e. 44.2%) fewer requests were processed than in the previous year.

The year-on-year decrease in the number of requests for information was mainly due to an increased number of queries related to the organisation and conduct of the 2021 Census of Population, Houses and Dwelings.

The long-term trend in the absolute number of enquiries can be seen in Figure 1. The number of enquiries has been declining since 2008, with a break in the trend in 2011 due to the 2011 Census of Population, Houses and Dwellings, when the SLDB Information Services dealt with a number of enquiries both on the Census itself and subsequently on the results, which were published mainly in 2012 and 2013. A similar fluctuation was observed in 2021, when the increase in the number of queries was influenced by the fact that the information services staff at the headquarters and in the regions were significantly involved in the work during the Census, especially in the collection of Census forms. They also responded to a number of enquiries from citizens on the completion of the Census forms. The interest in the Census results, especially in spatial detail, is likely to become apparent only in 2023, when detailed results will gradually become available. One factor in the long-term decline has been, for example, the declining interest in certificates on inflation (from 2019, customers can download certificates bearing an electronic signature from the website themselves), average wages, population, etc., as customers who handle this information are satisfied with the publication on the CZSO website. The number of such requests is also related to whether or not the legislation requires users to provide proof of the value of the relevant indicator by a certified extract from a statistical survey. The decreasing number of requests is undoubtedly also influenced by the increasing volume of data published in open format.

Total number of enquiries 40 000 35 000 **Number of enquiries** 30 000 Total 25 000 Central 20 000 Regions 15 000 10 000 5 000 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 Year

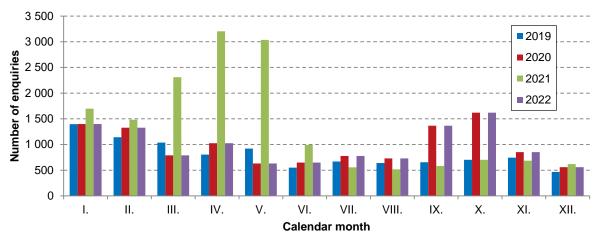
Figure 1

As in previous years, several factors had a stronger impact on the distribution of enquiries over the year - there is considerable interest in the annual results starting with the publication of the annual inflation rate in the second week of January. Also during February, the number of enquiries was significantly higher than the average for normal months, with a higher number of enquiries related to respondents' reactions to receiving statistical returns and also related to school deadlines for students. There was undoubtedly an effect of the different deadlines associated with the Census process in the comparison of the number of enquiries between 2021 and 2022.

The increased number of enquiries in September and October was mainly related to the preparation, conduct and results of the elections to the municipal councils and one-third of the Senate of the Parliament. These were both questions about the election results themselves and methodological questions, e.g. about the conditions for submitting candidate lists, explanations of the procedure for calculating and allocating seats in the municipal council, etc.

Figure 2

Number of enquiries by calendar month



There are 7 regular subscribers in the area of providing data from the Register of Census Districts. In contrast, the database from the Register of Economic Entities is provided regularly to a total of 33 regular customers.

The data marketplace is routinely used to provide outputs from the Register of Economic Entities (RES) to external users, enabling the creation of views and exports that can be tailored to customer requirements. The data marketplace can also be used to provide various reports on the number of entities in each category within the scope of publicly provided attributes. Customers are increasingly adopting and using RES data in an open format.

Since November 2022, a new DISRES application is available on the website for viewing the RES data. Compared to the original application, it offers more options for selecting the desired economic entity and the scope of the RES data provided is extended by the new "main economic activity". In addition, the overall design of the environment has been significantly upgraded and is now comprehensive and more user-friendly.

The preparation of the data marketplace for the dissemination of data from the SLDB 2021 continued in 2022.

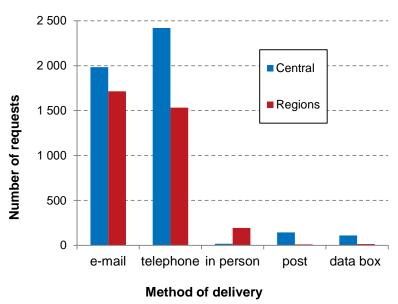
As in previous years, in 2022 the CZSO concluded contracts for the provision of microdata in cooperation with universities and research institutes. A total of 30 contracts for the provision and processing of microdata (including subcontracts and amendments) were signed last year; most of the contracts were traditionally signed for the provision of microdata from social (SILC, SRU, VŠPS) and demographic statistics.

Method of delivery of requests

Customers have been approaching the Information Services Units with their requests in a similar way for many years - telephone enquiries were the most common (43%), predominating at headquarters (47%) but accounting for only 38% of enquiries at the regions. Email was the most common means of communication (43% of enquiries) in regions. A larger number of users made their requests in person at the regional CZSO offices, where the proportion of requests made in person represented almost 5% of the total, while at headquarters it was only 0.3%. In recent years, customers have also sent their requests via data boxes (mainly at the headquarters), but the share of requests received in this way is not yet very significant (1.4%). The share of requests sent by post has been low for a long time, last year it was only 1.7%.

Figure 3

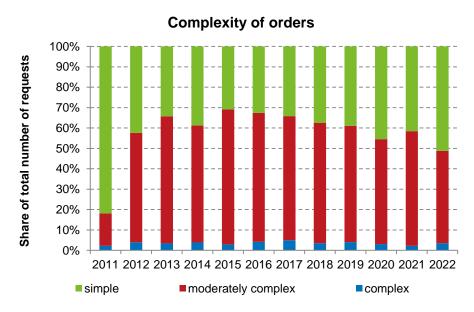
Method of delivery of requests



Complexity of orders and the time needed to process them

The assessment of the complexity of orders is highly subjective, yet we continuously try to record and evaluate the complexity of orders. Until 2011, simple requests were significantly more prevalent, with a share of between 70-80%. In 2012, due to a change in the methodology for recording orders, the proportion of simple enquiries was 40 %. Despite slight fluctuations from year to year, the proportion of orders in terms of complexity is more or less the same. In 2022, 51.2% of the queries were classified as simple, while 3.4% of the contracts were assessed as complex and 45.4% as moderately complex.

Figure 4



In 2022, as in previous years, only a small proportion of orders were referred directly to the VPO for processing (7.1%), and in addition, VPO staff were consulted to answer some specific or very complex questions that required special data processing, detailed methodological explanations or detailed knowledge of data quality and reliability, especially from sample surveys.

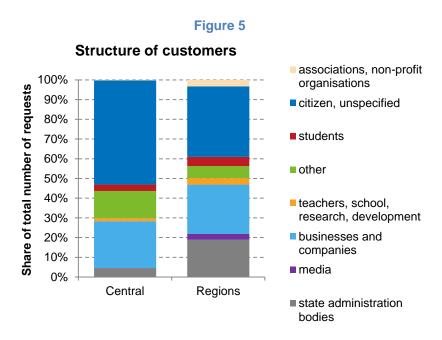
Also in 2022, the standard of the shortest possible turnaround time (sending a reply) was maintained. The vast majority (94.6%) of requests were processed the same day or the following day. The proportion of orders that took more than 30 days to process was not statistically significant (0.2%). These were

exclusively the most complex requests, the content of which was consulted (often repeatedly) with the customer. Sometimes it was necessary to carry out extraordinary data processing at the VPO or the customer gradually refined his/her requirements, etc. Some orders (about 0.7%) could not be processed at all because the data were not available in the required detail (factual or spatial), or the CZSO does not monitor the data requested by the customer at all. In such cases, the information services staff helped the customer by offering an alternative solution, e.g. by offering similarly focused available information, referring to the websites of other institutions, etc.

Main customer groups of the CZSO

The shares of the CZSO's main customer groups have not changed much over the years, except for a fluctuation in 2021 in connection with the Census. Also in 2022, the most frequent customers of information services were citizens or persons who could not be identified as requiring information for a business or institution. The next most frequent customers were representatives of the business sector, students, employees of state and local government, as well as media, students, associations and non-profit organizations.

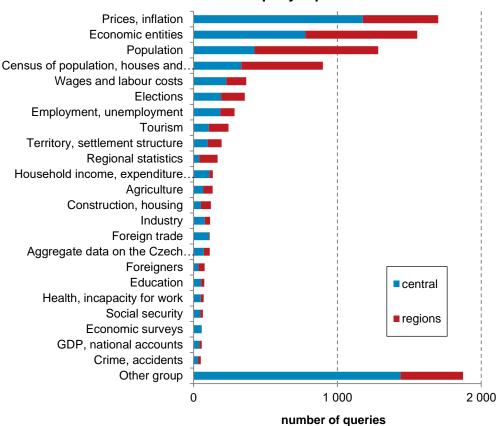
The structure of customers logically differs between the centre and the regions. The share of enquiries from citizens (including an unidentified group) accounted for 53 % of the total number of enquiries made to the information services offices at the headquarters, while at the regions it was 36 %. The more frequent clients of the regional offices compared to the headquarters were logically representatives of local governments and regional offices of state administration bodies. Similarly, various associations or non-profit organisations were more likely to turn to the regional offices. Businesses and students also contacted both the headquarters and regional offices. Media enquiries are registered almost exclusively at the regional offices, while at the headquarters they are handled by the press officer and the marketing and PR department.



Contract topics

Queries received are also recorded according to statistical groups. Customers sometimes ask for information from more than one statistical area within a single query, in which case the topic is recorded more than once, so the sum of the number of queries by topic is one tenth greater than the total number of queries. Almost 17 % of the queries were requests marked as 'other group' - these are queries that cannot be assigned to a specific group of statistics, e.g. general questions on reporting (1,562 queries), information of a methodological nature (1,172 queries), orientation on websites, technical support, etc.

Figure 6
Structure of query topics



In 2022, the order of the groups of statistics of most frequently asked by customers changed. Whereas in previous years the most requested groups were Organisational Statistics or Population, and in 2021 the SLDB 2021 was the most frequently asked, in 2022 the Prices, Inflation group of statistics became the most frequently asked for due to economic developments (18.5% of enquiries). Next in line of interest of users was traditionally the Economic Entities group, which was renamed from the Organisational Statistics group (17.0% of queries), This is about the selection of entities from the RES according to user-defined criteria or calculations of the structure of entities registered in the RES. In addition, in connection with the operation of the Register of Persons, less informed customers still turn to Information Services with requests for extracts from the ROS, updating data on an entity in the ROS, etc. If customers contact the Information Services, they will receive information on the correct procedure for obtaining an extract from the ROS (i.e. from the Register of Persons) or on the procedure for updating data in the RES (ROS).

In population statistics (14.0% of queries), user queries mainly focused on the evolution of the number and structure of deaths (in relation to the consequences of the epidemic). This was followed by the Census of Population, Houses and Dwellings, where data on previous Censuses were mainly provided, but users also often asked when and in what form the SLDB 2021 data would be available. There was also a great deal of interest in labour and wage statistics, with queries mainly on average wages, median wages, wage trends and unemployment rates.

The most frequently provided type of output were finished products including links to publications and files on the web and in public databases. Altought, this also includes datasets prepared in advance based on users' estimates of interest (63.9% of queries), information on statistical surveys (17.0%) and information of a methodological nature (12.8%). A part of the queries (0.7%) is classified under the topic "Technical support services". This includes, for example, queries about the functioning of the website, the method of data transmission, etc.

Exceptional orders

When dealing with more complex orders, it is sometimes necessary to communicate with the customers. It is necessary to accurately determine and sometimes amend their ideas, explain the methodology or any limitations in the data's predictive power. In more complex cases, we address the staff of the relevant departments, without whom such orders could often not be solved. If the CZSO does not have information in the required area, we try to advise the customer where to look for such data. We would like to document

the variety, spread and difficulty of the queries and requests that are dealt with in the information services with concrete examples - an overview of selected orders processed in 2022 at the headquarters and regional administrations is presented in Annex 1.

International Information Services

Amount of information provided and international questionnaires completed

Information type :	2017	2018	2019	2020	2021	2022
International questionnaires	144	126	135	146	149	143
Amount of information in ESDS ¹	199	167	166	135	102	121

International Information Services

As part of its activities, the CZSO has been involved in the network of national contact centres "European Statistical Data Support" (ESDS). The number of queries to European statistics increased slightly in 2022 compared to 2021, but when compared over a longer period of time, the long-term downward trend of this development has only slowed down. Regular customers are already independently using the Eurostat web presentation and databases, which are very convenient also for Czech users. Most enquiries were answered within 24 hours, a large part of them on the same day.

The information services have a longterm cooperation with Eurostat and publish its predefined tables in full scope in Czech on the CZSO website; the tables were updated daily.

Central Statistical Library

Compared to previous years, 2022 was a much more favourable year for the Central Statistical Library (CSL), although after two years of coronavirus restrictions, last year also brought some operational restrictions for the library. The stage of replacing the windows and sills of an entire wing of the building forced the closure of the library to the public for almost the entire month of October. Despite the difficult conditions in the final months of 2022, the UCC was able to achieve a recovery in attendance and improvements in most quantitative indicators.

The underground depository continued to undergo further stages of floor repairs and work to move publications out, dismantle and install shelving and then move publications back in. Lighting was replaced in the lift shaft to the underground publications depository.

The day-to-day operation of the library, consisting mainly of the circulation and distribution of periodicals, journals and publications to the staff of the office, was maintained throughout. Library services in relation to the public were interrupted only during the replacement of windows in all three library rooms in October. Student field trips were again able to visit the library in December. External users emailed or telephoned their requests at least a day in advance, in accordance with established practice. The sale of publications and journals published by the CZSO, supplemented by occasional reprographic services, also continued uninterrupted.

Basic information on the activities of the Central Statistical Library

	2017	2018 ¹⁾	2019	2020 ²⁾	2021 ²⁾	2022 ³⁾
Number of visitors	1 006	720	732	172	287	384
Number of borrowings	4 803	2 382	2 168	361	614	1 389
Additions to the library collection	1 797	1 149	1 423	242	274	387

¹⁾ The results are skewed by the nearly six-month closure of the library to the public.

²⁾ Results are significantly affected by the impact of anti-epidemic measures.

³⁾ The results reflect the temporary closure of the library to the public due to the reconstruction of the CZSO building

¹ ESDS – European Statistical Data Support – The CZSO is part of a network of national statistical offices that support users in obtaining European statistical data.

The Central Statistical Library had 9 new registered readers in 2022, adding up to 2,163 registered library users at the end of the year. During the year, 384 users visited the library at the CZSO and borrowed (mostly for study) a total of 1,389 publications, including 1,095 books and 294 periodicals. The online catalogue recorded 2,400 entries and 25,260 searches in 2022.

As of 31 December 2022, a total of 59,029 volumes with a total value (partly estimated) of 27,854,781 CZK had been processed and stored in the Central Statistical Library's collection.

During 2022, a total of 387 books, including CDs, were registered and catalogued, with a total value of 109,058 CZK, at a purchase cost of 16,755 CZK.

The most important source of new publications was the CZSO's own publications (141 publications). The second most important source of the increase in the collection was foreign publications obtained in exchange (110 items). In third place, the library collection was enriched by donations (99 items), mostly from current and former CZSO employees. The library acquired 36 publications by purchase. Currently, the library corresponds with 92 exchange partners.

In 2022, the library had a total of 83 titles of newspapers and magazines on file. A total of 296,881 CZK was spent on subscriptions to professional periodicals in 2022. The library also acquires foreign periodicals through exchange.

In the analytical description of specialist journals, 82 titles of articles were processed. 11 temporary publications were purchased and handed over as working aids to CZSO staff on the basis of distribution lists.

SafeCentre

In 2022, the SafeCentre also offered the opportunity to work to interested parties from the academic and scientific spheres with confidential statistical data, provided that the conditions were met. The services of the SafeCentre were repeatedly used by 6 employees from the academic and scientific sphere.

Handling of inquiries according to Act 106/1999 Coll.

An important activity of the Information Services Unit at the Headquarters is the handling of inquiries under Act No. 106/1999 Coll., on free access to information. In 2022, 61 requests for information were registered and processed under this law, a new historical high in the number of requests submitted since 2000.

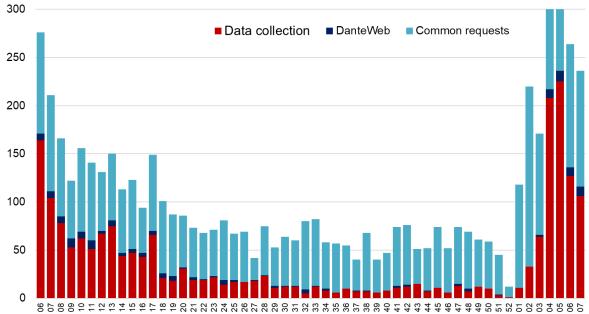
Inquiries according to Act 106/99 Coll., on free access to information

	2017	2018	2019	2020	2021	2022
Submitted inquiries	20	22	19	27	45	61
Submitted appeals	1	2	-	-	1	3

CZSO Call Centre

A new feature of 2022 was the launch of the so-called call centre from week 6, i.e. an application that allows the calls to be handled in a distributed manner, i.e. not only at the headquarters but also at the regional administrations, in times of a large number of calls that regularly occur after the notification of the reporting obligation has been sent out. The following graph shows how the weekly number of telephone enquiries has evolved depending on the type of enquiry.





Revenue from services rendered

According to the accounting records of the JASU EIS, revenue from products and information services provided in 2022 amounted to 691,156 CZK (CZK 446,799 less than in the previous year). Year-on-year, revenue from information services decreased by 39 %. The budget for revenue from information services of the CZSO for 2022 is 750 thousand CZK. Unfortunately, it was not possible to meet the budget of 750 million CZK. The year-on-year decrease in the volume of revenue is also due, among other things, to the fact that the CZSO is increasingly providing large volumes of data in open format, which the user can download free of charge from its website - an example is the Register of Economic Entities.

At the beginning of 2019, the prices of a number of products and services provided were significantly reduced, in particular the prices of the RES, the Register of Census Districts and Buildings (RSO) and the fees for the preparation and provision of microdata. This reduction in the prices of a large part of the CZSO's products has had an effect on the volume of revenues for the information services provided in the following years, i.e. in 2022.

Revenue from information services rendered and their structure

	2017	2018	2019	2020	2021	2022
Total sales in CZK	2 694 164	2 652 815	1 239 765	1 119 910	1 137 955	691 156
of which share of sales in %						
Register of economic entities	56,6	49,0	40,8	42,4	41,4	34,1
Special orders	16,7	15,2	33,5	24,4	26,0	29,2
Publications	3,9	3,5	7,1	8,2	8,9	11,5
Register of Census districts and buildings	8,3	5,4	10,3	4,6	5,8	4,1
Microdata	14,4	26,9	8,3	20,5	17,9	21,1

The reduction in the prices of some of the products and services provided has, of course, also had an impact on the revenue structure. Revenues from RES-related activities continue to be one of the most significant items of our revenues, accounting for 34.1% of the total in 2022. The share of revenue from special order processing is also significant, where the rate per hour of work of a professional employee is mainly used to calculate the price (this rate has not changed). The share of revenue from microdata collections was also more significant, although the volume varies considerably from year to year, mainly due to the interest and financial capacity of individual customers (research and higher education institutions).

Revenue from products and services provided in CZK

5 000 000
4 500 000
4 000 000
3 500 000
2 500 000
1 500 000
1 000 000
500 000
2 011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022

Figure 8

B. Ensuring the Authority's publication activities

Among other things, the Information Services Units provide some of the activities related to the publication of CZSO publications. In addition to being responsible for compiling the Product Catalogue (PC), they also coordinate its implementation and ensure the publication of products on the web. An overview of the products in the 2022 CP can be seen in the table below.

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	2018	2019	2020	2021	2022		
Total products	290	321	313	317	319		
Of which: analysis	26	43	45	38	39		
time series	63	65	63	113	114		
other data sets*/	180	192	184	145	145		
quick information	21	21	21	21	21		

Overview of products included in the Product Catalogue at the time of its approval

During the year, further 19 products published at headquarters and 12 analyses prepared by the individual regional administrations were added to the product catalogue, creating a total of 350 titles, as well as 150 press releases and announcements.

The Information Services Units are also engaged in their own publishing activities.

In 2022, the Information Services Department was again responsible for coordinating work on the preparation and publication of the Statistical Yearbook of the Czech Republic. As every year, the Department independently prepared and published the publication The Czech Republic in International Comparison and, in cooperation with the VPO, the quarterly publication Indicators of Social and Economic Development of the Czech Republic. The data source for this publication was gradually becoming a public database from 2020 onwards, and in 2022 this transformation was completed, so that all tables were converted to predefined output objects of the public database.

^{*/} including the dates of publication of the national accounts

The Department of Information Services pays great attention to the possibilities of visualising statistical information and making it more accessible to the public. In 2022, Department staff updated and published the County Comparison application, which allows users to view the development of approximately 30 selected indicators in a time series since 2000 in dynamic graphs or maps, combine indicators in various ways, and customize their display.

Following the regional statistical yearbooks, the product Comparison of regions in the Czech Republic was prepared. During the year, the publication The Czech Republic since 1989 in figures with long-term time series was updated in three stages, which is of considerable interest to users.

The Department is also the author of the annual publications with a selection of regional data - Regions of the Czech Republic, the Small Municipal Lexicon and the publication Administrative Districts of Municipalities with Extended Jurisdiction. The source of data for these publications is the Public Database. The Department also contributes tables of international or interregional comparison to publications prepared by other departments.

The Department continues to coordinate the preparation of joint publications issued by all regional administrations. Working groups are set up for individual publications to prepare background material so as to minimise multiple work. In this system, county statistical yearbooks, quarterly county bulletins and (as every year) an analysis on a common theme, this time "Basic trends in the demographic, social and economic development of the county", have been prepared and published. The results of the analysis were subsequently presented to various user groups. In addition, other datasets and mandatory or optional news, time series and data summaries were regularly published on the county websites down to the level of individual municipalities.

CZSO website

Among the most important events of 2022 in terms of the operation of the CZSO website was the gradual publication of the results of the Census of Population, Houses and Dwellings 2021 and the presentation of the results of the elections to the municipal councils and the Senate of the Parliament of the Czech Republic. The key task from the point of view of the website was the continuation of the Dissemination Portal project.

On the scitani.cz website, the results for the different areas of the SLDB 2021 were published on a regular basis, at an interval of about a fortnight. First, data on the total population, average age, education, gender, ethnicity and religious beliefs were published. The first data on housing stock were also published. This was followed by a gradual refinement of the data to sub-units and the addition of more topics for population and houses and the addition of new topics for dwellings. Thus, in 2022, most of the data collected in SLDB 2021 (population, houses, dwellings) were made available to the public, with the exception of households and commuting, which will be published in early 2023. The website presented data for each topic in the form of graphs, time series tables for the last four Censuses, tables offering county comparisons, and cartograms with the most important indicators. Each topic included links to the Public Database for additional data in greater spatial detail.

From January 2022, cooperation with the successful supplier of the Dissemination Portal project was launched, which will replace the current presentation of czso.cz (to be statistika.cz in the future). This project will involve a comprehensive change of the solution, namely the editorial system for managing the website, the graphic design of the website and its information architecture. In the first phase of the project, a new editorial system was created and the transfer of the current scitani.cz website to the new environment was initiated.

In the summer of 2022, the design of the information structure and graphic design of the central web presentation www.czso.cz - in the future statistika.cz - was completed by the graphic design contractor and will be implemented in the next phase of the Dissemination Portal project.

Within the framework of the Dissemination Portal project, a test run of the new web analytics tool MATOMO was launched at the end of the year, which could in the future replace the previously used monitoring tool Google Analytics, the operation of which would be terminated at the end of 2021 due to the stricter GDPR legislation.

Throughout 2022, the chatbot was available to visitors of czso.cz and scitani.cz, whose knowledge base is constantly being updated and expanded. The chatbot on czso.cz recorded a total of approximately 9.5 thousand conversations and 21 thousand queries in 2022. Over 16 thousand queries were answered -80% of the total. Over 4.2 thousand queries remained unanswered. There were 5.2 queries per conversation. The scitani.cz website recorded 723 conversations and almost 2 thousand queries. Almost 76% of them were answered (1,320 queries).

Figure 9

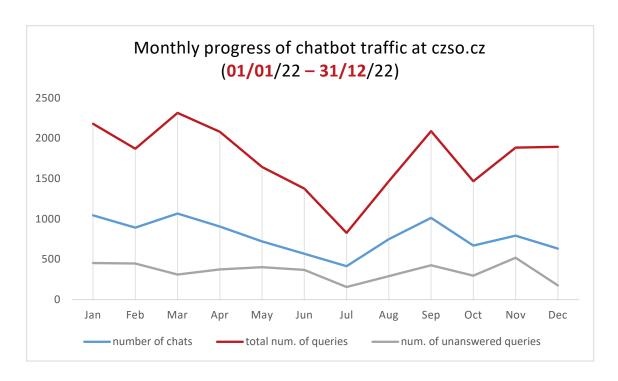


Figure 10

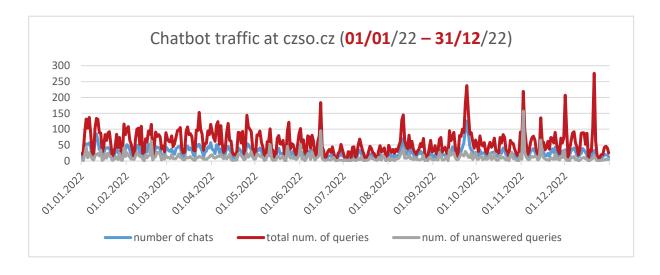


Figure 11

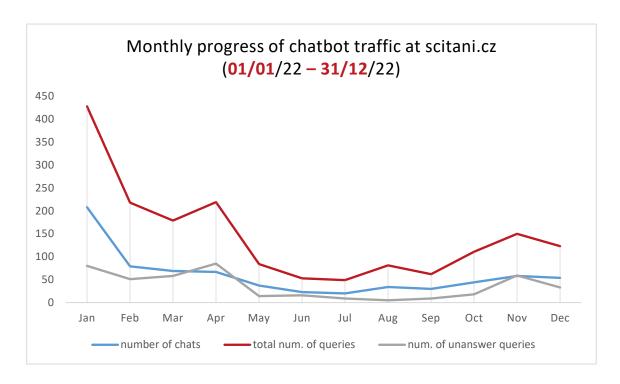
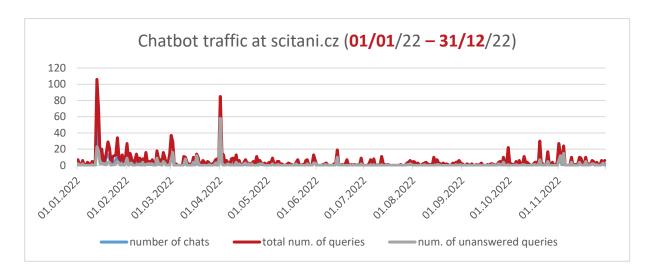


Figure 12



In the area of open data, the production has been further expanded, with MOS and KROK data to be added next year. Based on the request of the Ministry of the Interior, the CZSO is now also publishing open data on the CZSO Official Bulletin Board.

The CZSO website recorded almost 6 million visits and over 8 million views in 2022.

In addition to **the homepage being the most visited page of the website**, the other visited pages in 2022 include the following pages: inflation - consumer prices, press releases, 2022 elections, quick information, inflation - types, definitions, tables, online filling in of reports (DANTE WEB), statistics, elections, product catalogue and classification of economic activities (CZ-NACE).

In the period from 1 January 2022 to 31 December 2022, there were 1.4 million visits to the CZSO website via mobile devices.

Among web browsers, Chrome, Firefox and Safari were the most represented browsers.

Most visitors accessed the web presentation from the Czech Republic, the United States of America and Russia.

The most searched terms in 2022 were: inflation, election, unemployment, population, average wage.

Public database

The Public Database (PDB) is the main source of published statistical data in all areas. The data is, among others, offered in the form of interactive tables or animated graphs on the Authority's website. At the beginning of 2022, 605 million values were published in the external database for users. At the end of 2022, 698 million values were already in the external database. During 2022, the number of values offered was therefore increased by 93 million of new data, much of which was data from the 2021 Census of Population, Houses and Dwellings.

Visits to the VDB presentation application increased slightly in 2022 compared to 2021 (by about 4% in terms of the number of views). In 2022, 618 thousand users visited the application (including users who visited the site repeatedly). 4.4 million pages were viewed (an increase of 4% compared to the previous year). Users made almost 184 thousand data exports from the public database (of which 115 thousand in xlsx format and 10 thousand in PDF format).

Traditionally, the greatest interest was shown in the groups of statistics Prices, Inflation, Census of Population, Houses and Dwellings, Population, Trade, Wages and Labour Costs (number of views CEN - 426 thousand, SLD - 243 thousand, DEM - 201 thousand, OBU - 190 thousand, Wages and Salaries - 126 thousand). The top 5 most visited tables in 2022 included the following tables:

- Retail sales and sales and repair of motor vehicles unadjusted 140k views
- Consumer price indices by ECOICOP classification basic index 99 thousand views
- Consumer price indices by ECOICOP classification annual index 60 thousand views
- Number of employees and average gross monthly wages 50 thousand views
- Average consumer prices of selected goods 48 thousand views

In addition to publishing the data in its own web presentation, the VDB is also the main source for generating and providing datasets in open format, which are offered in the CZSO Product Catalogue and also in the National Catalogue of Open Data. In 2022, 293 new datasets with updated or completely new statistical data in open format were generated from the VDB. More than 69,000 data files were downloaded by users during 2022, mostly on the number of deaths by week and with the results of the 2021 Census (population composition by age, nationality, religion, education), as well as data on wages, foreigners, employment and consumer prices.

C. Presentation of statistical data to the public

Also in 2022, the information services staff was dedicated to presenting the activities of the CZSO and the results of statistical surveys and analyses. The Information Services Units at the headquarters and in the regions prepared and held more than 25 presentations for the professional public, representatives of the media, and university and high school students with approximately 700 participants.

Information services staff prepared mainly presentations for students and university teachers, introducing dissemination products, websites, public databases and open data offerings. Statistical publications and other information were presented, for example, at the Czech University of Agriculture. A number of presentations were also prepared at regional information service offices. These were both general presentations on the results of their own activities, but also thematically focused presentations according to customer requirements, both in person and in on-line form.

Information services employees at the headquarters and in the regions also contributed to the magazine Statistika&My, for which they prepared contributions with a warning about the publication of publications such as "Statistical Yearbook of the Czech Republic 2021", "Regional Statistical Yearbooks" and a number of short contributions about activities in the field of information services towards the public.

Overview of selected contracts processed in 2022

Information Services Division at the CZSO headquarters

Methodological consultations

- Consultations on CZ-NACE, CZ-CPA and PRODCOM classifications;
- job classification according to CZ-ISCO;
- questions on the statements what they are used for, how to fill them in;
- explanation of differences between CZSO and Eurostat data;
- how to work with open data + explanation of codebooks;
- data on merging/division of municipalities since 1990, procedure for establishing new urban districts and ZSJ-divisions.

Data from SLDB

- Methodology for calculating the structure of occupied dwellings by legal reason for using the dwelling 1991-2021, data availability and methodology for dwelling occupancy (2021)
- Census forms and instructions from SLDB 1921 and 1930;
- data samples from SLDB 2021, e.g. resident population by electoral wards, population by education, ownership structure of houses and dwellings, heating method of the dwelling and source of energy for heating;
- data samples from SLDB 2011, e.g. population data in grids (1 km x 1 km), employment by NACE, commuting to work and school;
- data samples from SLDB in longer time series, e.g. historical Census results 1850-1900, houses and dwellings by ZSJ (2001, 2011, 2021), population, ethnicity, age structure, religious beliefs, highest educational attainment (1991-2021), data for scientific research (1991-2021), data for selected now defunct municipalities (1930, 1950), population by religion for the cadastral territory of Prague (1930), population, housing stock, affiliation to the owner of the dwelling (1921, 1930), structure of households living in dwellings by year of construction (last reconstruction) by type of house and in other specific breakdowns (from SLDB 1950);
- place of birth and residence address of a citizen born in the 1930s, request to trace a relative according to the 1961 Census.

SafeCentre

- Births between 1993 and 2021;
- Research and development, use of information and communication technologies and innovation 2014-2020.

Price statistics

- on the consumer basket in the Czech Republic and the EU;
- interpretation of the inflation rate for the past calendar year;
- annual sectoral price index, methods of calculation;
- average water and sewerage prices in the Czech Republic from 1994-2021; firewood prices since 2002; fuel prices in the time series 2010-2021;
- industrial producer price indices (1990s), rental price indices for real estate (fenced area), evolution of office space rental prices, analysis of real estate price growth.

Population statistics

- Differences in population as of 31 December of the current year and 1 January of the following year, population in municipalities since 1990;
- explanation of regional differences in selected indicators;
- weekly deaths 2001-2012;
- deaths 1995-2002, deaths by selected groups of causes of death (2011-2020);
- suicides and psychiatric hospitalizations in the Czech Republic;
- frequency of first and last names, most popular baby names, intergenerational transmission of first and last names.

Statistics on wages and income and expenditure of the population

- Algorithm for calculating real wage trends based on inflation;
- data from the 1993-1999 Family Accounts, 2016-2021, specially adjusted data from the EU-SILC and SRU 2010-2021, selection from EU-SILC 2005-2020 data;
- purchasing power of the population in selected cities of the Czech Republic;
- average annual growth of average gross wages for the period 2014-2020;
- average wages of chief operating officers in restaurants and sales directors in advertising and evening agencies for 2020, 2021 and 2022;
- Wages in Ukraine;
- expenditure on pets pets and their number.

Agricultural statistics

- Definition of crop production statistics indicators;
- agricultural production before 1948; data on cormorant hunting, insect farming;
- food consumption 1993-2019;
- food waste statistics.

Election statistics

- explanation of the distribution of seats in municipal elections;
- data on the age, occupation and political club of women elected to the Chamber of Deputies of
 the Parliament of the Czech Republic since 1990; results of the elections to the Czech National
 Council 1990 and 1992 and to the Chamber of Deputies 1996, 1998, 2002 and 2006; data from
 the Register of Candidates in the elections to the Chamber of Deputies of the Parliament of the
 Czech Republic 1996, 1998 and 2002; results of the elections to the Chamber of Deputies of the
 Parliament of the Czech Republic 1996, 1998 and 2002 in the South Moravian Region by districts;
- European Parliament elections 2014 and 2019 aggregated data from all municipalities of the Czech Republic;
- Elections to Regional Assemblies 2012, 2016 voter turnout in the regions;
- list of elected representatives in the municipal council elections 2014, 2018 and 2022 across the Czech Republic output from open data.

Summary data and other statistics

- price indices, international trade, stock exchange index, cost of living 1918-1925 in the Czechoslovakia
- Background data for theses in various areas of statistics;
- economic data from statistical yearbooks 1919-1939;
- value added tax in EU countries;
- foreign trade on the territory of the Czech Republic in 1918-1992, foreign trade in Czechoslovakia in 1920;
- regional accounts, gross value added;
- Occupational injury rates by sector (construction, mining) in 2019, 2020 and the first half of 2021;
- Adult education in the Czech Republic + comparison with the EU;
- RSO territorial structure districts, municipalities population data export from iRSO;
- Map of residential buildings in the Czech Republic with number of dwellings.

Information Services Department at the Regional Administrations of the CZSO

- data for monitoring the implementation of the Regional Development Programmes for 2021-2027;
- documents for updating the Territorial Energy Concepts of regions, SO ORP and cities (housing construction, heating method);
- detailed data for the update of the spatial analysis documents for 2021;
- processing of statistical data for the annual reports of the Regional Councils of Cohesion Regions;
- data for data warehouses of regional authorities;

- processing of data broken down by municipalities for the evaluation of the effectiveness of measures in the Local Action Groups (LAGs) programme documents and the preparation of documents for the next planning period based on special requirements;
- demographic data for the update of the Local Action Plan for Education strategy document
- analyses of the development of the region in 2021 with a follow-up from 2016 (used for the meetings of the regional council, the management of the regional authority, etc.);
- collaboration with the Fire and Rescue Service on the update of the emergency plan;
- preparation of data (mainly demographic data) for strategic development plans and estimates of the future population development of cities, municipalities, urban districts of territorial subdivisions of statutory cities or micro-regions, consultation of analyses of the development of these territories in the past period;
- data in different territorial perspective (region, city, municipality, association of municipalities) for the publication of various publications, atlases, information and promotional materials, chronicles of cities and municipalities, etc.;
- extensive data extracts on municipalities, parts of municipalities and towns, cadastres and basic settlement units from the SLDB 2011 and older Censuses;
- demographic events (births and deaths) around the Temelín nuclear power plant
- background papers, consultations on applicable data and presentations at seminars on the "Regional Family Policy" project or the "Pension Reform Roundtables" (MoLSA);
- number of minors by municipality to optimise the activities of child social protection bodies
- documents for the evaluation of the MIT subsidy programme Obchůdek 2021 (municipalities with up to 1,000 inhabitants and local districts with up to 3,000 inhabitants);
- cooperation on the Historical Atlas of Prague (preparation of the chapter History of Prague statistics, data on population and houses from SLDB since 1980, demographic data since the 1960s, specific output on population for 1996, 2007 for aggregation of several ZSJ of Prague, scanning of old publications);
- on demographic events of foreigners in Prague in time series, data on completed dwellings in Prague from 1921-2021;
- number of students in technical fields and computer science;
- data for the evaluation of the "Analytical-implementation plan to support regionally specific activities within the economically and socially vulnerable areas of the Ústí nad Labem Region";
- the organisation of the project day "Statistics" within the framework of the operational project Research, Development and Education at the secondary school in Liberec;
- the impact of coronavirus measures on visitor numbers in 2020 within the Euroregion Nisa;
- an explanation of the difference in population from the 2021 and 2011 Census results (usual residence) versus the population statistics results (registered/permanent residence);
- data on the number of visitors to the HUZ in different time periods;
- number of beds and number of overnight stays in the Hradec Králové district;
- data on demography, employment and unemployment, for foreigners, on macroeconomics in the time series for updating the Crime Prevention Concept;
- data on the city of Olomouc for the "Olomouc City Profile";
- data from SLDB 2001 and 2011 and demographic data for the publication "People and Landscape of Czech Silesia";
- answers to questions on the processing of municipal council elections ballot paper evaluation (allocation of votes), methodology of processing the minutes (and the link to the ballot paper), detailed explanation of the calculation procedure and allocation of mandates to elected councillors;
- materials for students' term papers, bachelor's and master's theses on a variety of topics, including consultation on the content and predictive value of statistical data;
- the preparation of various documents and commentaries for the regional media, including several "live" radio and television appearances.