

# Digitization of tax administration

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**Abstract:** The article deals with electronic communication in the field of tax administration between financial or customs authorities and tax subjects. Tax authorities report electronically filed tax claims and, in contrast, the costs of information technology for tax administrators. It is evident that electronic communication is increasingly common between tax subjects and tax administrators. The epidemiological situation in connection with the disease Covid-19 recorded this growing trend. Future developments may rather slow down this trend due to rising energy costs. On the other hand, the state supports the establishment of data boxes for most tax subjects.

**Key words:** tax administration, digitization, electronic communication, tax portal, web application

**JEL Classification:** H21

## 1 Introduction

The Financial Administration continuously informs, among other things, about steps in the field of electronic communication with citizens, companies and digitization. Electronic filing of the tax return is mandatory for some taxes, for example value added tax. It is evident that more and more tax entities are using electronic communication. The bad epidemiological situation regarding the coronavirus also supported this trend. People engaged in electronic communication with the authorities more to avoid mutual contact. Future developments may rather slow down this trend due to rising energy costs. On the other hand, there is support from the states in the form of free establishment of data pages or free registration in the electronic portals of the tax administration. At the same time, we can add that digitization, which is perceived as a positive step to simplify and speed up the functioning of the tax administration, can also be a sensitive area due to the large spectrum of information in the computer network. Its security can become an increasingly expensive item of tax administration.

## 2 Methods

The source of a basic information on the development of digitization in tax administration in the Czech Republic is the press and annual reports of tax administration authorities. Information regarding other countries can be found in the Eurostat or OECD databases (Organisation for Economic Cooperation and Development).

### 2.1 Situation in the OECD countries

OECD (2022) reports that tax administrations continued to deliver quality services for taxpayers during the COVID-19 pandemic, including in many cases delivering wider government support measures, while collecting EUR 12.1 trillion in 2020, according to new data from 58 OECD and other advanced and emerging economies. Tax Administration shows how the pandemic accelerated the shift to digital services with a 30% increase in digital contacts in 2020. Digital channels are now dominating interactions with taxpayers, with around 1.3 billion contacts via online taxpayer accounts, and more than 30 million contacts via chatbots. This is a rapid shift from the pre-pandemic models which may have depended on channels such as post or in-person visits to the tax office. These new channels are often employing behavioural insights which are becoming more widely used in all aspects of a tax administration's work.

Commenting on the report, Bob Hamilton, Chair of the OECD Forum on Tax Administration (FTA) and Commissioner of the Canada Revenue Agency said, "This edition of the Tax Administration Series highlights the range of innovations being undertaken by tax administrations both in their interactions with taxpayers and in their internal operations, including as a result of lessons learnt from the COVID-19 crisis. Leading a tax administration, myself, it is clear to me that digital service delivery, as well as increased agility and flexibility, is going to be of central importance to us in achieving our goals while meeting the expectations of taxpayers in the rapidly digitalising economy."

The report OECD (2022) also highlights how digital transformation is being driven by the manipulation and management of data, which is central across a tax administration's functions. For example, around 90% of tax

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administrations report using data science and analytical tools to facilitate the use of data in all aspects of their work. “One of the big challenges for tax administrations going forward is how to exploit the opportunities that artificial intelligence and machine learning bring so that they can use cutting-edge techniques to further improve services to taxpayers,” said Pascal Saint-Amans, Director of the OECD Centre for Tax Policy and Administration.

We can add to the OECD statistics that the digitization of public administration presupposes the availability of information and communication technology (hereafter ICT) and electronic services in companies and households. For example, in the member states of the European Union, access to and use of communication technologies is very diverse. The northern and western parts of the European Union usually show the highest shares of ICT use, while the eastern and southeastern parts reach the lowest values. Data are available from 2021 or 2020.

The countries of the south-eastern part of the European Union, i.e. Romania, Bulgaria, or even Croatia, have a % share of the total number of companies with more than 10 employees ranging from 51 to 68%, individuals using computer technology ranging from 63 to 68% of the total population aged 16-74.

The OECD (2022a) has released another Tax Administration Series (TAS) for 2022, like its predecessors, provides comparative information on the performance of advanced and emerging tax administrations around the world and seeks to outline the main underlying trends and challenges they face. The OECD has released another Tax Administration Series (TAS) for 2022, like its predecessors, it provides comparative information on the performance of advanced and emerging tax administrations around the world and seeks to depict the main underlying trends and challenges they face. This 2022 edition (10th edition) shows how the trend towards e-government has continued and been accelerated by the pandemic, with digital contact channels now dominating taxpayer interactions. For example, the tax administrations reported that there were approximately 1.3 billion contacts through online taxpayer accounts in 2020 – a year-on-year increase of 27%. The report also highlights how tax administrations are beginning to move towards digital transformation. Around 75% of administrations have a digital transformation strategy in place.

With an increasing number of services provided online, the ways in which tax administrations deal with taxpayers is evolving. Effective digital engagement is driven by two main factors:

- Secure digital identity and authentication
- Collaboration with third-party service providers

## **2.2 Situation in the Czech Republic**

The Act No. 280/2009 Coll., Tax Code, as amended, Act No. 297/2016 Coll., on trust-building services for electronic transactions communicates the procedural issues of digitization by the tax administration and the obligations of tax subjects. The legal framework of digitization can be found in procedural legislation, i.e. Regulation (EU) No. 910/2014 of the European Parliament and of the Council, on electronic identification and trust-building services for electronic transactions in the internal market and on the repeal of Directive 1999/93/EC is the superior legal regulation of the European Union. Substantive legal regulations, i.e. laws on specific taxes, contain information on the obligations of tax subjects to submit tax returns electronically.

Czech Tax Administration (2022a) summarizes the possibilities of electronic filing by Czech tax entities as follows:

- Application online financial office (DIS+)
- Application Electronic submissions for financial administration (EPO)
- Data box
- Third party software

Tax and customs authorities have an established e-filing office as standard, which is intended for receiving all data messages in electronic form. These electronic repositories accept electronic submissions signed with a guaranteed electronic signature based on a qualified certificate issued by an accredited certification service provider. There is a fee for establishing an electronic signature, and certificates stored on the computer need to be renewed after a certain period of time. Electronic filing is possible in the form of a data report provided with a guaranteed electronic signature, in the form and structure and under the conditions published by the Ministry of Finance in the "Electronic filing for tax administration" application, which is available on the website of the Ministry of Finance. To communicate with the tax administrator via the Internet, you need an electronic signature.

In addition, the Czech Tax Administration operates an Automated Tax Information System (hereinafter also referred to as "ADIS"). It is the application technical support of the Financial Administration of the Czech Republic. This is a nationwide application that has a unified technical infrastructure. ADIS consists of sub-modules for financial administration activities – register of tax entities, processing of tax claims (tax declarations, reports or statements) of individual taxes, modules of common cross-cutting activities that are needed for administration, registration, collection

and recovery of taxes, transfer of financial funds to authorized beneficiaries and from the necessary system support modules. Applications within ADIS on the Internet of the Financial Administration of the Czech Republic: My tax portal (Online financial office - tax information box), Electronic submissions for the Financial Administration, Electronic records of sales...), which is a service for tax subjects. Two major changes in the ADIS system took place in 2021, namely the launch of the flat-rate individual income tax regime and the launch of the MY TAX Portal. The creators of the system strengthened the security of the information system against cyber-attacks in order to fully ensure the functionality of the system and to protect personal data from misuse.

From 2022, the Tax Administration will provide web applications instead of interactive tax forms when filling out tax statements. The tax administration justifies this change by improving the information of tax subjects when filling out a tax return and by making the user environment more pleasant.

- **Property tax**

This tax is also paid by small owners, for whom the law has not yet established the obligation to pay tax electronically.

- **Income taxes**

The Czech Republic uses two income taxes. Individuals pay personal income tax and corporations and companies, pay corporate income tax. Both taxes are dealt with by one law. Part of the rules for collecting these taxes from individuals and companies are the same.

The Czech Tax Administration (2022) registered a total of 2,465,997 income tax returns in the 2021 tax period. Of these, 1,494,885 in paper form, i.e. 60.6% (printed EPO 85,997, written 1,408,888), electronically 971,112, i.e. 39.4% (of which electronic EPO 593,567 pcs., data report 377,545). We can divide these numbers between individuals and legal entities:

- Individuals - total returns for the 2021 tax period 2,118,016, of which 650,877 electronically, 1,467,139 paper ones.
- Companies – a total of 347,981 declarations, of which 320,235 electronically, 27,246 paper ones.

**Table 1** Share of electronic tax administration in the Czech Republic

	2017	2018	2019	2020	2021
The share of electronically filed tax claims to the tax office in the total number of filed tax claims (%)	66.57	58.80	61.20	64.53	68.52
The share of ICT costs in the total costs of financial administration (%)	12.75	9.41	10.16	12.57	13.01
Share of electronically submitted customs declarations in the total number of submitted customs declarations (%)	98.9	98.20	98.83	98.94	99.59
The share of ICT costs in the total costs of the customs administration (%)	8.89	7.95	8.10	7.11	8.94

Source: Czech Tax Administration (2022)

The Financial Administration of the Czech Republic (Baráková, 2022) reported that in 2021, after the end of the deadline for electronic submission of income tax returns, it records 2,465,997 tax returns. A total of 39.4% of taxpayers used the electronic form of filing this year. "For the second year already, citizens can use the Online Financial Office to file a tax return, and the number of users using it is still growing," says Jan Ronovský, Deputy Director General of the Financial Administration.

Ministry of Finance of the Czech Republic (September 15, 2022) provides data on the number of tax returns filed electronically. Taxpayers submitted 76.1% of their tax returns electronically to the Customs Administration of the Czech Republic. Taxpayers submitted a total 68.5 % of these tax returns to the Financial Administration of the Czech Republic electronically.

- **Consumption taxes (value added tax, excise duties, energy taxes)**

The seller pays these taxes before selling goods and services for final consumption. The tax amount is included in the price of the goods or services. Sellers are business entities obliged to submit tax returns for value added tax, consumption or energy taxes predominantly electronically.

Customs authorities in the Czech Republic collect consumption taxes, energy taxes and import duties. Decree No. 458/2020 Coll., on certain form submissions in the area of competence of the authorities of the Customs Administration of the Czech Republic, provides samples of form submissions. Electronic submissions have the same requirements and required data as printed forms.

According to the Customs Administration of the Czech Republic (2022), the specific goal of projects to expand digitization is to streamline and expand the capabilities of the Customs Administration of the Czech Republic to convert analog documents into digital form by equipping the relevant workplaces with document and large-format scanners. The clerk must manually stamp the incoming documents with a so-called filing stamp and manually transcribe the data from the file agenda into it. Fundamental parts of the further development of the file service are the digitization of documents, the marking of analog documents with bar codes, and the expansion of electronic intelligent forms. Electronic forms do not meet the requirements of the legislation for sending them by data box and their subsequent automated processing.

The need for projects results from these shortcomings:

- Current situation is contrary to the requirements of the legislation,
- Public does not have sufficient comfort associated with the electronicization of public administration,
- Worse perception of the Customs Administration of the Czech Republic in the eyes of the public (compared to offices where electronic filing is already common),
- Time-consuming (work) related to the transcription of the data contained in the form into the relevant applications,
- Not using the opportunity offered by the 602FromFlow Server tool already purchased.

Streamlining the conversion of analog documents into digital form, marking analog documents with 2D codes with the usability of document tracking within its entire life cycle. Introduction of a unified environment for the digitization of analog documents. Elimination of manual transcription of necessary data from analog documents, reduction of error rate and labor.

The taxpayer submits an application for authorization of electronic communication for consumption taxes (EMCS, RZL, when issuing documents for a free tax circulation) and submits the customs procedure on the ZFO form. This is currently the preferred procedure.

### **3 Research results**

Two main state administration bodies deal with tax administration. One of them is the tax office and the other is the customs office. The tax office collects taxes not only from companies, but also from citizens and individuals. The customs administration collects taxes only from firms and companies. We can assume that companies usually manage with a larger volume of financial resources. Large companies are therefore involved in the obligation to file tax returns electronically first. It is likely that this obligation will cause less complications for them than for other smaller entities. This is the reason why the customs administration reports a higher proportion of electronically filed tax returns than the tax administration.

The obligation to submit a tax return electronically is mandatory for the following taxes:

- Value Added Tax - This tax is collected by the tax office and the customs office.
- Excise Duties - This tax is collected by the customs office.
- Energy Taxes - This tax is collected by the customs office.

#### **3.1 Aspects affecting the development of digitalization of public administration**

- Use of ICT by citizens and companies and availability of ICT on the market
- Confidence of citizens and companies in ICT security
- Data protection against misuse within the organization
- Network security against external attacks by unauthorized persons
- Compliance with the protection of personal data (General Data Protection Regulation – GDPR)<sup>2</sup>

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<sup>2</sup> Regulation (EU) No. 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons in connection with the processing of personal data and on the free movement of such data and on the repeal of Directive 95/46/EC

The author sees the advantages and disadvantages of electronic communication in tax administration similarly to Habigerová (2011).

**Table 2** Advantages and disadvantages of electronic communication

Advantages of electronic communication	Disadvantages of electronic communication
<ul style="list-style-type: none"> <li>• Low price (relatively)</li> <li>• Comfort, ease, clarity</li> <li>• Availability at any time</li> <li>• Remote communication</li> <li>• Time savings</li> <li>• Communication of several people at once</li> <li>• Communication with authorities</li> <li>• Data volume transfer</li> <li>• Data archiving</li> <li>• Anonymity without personal contact</li> <li>• A citizen's digital identity enables the citizen to access various services of state administration bodies.</li> </ul>	<ul style="list-style-type: none"> <li>• Impersonal</li> <li>• Lack of feedback</li> <li>• Low data security</li> <li>• Delayed or no response</li> <li>• Internet outages or slow Internet connection</li> <li>• Unavailability all the time</li> <li>• Ignorance of the program</li> <li>• Anonymity</li> <li>• Misrepresentation of information</li> <li>• Lengthiness</li> <li>• Thanks to convenience, the personal disappears</li> <li>• Communication</li> <li>• The purchase price of electronic communication equipment can be a problem for poorer citizens.</li> </ul>

Source: Own processing

Impersonal contact can be an advantage in some situations, but a disadvantage in others. Similarly, it also applies to the price, a relatively low price can be perceived differently by different social groups of people.

### 3.2 Changes in the year 2023

The citizen's digital identity (Citizen's Portal) was accessible before the year 2023. This way, some citizens could prove their identity to the tax authorities and submit a tax claim to the tax administration electronically.

All self-employed persons in the Czech Republic will receive free data boxes from 2023. Self-employed persons and companies will then have to submit tax returns exclusively electronically. They will have a choice of either submissions through a data box, electronic submissions for the Financial Administration (EPO), or the online tax office in the "MY taxes" portal.

The following entities will have a data box established by law:

- legal entity registered in the commercial register;
- legal entity established by law;
- organizational components of a foreign legal entity registered in the commercial register;
- lawyer, tax advisor;
- statutory auditor;
- insolvency administrator;
- expert, court interpreter and court translator;
- public authorities.

## 4 Conclusions

Electronic communication and digitization is expanding not only in countries that we can consider developed. This develops both at the level of international cooperation and in communication between an individual and an official of the tax administration. OECD data show that the Czech Republic is among the states with an average to slightly higher level of digitization in tax administration. In any case, the tax administration has recently been accelerating steps in the area of digitization. The challenge for the tax administration is the connection of various already existing sub-systems and records with which the tax administration works, but these systems are not yet connected. This will facilitate and speed up the work of tax administration employees. Citizens can identify themselves to tax administrators using a digital identity. In

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(General Data Protection Regulation) , is a regulation of the European Union, the aim of which is to significantly increase the protection of personal data of citizens. It was announced in the Official Journal of the European Union on 27 April 2016.

the Czech Republic, citizens are provided with a digital identity free of charge. The tax administrator thus accurately identifies the tax subject.

Digitization of public administration makes sense when information and communication technology is used by a sufficient number of citizens and companies. It is difficult to set a general minimum threshold for all states. I dare to say that the minimum threshold can be, for example, the share of citizens using ICT of at least 60%. At the same time, it should be true that citizens trust public institutions and electronic communication with them. A higher level of abuse of authority by public officials or corruption reduces citizens' trust in state administration bodies. This mistrust can also be reflected in the lower use of ICT when communicating with tax authorities. Another aspect that can reduce the confidence of tax subjects is the security of the ICT network against attacks from the outside environment.

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