

Author information:

- Ülle Madise, Chancellor of Justice of Estonia, ylle.madise@oiguskantsler.ee, +372 693 8404
- Kertti Pilvik, Head of International Relations and Organisational Development for the Chancellor of Justice of Estonia, kertti.pilvik@oiguskantsler.ee, +372 693 8434 (the main contact for the journal)

THE ROLE OF OMBUDS INSTITUTIONS IN A RUSH OF DIGITALIZATION

Ülle Madise, PhD, Kertti Pilvik, MA

Abstract

The article discusses the challenges and possibilities that arise from the increasing digitization of societies and the impact of artificial intelligence (AI) on the work of ombuds institutions, with a focus on the case of Estonia. It emphasizes the importance of ombuds institutions in protecting individuals' rights and raising awareness about digital risks in the face of rapid technological progress.

The article also underscores various cases dealt with by the Chancellor of Justice of Estonia, ranging from accessibility issues and infringements of trust in information systems to concerns about data privacy and the right to be forgotten. It stresses the Chancellor of Justice's role in reviewing the constitutionality of legislation, resolving complaints, and raising people's awareness.

Besides, the article examines the impact of AI on ombuds institutions, noting the increasing complexity of cases related to AI systems, the need for assessing fairness and ensuring accountability in decision-making processes made by AI, and the potential for AI tools to enhance the efficiency of the work of ombuds institutions. It also emphasizes the importance

of maintaining human-centric approaches and ensuring a balance between technologies and human involvement in preserving human rights and values.

Keywords: digitalization, artificial intelligence, digital rights, protection of people’s rights, public e-services, ombuds institutions, the Chancellor of Justice of Estonia.

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I. Introduction

Remember the box often used on web pages where you have to prove that you are not a robot? This symbolic and visually striking illustration exemplifies the advancements we have attained. Upon deeper contemplation, it becomes evident that this represents our future —

the challenge of accurately distinguish whether the entity on the opposing end is a human being or a robot.

The growing influence of global digitization has created a favourable environment where an increasing amount of communication between the state, individuals, and companies occurs through digital channels. The primary purpose of national information systems is to greatly streamline interactions between government bodies at various levels and facilitate communication with individuals and companies. Nonetheless, there are instances where the inflexibility of information systems and outdated or insufficient functionality of applications limit individuals' rights.¹ Sometimes, in the rush of digitalization, it is also forgotten that not all people are equally digital-savvy or prefer human contact instead of communicating with a machine.

Estonia is known for its e-governance. Being a poor country at the time of regaining independence in the early 1990s, rational and strategic decisions had to be made on how the country could offer accessible public services to everyone in a situation where money and human resources are scarce. The solution was found in the development of e-services and the establishment of a mandatory national digital identity (e-ID) granting individuals' digital access to all of Estonia's secure e-services. This digital identity system serves as the foundation of Estonia's e-state and is integral to the daily transactions of its citizens in both public and private sectors. Estonians have the flexibility to utilize their e-ID through various means including the state-issued ID-card, Mobile-ID on their smartphones, or the Smart-ID application.²

Today, Estonia is probably the only country in the world where 99% of public services are available online 24/7³. With their e-IDs, individuals are able to perform a wide range of activities such as paying bills, participating in e-voting, signing contracts, shopping,

¹ Estonian Chancellor of Justice's Annual Report 2017/2018: [E-government](#).

² See more about the e-Identity at <https://e-estonia.com/solutions/e-identity/id-card/>.

³ See e-Estonia guide published at https://e-estonia.com/wp-content/uploads/eestonia_guide_a5_230206_rgb.pdf.

accessing health information, and much more⁴. It seems self-evident to Estonians that in order to receive most public services, it is enough to log in to the State Portal eesti.ee⁵ and submit an application or tax declaration, or communicate with the state in other ways. Estonians are so used to e-services that, for example, according to a 2011 survey⁶, they considered automatic gas stations to be the most customer-friendly service in Estonia. These are self-service gas stations where they do not have to come into contact with a single human.

Yet, the information technology extensive developments in the last decade have made even technology-loving Estonians worry. The development has been so fast that it is no wonder that people have asked the Chancellor of Justice of Estonia how they can step out of the e-state and do their things without the Internet⁷. This development has been so intense that the world's top IT specialists, who have created and led these information technology developments themselves, asked to pause the further development of artificial intelligence for six months in order to avoid its later uncontrollability and to accept more detailed rules⁸. Among these specialists, there are Jaan Tallinn who co-founded the well-known communication platform Skype and founders of many other world-renowned IT platforms and new technologies.

Amidst the fast-paced technological advancements, the significance of ombuds institutions becomes particularly crucial. While most national ombuds institutions lack the authority to intervene in the affairs of private companies, they play a vital role in raising awareness among the public regarding the risks associated with the digital realm. They also work towards ensuring that the development of laws and public services align with the protection of fundamental rights and freedoms and that everyone is taken into account.

⁴ See more about the e-Identity at <https://e-estonia.com/solutions/e-identity/id-card/>.

⁵ Available at <https://www.eesti.ee/en>.

⁶ See the press release published by Kantar Emor at <https://www.kantaremor.ee/pressiteated/eesti-koige-kliendisobralikumad-ettevotted-voib-leida-pankade-ja-kutusearide-seast/>.

⁷ Estonian Chancellor of Justice's Annual Report 2017/2018: [E-government](#).

⁸ Open letter published by the Future of Life Institute at https://futureoflife.org/open-letter/pause-giant-ai-experiments/?utm_source=substack&utm_medium=email.

By advocating for the protection of digital rights and actively participating in policy discussions, ombuds institutions contribute to shaping a digital landscape that respects and upholds the rights of individuals. They serve as a bridge between citizens and governmental bodies, fostering dialogue and cooperation to address concerns related to privacy, data security, and equitable access to digital services. Moreover, ombuds institutions have the capacity to examine complaints concerning infringements of digital rights. They function as a platform where individuals have the opportunity to seek redress and address their concerns.

II. Examples of digitalization-related cases resolved by the Chancellor of Justice of Estonia

Like many other ombuds institutions, the mandate⁹ of the Chancellor of Justice of Estonia encompasses a wide range of responsibilities in safeguarding individuals in the digital domain. Their role involves ensuring the protection of fundamental rights and freedoms, including resolving complaints on the activities of persons and agencies performing public tasks and addressing any violations or deficiencies that may arise. The Chancellor of Justice is also provided with the opportunity to challenge the constitutionality of legislation in the Supreme Court, as well as to conciliate discrimination disputes arising between private persons. During their proceedings, the Chancellor of Justice has the authority to request testimonies from relevant parties, analyze documents, conduct inspections, perform on-site observations, and engage in other necessary actions. In broad terms, the approach to resolving complaints by the Chancellor of Justice can be described as follows.

⁹ The mandate of the Chancellor of Justice is mainly stipulated in the Chapter XII ‘The Chancellor of Justice’ of the [Constitution of the Republic of Estonia](#) and the [Chancellor of Justice Act](#). The importance of a strong ombuds institutions' mandate is also emphasized by various international standards such as the [Venice Principles](#) endorsed by the Committee of Ministers of the Council of Europe on May 2, 2019, and the [Resolution on the role of Ombuds institutions and mediator institutions](#) adopted by the UN General Assembly on December 16, 2020.

- 1) When a complaint is received by the Chancellor of Justice, the first step is to assess whether the root cause of the problem could be an unconstitutional legal act. If unconstitutional legislation is identified, the Chancellor of Justice initially approaches the authority responsible for enacting the legislation with a proposal to amend it. If the proposed amendment is not implemented, the Chancellor of Justice requests the Supreme Court to declare the legal act, or a specific part of it, unconstitutional or invalid.
- 2) In cases where the legal act is found to be constitutional, the Chancellor of Justice investigates whether the issue arises from unlawful enforcement or a violation of good administrative practice. If a violation is identified, the Chancellor of Justice presents a proposal to the relevant institution to eliminate the violation, recommends changes in practice to adhere to good administrative practice, or issues a memorandum with a suggestion to provide clarity on legal regulations.
- 3) In certain instances, the Chancellor of Justice may choose not to intervene when it is determined that an individual's rights have not been violated, or when addressing their specific issue falls outside the scope of the Chancellor of Justice's authority. In such situations, the Chancellor of Justice will communicate their stance to the petitioner and may provide alternative avenues for protecting their rights.¹⁰

Chancellors of Justice have paid attention to the digitization and related issues since Estonia regained independence and began digitization of public services. For the first time, Chancellor of Justice Eerik-Juhan Truuväli drew attention to questions related to digitization when, at the presentation of his annual report in front of the Riigikogu (i.e. Estonian parliament) in 1995, he admitted that there were problems with the accessibility of legislation

¹⁰ See also the scheme “How the Chancellor of Justice resolves complaints?” available at <https://www.oiguskantsler.ee/en/how-chancellor-justice-resolves-complaints>.

in Estonia and that this error could be alleviated by thorough training of people and the rapid development of a digital database of legislation¹¹.

Subsequent Chancellors of Justice have made efforts to guarantee that life in Estonia and interactions with the government remain feasible even in the absence of the Internet. Their objective has been to safeguard individuals' rights and fundamental freedoms, ensuring protection regardless of whether they have access to a computer or network¹².

1. e-Identity

As previously mentioned, Estonia's e-state relies on a robust digital identity system, which plays a pivotal role in the everyday interactions of its residents across public and private domains. Estonian citizens enjoy the convenience of utilizing their e-ID through multiple channels, such as the government-issued ID-card, Mobile-ID on smartphones, or the Smart-ID application.¹³ Therefore, ensuring access to e-identity and its security is of utmost importance due to the significant role it plays in digital transactions and interactions.

A particularly curious case took place in 2019, when the Estonian Information System Authority introduced new ID-card software Digidoc4, which failed to function with screen readers used by visually impaired persons. When working with a computer and IT tools, visually impaired persons use screen readers that read out the text to them. These people lost the opportunity to safely give digital signatures and verify their validity. With the help of the ID-card, they can carry out banking transactions, order food, books and commodities from an e-shop for delivery to their home, enter into contracts, operate as members of the board of an association, etc. However, if something happens with the electronic identity of these people (forgetting the password, the card getting locked, software renewal that is no longer

¹¹ Minutes of the session of Riigikogu of 28.09.1995, page 5:

<https://www.oiguskantsler.ee/sites/default/files/Aasta%C3%BClevaate%20ettekanne%2028.%20september%201995.pdf>.

¹² Estonian Chancellor of Justice's Annual Report 2017/2018: [E-government](#).

¹³ See more about the e-Identity at <https://e-estonia.com/solutions/e-identity/id-card/>.

interoperable with the screen reader, etc.), they also lose independent access to the state and the services offered by it. The state did not find a solution to this problem until seven months later, leaving part of the population out of the possibility to use nationally important software for such a long time.¹⁴

The recent activity of the Police and Border Guard Board, which involves obtaining a new ID-card from grocery stores, has also caught the attention of the Chancellor of Justice. The Chancellor asserts that this practice is not in accordance with the law. The issuance of identity documents and the related procedures are regulated by the Identity Documents Act¹⁵. Section 12¹ (1) of the Act explicitly states that the document should be issued by the Police and Border Guard Board or the Ministry of Foreign Affairs. Furthermore, according to Section 12¹ (2²) of the Act, upon an individual's request, the document can be issued by post through a secure postal service provider. The Identity Documents Act does not permit the delegation of these functions to other private sector entities.¹⁶

2. e-Voting

In 2005, Estonia made history by introducing Internet voting, becoming the first nation to implement this nationwide. The revolutionary e-Voting system enables citizens to conveniently cast their votes, regardless of their location in relation to a physical polling station. The success of e-Voting is largely attributed to the widespread availability of secure digital authentication and signatures among the majority of Estonian residents. By 2023, Internet voting has gained popularity, with 51% of voters opting for this method in local, parliamentary, and European Parliament elections.¹⁷

¹⁴ Estonian Chancellor of Justice Annual Report 2018/2019: [Protection of the rights of people with disabilities](#).

¹⁵ Available in Riigi Teataja at <https://www.riigiteataja.ee/en/eli/504072022003/consolide>.

¹⁶ Case materials of the Chancellor of Justice. Available only in the internal Document Management System of the Office of the Chancellor of Justice. See also Estonian National Broadcasting news “[More people taking advantage of Selver ID card issuing service](#)”.

¹⁷ See e-Estonia factsheet on e-Voting at <https://e-estonia.com/wp-content/uploads/factsheet-i-voting-mar2023-2-2.pdf>. The topic of e-Voting has been extensively covered in various publications, including the

The Chancellor has asked to check several times whether the Estonian electronic voting system meets the requirements for democratic voting.¹⁸

The Estonian Constitution¹⁹ (§ 60) stipulates that elections must be free, uniform, general, direct, and secret. These principles must also be respected in the case of electronic voting. For this, electronic voting must comply with the following conditions: a voter's identity and eligibility to vote is established, each voter has one vote, a voter is able to vote freely, secrecy of the vote is ensured, the vote cast is counted, and the results of voting and elections are correctly established. In brief: the system must ensure an honest result and, in the interests of credibility, monitoring and verifying it must be possible.

The Chancellor of Justice has explained that the system of electronic voting in Estonia complies with the constitutional principles set for elections. Individual verifiability of a vote is not an end in itself. This is also not possible when voting by paper ballot. In order to reduce the risk of selling votes, Estonia uses a system of combined control in electronic voting.

Certainly, the technical solution (including verifiability) for electronic voting needs continuous critical assessment and development. Also important are maximum transparency and clear explanation of the system for the public.

Several people have asked the Chancellor of Justice whether secrecy of voting is indeed ensured in Estonia. The Chancellor of Justice explained that the procedure for electronic voting (§ 48⁴ Riigikogu Election Act²⁰) meets the principle of secrecy of elections (§ 60(1) Constitution). Secrecy of voting is intended to ensure freedom of election. On the one hand,

article "[Internet Voting in Estonia: From Constitutional Debate to Evaluation of Experience over Six Elections](#)" authored by Ülle Madise and Priit Vinkel.

¹⁸ The following examples are based on the Estonian Chancellor of Justice's Annual Report 2018/2019: [Elections](#).

¹⁹ Available in Riigi Teataja at <https://www.riigiteataja.ee/en/eli/530122020003/consolide>.

²⁰ Available in Riigi Teataja at <https://www.riigiteataja.ee/en/eli/ee/510032014001/consolide/current>.

secrecy of voting means anonymity of the vote and, on the other hand, privacy of voting. In the case of electronic voting, the anonymity of a vote is ensured through encryption of the e-vote. To ensure privacy of voting, a so-called virtual polling booth has been created, meaning that a voter may also change their vote when voting electronically.

3. Access to e-services

The accessibility of e-services plays a crucial role in safeguarding fundamental rights in today's digital era. As more essential services and interactions move online, it becomes imperative to ensure that everyone, regardless of their abilities or disabilities, can access and benefit from these digital services. Equal access to e-services is not just a matter of convenience; it is a matter of upholding fundamental rights such as the right to information, the right to participate in civic activities, and the right to equal opportunities.

By prioritizing inclusive design and implementing accessibility standards, e-services can empower among others the elderly and individuals with disabilities to fully participate in society and exercise their rights. This includes providing alternative formats for content, compatibility with assistive technologies, and user-friendly interfaces.

A complaint was filed with the Chancellor of Justice²¹ by an individual who faced difficulties in applying for a building permit due to the requirement of submitting building design documentation electronically. Apparently, the building design documentation had been drawn up years ago on paper and had also been filed in that format with the rural municipal government for obtaining a building permit.

According to the procedure governed by the Building Code, owners seeking a building permit must interact with the relevant agency through the Register of Buildings electronically. However, the Chancellor of Justice argued that the maintaining body of the Register of Buildings should consider allowing owners to obtain a permit for building use when they

²¹ Estonian Chancellor of Justice's [Annual Report 2016/2017](#), p 55.

have already submitted certain documents, such as building design documentation, in paper format to the competent authority in the past.

The Chancellor of Justice made a proposal to the Minister responsible for the register also to allow filing of paper documents in certain justified cases. Additionally, it was suggested that the guidance materials provided by the Register of Buildings should be made more user-friendly, ensuring that the application process is easily understandable and accessible to all building owners.

The Chancellor of Justice was also contacted by an architect's office²² which had failed to submit a tender because due to a technical glitch they did not manage to send their competition project to the public procurement register. When trying to upload their work to the public procurement register, the architect's office encountered a technical malfunction related to a temporal restriction on performing operations. The restriction resulted in a situation that if the file could not be uploaded within 60 seconds the operation was discontinued. Unfortunately, this meant that users of a slower Internet connection could not submit their tender.

The Chancellor of Justice analysed the incident and ascertained that the public procurement register could indeed not accept files forwarded through a slow data communication channel. Regrettably, this information did not reach the tenderer, so that the architect's office did not succeed in submitting a competition project completed as a result of several months of work. Since the automatic error message did not contain a possible reason for the upload failure and the help desk did not explain this as a possible problem, the principles of good administrative practice were violated. The manager of the public procurement register must ensure that a tenderer is informed of all technical requirements, including those related to submission of documents, and in the event of a technical failure would also receive information about the reasons for failure and possibilities to rectify it.

²² Estonian Chancellor of Justice's Annual Report 2018/2019: [Good administrative practice](#).

In the practice of the Chancellor of Justice, there are also examples where an excessive eagerness to provide services or the desire to provide them proactively can present challenges and infringe on people's rights.

The Chancellor of Justice was asked to verify²³, for instance, whether the Social Insurance Board was acting lawfully when sending to cities, towns and rural municipalities the personal data of people with disabilities living within their boundaries. The alleged aim of sending the data was to inform cities, towns and rural municipalities of people's possible need for assistance and help local authorities to plan and offer social services. In transmitting these data, the Social Insurance Board relied on the Social Welfare Act²⁴ under which it is required to notify a local authority of a person in need of assistance.

The Chancellor of Justice found that massive transmission of health data of people with disabilities was not lawful. Technical requirements for processing personal data had also not been complied with in transmitting the data. It is understandable that the Social Insurance Board tries to help local authorities in supporting people with disabilities, but inviolability of private lives of individuals must also be respected. If a need arises to organise provision of social welfare services otherwise than what the Social Welfare Act enables, the law must be amended. People must be left the right to decline assistance and processing of their personal data.

Another similar case²⁵ involved a Draft Act designed to support the well-being and preparedness for employment of young individuals. The objective of the Draft Act was to establish a legal framework allowing searches to be conducted in national databases to identify young people between the ages of 16 and 26 who were deemed to be disengaged from any meaningful activity, such as education, employment, military service, or childcare leave. Following the identification of these individuals based on registry data, specialists from local authorities were to contact them to inquire about the reasons for their

²³ Estonian Chancellor of Justice's Annual Report 2019/2020: [Protection of privacy](#).

²⁴ Available in Riigi Teataja at <https://www.riigiteataja.ee/en/eli/ee/504042016001/consolide/current>.

²⁵ Estonian Chancellor of Justice's [Annual Report 2016/2017](#), p 47.

disengagement and inform them about the services offered by study counselling centres of Rajaleidja, the Estonian Unemployment Insurance Fund, and other available resources. The data of these identified young people would be stored in a national database.

However, the Chancellor of Justice was not convinced that the original proposed form of the Draft Act would effectively achieve its intended purpose. The Chancellor recommended exploring alternative solutions to engage young people in active life, such as enhancing access to education through appropriate courses, flexible study opportunities, internships, improved career counselling, and facilitating flexible and straightforward employment relationships.

4. e-Health system

Estonian healthcare providers have an obligation to transmit information regarding all treatment cases, prescriptions, and other health-related data of residents to the national health information system (e-Health system)²⁶. The primary aim of this mandatory aggregation of health data is to improve treatment possibilities. Additionally, the utilization of data for research, advancing public health, and developing innovative solutions is equally significant²⁷. However, allowing unjustified and excessive access to this data would violate individual privacy rights and erode trust in the information system. The scenario in which individuals' health data is shared with other countries or businesses can give rise to significant privacy and security problems. Consequently, the effective utilization of opportunities offered by the eHealth system could be compromised.²⁸

There is a striking example from the field of work of the Chancellor of Justice, where due to lobbying efforts, a Draft Act was proposed in the Riigikogu, which would have granted insurance companies access to the Estonian e-Health system. The objective of the lobbyists

²⁶ See more about the Estonian e-Health system at <https://www.digilugu.ee/login?locale=en>.

²⁷ See also the developments of the European Health Data Space at https://health.ec.europa.eu/ehealth-digital-health-and-care/european-health-data-space_en.

²⁸ Estonian Chancellor of Justice's [Annual Report 2015/2016](#), pp 36-37.

was to initiate a system where an individual's insurance premiums would be determined based on their and their family's medical history. However, this Draft Act faced strong criticism from both the Data Protection Inspectorate²⁹ and the Chancellor of Justice³⁰, resulting in its abandonment.³¹

Introduction of ever new e-services means, *inter alia*, that some services are from the start developed only as e-services and the same service is not available by any other means. If information system development fails to pay sufficient attention to all users (including users with special needs), it is inevitable that new solutions are introduced that cannot be used by everyone. Such a systemic error was discovered in connection with vaccination against the coronavirus. It was found that the blind could not use the relevant registration facility created by the state. The fact that the blind could not use the hastily implemented system was revealed accidentally. No other ways to register in the vaccination queue (e.g. by phone or through other solutions) were introduced to these people. The Chancellor of Justice emphasized that if emergency solutions are introduced in a rapidly changing situation, then people should at least be informed of alternative options.³²

5. Incorrect data in national registers

The Estonian Constitution³³ grants individuals the right to good administration, which imposes a duty on agencies to publish in their databases the information that is accurate, non-misleading and consistent. Providing misleading information can lead individuals to make detrimental decisions while exercising their rights and freedoms. Several people have approached the Chancellor of Justice with concerns that incorrect or incomplete data in the

²⁹ The extraordinary presentation of the Data Protection Inspectorate is available at <https://adr.rik.ee/okk/dokument/4516760>.

³⁰ See the response of the Chancellor of Justice to the Data Protection Inspectorate at <https://adr.rik.ee/okk/dokument/4537678>.

³¹ Estonian Chancellor of Justice's [Annual Report 2015/2016](#), pp 36-37.

³² Estonian Chancellor of Justice's Annual Report 2020/2021: [Accessibility in general](#).

³³ Available in Riigi Teataja at <https://www.riigiteataja.ee/en/eli/530122020003/consolide>.

national registers have prevented them from receiving the public services to which they are entitled.

For example, a mother was deprived of child benefits because the state had not updated the data in the population register, and an automatic administrative decision was made based on incorrect data. The database showed that the mother did not have custody of her child, even though it had been restored some time ago. In another case, a small child was not given health insurance because the population register entry made on their behalf was not activated after the child's birth was registered. Also, the pensioners were deprived of allowance for alone living pensioners because the registers did not reflect the correct information about their living situation. With the intervention of the Chancellor of Justice, these cases found a just solution.³⁴

These instances underscore the importance of maintaining accurate data in national registers to ensure individuals receive the public services they rightfully deserve. Moreover, accurate and quality data enables fair and unbiased decision-making and enhances the overall performance and effectiveness of e-services. Therefore, organizations and developers must prioritize data accuracy as a fundamental pillar of responsible e-services development and deployment. The accuracy and adequacy of data assume particular significance with the integration of artificial intelligence systems into the provision of e-services.

6. The right to “be forgotten”

The Chancellor of Justice has received several complaints regarding the so-called right to be forgotten. Article 17 of the European Union General Data Protection Regulation³⁵ sets out the conditions where a person may request erasure of their personal data without delay. On that basis, the Chancellor has received several requests with the wish to “be forgotten”. The

³⁴ Case materials of the Chancellor of Justice. Available only in the internal Document Management System of the Office of the Chancellor of Justice.

³⁵ Available at <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02016R0679-20160504&qid=1532348683434>.

Chancellor of Justice has also been asked when that right arises and where its limits lie. Specifically, people wish to use that right in the case of information concerning the punishments of a person where public availability (e.g. via a search engine) may, for example, affect getting or losing a job. In the Chancellor's opinion, judicial conviction is, by nature, a temporary legal status which ends with the expiry or annulment of the punishment.³⁶

The Chancellor was contacted, for instance, by an individual who had served a sentence imposed for a crime committed in the past and whose punishment data in the criminal records database had been expunged. Despite this, the person's criminal past was displayed on the homepage of the Internal Security Service, thus also making it available through search engines. The Chancellor asked the Internal Security Service to assess whether publication of personalised court judgments on its website was compatible with the general principles arising from Article 5 of the General Data Protection Regulation (including lawfulness, intended purpose) and to decide whether and to what extent disclosure of someone's punishment data is justified after punishment has expired. The Internal Security Service removed the person's full name from its homepage.³⁷

7. Life without the Internet

In 2018, a landmark dispute reached the Supreme Court over whether the requirement of non-profit associations to file annual reports only electronically is constitutional. In the event of failure to comply with the requirement, a non-profit association may be struck from the register without the right to be reinstated. The Chancellor found in her opinion to the Supreme Court that the state cannot claim that the necessary report is absent if it actually has the information from the report, even though submitted, for example, as an e-mail attachment or in paper format. If a non-profit association is struck from the register and its activities are terminated for this reason, the consequence is disproportionately severe for the association and interferes with its constitutionally guaranteed rights.³⁸

³⁶ Estonian Chancellor of Justice's Annual Report 2018/2019: [Protection of privacy](#).

³⁷ Ibid.

³⁸ Ibid.

The Supreme Court, however, did not agree with the Chancellor's opinion. The Supreme Court found that the obligation to submit reports electronically simplifies and improves capacity and makes reporting more comparable and transparent. It was also found that persons acting on behalf of a legal person in private law should be able to communicate with the state electronically, as a general rule. Thus, the Supreme Court noted that legal persons are expected to be able to communicate electronically with the state.³⁹

Nevertheless, the same conclusion does not apply to individual persons. People have the right to receive public services, request information and communicate with the state also in other ways, especially if they lack Internet access, necessary devices or skills, or prefer not to conduct their affairs online. This right became particularly pronounced during the COVID-19 pandemic, as numerous employees had to work remotely and students were instructed in distance learning⁴⁰ — while digital advancements continued to provide people with broad access to services, there was also a notable emergence of individuals who lacked the means or desire to engage in the digital realm.

Also, in a recent incident, the Chancellor of Justice received a complaint from an individual who was displeased that their phone call to authority was being recorded without the option to decline. Instead, they were directed to contact the agency via e-mail or other digital means, ignoring their wish and right to communicate with officials verbally⁴¹.

8. Awareness raising

In addition to monitoring constitutionality and resolving complaints, the Chancellor of Justice has also placed significant emphasis on information activities. As an example, the Estonian Chancellor of Justice and the National Audit Office collaborated to release the

³⁹ Supreme Court *en banc* 2 October 2018 decision no. [2-17-10423](#).

⁴⁰ See e.g. Estonian Chancellor of Justice's Annual Report 2020/2021: [Education and work](#).

⁴¹ Case materials of the Chancellor of Justice. Available only in the internal Document Management System of the Office of the Chancellor of Justice.

Estonian e-State Charter⁴². This charter serves as a comprehensive resource for individuals utilizing public services in Estonia, enabling them to understand their rights when interacting with government agencies through the e-government system. Users can also verify if their rights have been respected based on the information provided in the Charter.

Moreover, the Charter encourages each agency to review its own procedures and establish clear and easily measurable objectives for implementing a more citizen-centric approach to administration. It outlines criteria by which individuals can assess whether their rights have been considered when receiving public services through the e-government system. Furthermore, the principles outlined in the Charter promote simplicity and logicity in electronic administration. It is worth noting that these principles and criteria are not limited to electronic communication channels, but are also applicable in other forms of interaction with the government.

III. The impact of the development of artificial intelligence on the work of ombuds institutions

In recent years, the development of artificial intelligence (AI) has had a profound impact on various aspects of society, including the work of ombuds institutions. AI refers to the ability of a machine to display human-like capabilities such as reasoning, learning, planning and creativity⁴³. This technological advancement has brought both opportunities and challenges to the field of ombuds institutions' work.

The growing complexity of cases pertaining to information systems has a significant influence on ombuds institutions' work. As AI technologies are integrated into various

⁴² Available on the State Audit website at

https://www.riigikontroll.ee/LinkClick.aspx?fileticket=E3_I EQ6A5A8%3d&tabid=305&mid=908&language=et-EE&forcedownload=true.

⁴³ Definition by the European Union available at

<https://www.europarl.europa.eu/news/en/headlines/society/20200827STO85804/what-is-artificial-intelligence-and-how-is-it-used>.

sectors such as governance, security, defence, finance, and healthcare, people may face issues and concerns arising from these systems. Ombuds institutions are now tasked with understanding the intricacies of AI and its implications for people's rights and well-being. They need to be aware of the regulations concerned, ethical considerations, and potential biases inherent in AI algorithms to effectively address complaints and ensure fair outcomes.

Furthermore, ombuds institutions play a crucial role in safeguarding individuals' rights in the context of decisions made by AI. AI algorithms are often used in automated decision-making processes, such as in the police systems or access to public services. Ombuds institutions must assess the fairness, transparency, and accountability of these AI systems to prevent potential biases, discrimination, or violations of fundamental rights. They may also engage in reviewing AI systems and advocating for algorithmic transparency on their own initiative to ensure that decision-making processes are accountable and impartial.

On the other hand, AI also presents opportunities for ombuds institutions to enhance their efficiency and effectiveness. AI-powered tools can assist ombuds institutions in processing and analysing large volumes of data, identifying patterns, and detecting potential systemic issues. This can enable them to identify trends, prioritize cases, and allocate resources more efficiently. Additionally, AI chatbots, accessibility improvers for people with special needs or other virtual assistants can be deployed to provide initial information and support to individuals seeking assistance, improving accessibility and responsiveness of ombuds services.

However, the rise of AI also raises concerns about the potential erosion of human-centric approaches in ombuds and other institutions' work. The human touch, empathy, and understanding provided by ombuds institutions may be challenging to replicate with AI systems alone. Therefore, striking a balance between the use of AI technologies and maintaining human involvement and oversight is crucial to ensure the preservation of human rights and values in ombuds proceedings.

IV. Estonian experience in the development of artificial intelligence

In Estonia, a comprehensive examination of AI issues commenced in 2018 through the establishment of an expert group comprising representatives from government institutions, universities, and the private sector⁴⁴. This initiative was spearheaded by the Ministry of Economic Affairs and Communications and the State Chancellery. Based on the report of the expert group, the Estonian artificial intelligence strategy was formulated, leading to the adoption of the Estonian national artificial intelligence action plan⁴⁵.

The AI development plan primarily emphasizes enhancing the capacity for AI development and implementation. However, it also recognizes the importance of addressing data protection concerns and conducting analyses of AI systems' impact on fundamental rights. Additionally, the plan underscores the significance of raising awareness about AI and its implications.⁴⁶

Subsequently, Estonian companies and public sector organizations have enthusiastically embraced the application of AI technologies across various domains⁴⁷. For instance:

- Collaborative efforts between Tallinn University of Technology, Auve Tech Ltd, and ABB Ltd have led to the development and testing of self-driving buses in residential and commercial areas of Tallinn.
- Chatbots have found extensive use in both the public and private sectors. For instance, Bürokratt, an interoperable network of chatbots deployed on the websites of public institutions, enables individuals to obtain information from various authorities through a single chat window using natural language communication. In 2023, the bots will be enhanced to handle simpler services.

⁴⁴ See more at <https://www.kratid.ee/kratt-visioon>.

⁴⁵ Available at https://www.kratid.ee/files/ugd/7df26f_65582ae6b6d24daa8511d8ea50cab1dd.pdf.

⁴⁶ Ibid.

⁴⁷ See more at <https://www.kratid.ee/kasutuslood-kratid>.

- The Estonian Unemployment Insurance Fund has introduced an AI-powered decision support system called "OTT" that analyses a client's employment data from the past five years to provide personalized unemployment services.
- Automated border control has been implemented at Tallinn Airport and the road border crossing point in Narva City since the beginning of 2021. This system utilizes biometric data to assist border guards in identifying individuals and verifying their right to enter the country.
- The Environment Agency and the Information Technology Centre of the Ministry of the Environment (KeMIT), in collaboration with a development partner, have created a forest remote monitoring information system. This system allows for georeferenced recording of forest resources and the collection and sharing of operational forest information. The solution combines semi-automatic processes using machine learning algorithms, visual inspection of remote monitoring data, and third-party software solutions.
- Various artificial intelligence-based language programs assist in enhancing the lives of individuals with special needs by providing features such as speech-to-text and text-to-speech conversion, thereby facilitating easier communication.⁴⁸

It may seem surprising, but known as e-Estonia, there is no special law regulating artificial intelligence in Estonia. Although it was originally planned to draft a so-called AI law⁴⁹, which would have regulated its use and supervision, presently, it appears that the Estonian government is awaiting the finalization of the European Union's regulations on artificial intelligence⁵⁰ before determining the subsequent course of action.

⁴⁸ More information about the use of artificial intelligence in the public sector is available at <https://www.kratid.ee/kasutuslood-kratid>.

⁴⁹ Available at <https://eelnoud.valitsus.ee/main/mount/docList/93ebe63d-de8c-4662-9908-3232aa7f987c#b5vGeEQe>.

⁵⁰ See proposal for a Regulation laying down harmonised rules on artificial intelligence at <https://digital-strategy.ec.europa.eu/en/library/proposal-regulation-laying-down-harmonised-rules-artificial-intelligence>.

In the meantime, the European Union General Data Protection Regulation⁵¹, and the existing Estonian data protection, equality, consumer and other specific laws are the basis for regulating the field of AI. Consequently, there is no concrete institution responsible for supervising the area in Estonia. In the context of personal data protection, the Data Protection Inspectorate⁵² is the supervisory authority, the Consumer Protection and Technical Regulatory Authority⁵³ in the field of consumer protection and electronic communication, and the National Information System Authority⁵⁴ in the case of databases and cyber security. Unfortunately, there is no good insight into how effective their oversight of AI has been, nor whether and how the impact of the AI system on human rights has been assessed.

Nevertheless, through the utilization of its authority, independence, and expertise, the Chancellor of Justice can play a pivotal role in bridging the gaps in AI supervision and safeguarding individuals' rights when other state mechanisms prove ineffective. This becomes particularly significant in a context where the general public may have limited awareness regarding AI technologies, their applications, and potential risks. Therefore, the Chancellor of Justice has devised plans to take the initiative in overseeing the provision of public services that utilize AI technologies. This proactive approach aims to ensure that such services are conducted in compliance with ethical standards and legal requirements, thus protecting the rights of individuals.

Conclusions

Digitalization and the development of artificial intelligence have triggered substantial transformations worldwide, greatly influencing people's rights, freedoms, communication patterns, and service delivery methods. In light of individuals' varying levels of digital literacy and their differing capacities to safeguard their rights, the importance of ombuds

⁵¹ The Regulation is available at <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02016R0679-20160504&qid=1532348683434>.

⁵² See more at <https://www.aki.ee/en>.

⁵³ See more at <https://ttja.ee/en>.

⁵⁴ See more at <https://www.ria.ee/en>.

institutions is further underscored. By taking proactive measures and actively participating in policy dialogues, these institutions ensure the safeguarding of individuals' rights and freedoms in digital realms, facilitate constructive communication between citizens and authorities, preserve human-centric approaches and offer avenues for seeking redress. Besides, rapid technological developments have also placed a continuous learning burden on ombuds institutions, necessitating their ability to keep pace with the evolving landscape.

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THE OMBUDS INSTITUTIONS AND DIGITALIZATION

ÜLLE MADISE

CHANCELLOR OF JUSTICE OF ESTONIA



I'm not a robot



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HOW THE CHANCELLOR OF JUSTICE RESOLVES COMPLAINTS?

COMPLAINT

If necessary, the complainant will be contacted and the content of the problem will be clarified. The Chancellor of Justice has the authority to request testimonies from relevant parties, analyze documents, access information, conduct inspections, perform on-site observations, and engage in other necessary actions.

- **PROPOSAL** to bring the legal norm into conformity with the Constitution
- If ignored, **REQUEST TO THE SUPREME COURT** to declare a legal provision unconstitutional or invalid

1. IS THE CAUSE OF THE PROBLEM AN UNCONSTITUTIONAL LEGISLATION?

- **MEMORANDUM** to change the norm
- **RECOMMENDATION** to change practice and/or follow the good administrative practice
- **PROPOSAL** to eliminate the violation
- **ADVICE** to turn to the court, if this is the only or most effective way to protect their rights

2. IS THE CAUSE OF THE PROBLEM UNLAWFUL IMPLEMENTATION OF THE LEGAL NORM AND/OR VIOLATION OF GOOD ADMINISTRATIVE PRACTICE?

- **EXPLANATIONS** of how the complainant can protect their rights.

3. IS THE RESOLUTION OF THE MATTER BEYOND THE JURISDICTION OF THE CHANCELLOR OF JUSTICE?

OMBUDS INSTITUTIONS IN DIGITAL REALM

ROLE:

- Protection of fundamental rights and freedoms
 - Empowering human-centered approaches
 - Complaint handling
 - Inspection visits
- Shaping legislative landscape
 - Drawing attention to shortcomings
 - Participating in policy discussions
- Awareness raising

PREREQUISITES:

- Independence and fairly broad mandate, incl.:
 - Access to information
 - Own initiative
- Sufficient resources
- Expertise and knowledge

EXAMPLES OF DIGITALIZATION-RELATED CASES RESOLVED BY THE CHANCELLOR OF JUSTICE

■ **e-Identity**

- New ID-card software that failed to function with screen readers
- Obtaining a new ID-card from grocery stores

■ **e-Voting**

- Is the Estonian e-Voting free, uniform, general, direct, and secret?

■ **Access to e-services**

- Usability of the Register of Buildings and Public Procurement Register
- Proactive services for people with disabilities and youngsters

■ **e-Health system**

- Insurance companies' access to the Estonian e-Health system
- Errors in the vaccination appointment booking system

■ **Incorrect data in national registers**

- Deprivations of child benefits, health insurance and allowance for alone living pensioners

■ **The right to “be forgotten”**

- Information concerning the punishments

■ **Life without the Internet**

- Private entities should be able to communicate with the state electronically
- Individuals have the right to receive public services also without the Internet

■ **Awareness raising**

- Estonian e-State Charter



Question: Could AI replace ombuds institutions?

ChatGPT: AI has the potential to augment certain functions of ombuds institutions, such as data analysis and information retrieval. However, the human element of ombuds work, including empathy, judgment, and personalized interaction, is difficult to replicate. Therefore, complete replacement is unlikely, but AI can support and enhance their operations.



THANK YOU!

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