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## **Modernizing institutional communication in parliamentary offices, with a special focus on the digitalization of the parliamentary procedures in Hungary**

### **Summary**

In the 21st century, parliamentary offices have become increasingly important support institutions for democratically functioning legislative bodies, ensuring professionalism and expertise. Examining institutional parliamentary communication is essential when assessing the development of parliamentary structures and the challenges they face.

With the advancement of information technology, a key objective of parliamentary administrative structures has been to implement modern technological systems to support lawmakers' work. Institutional communication and digital transformation represent a broad, parliament-wide initiative that anticipates future needs and redefines the technological environment. By 2025, these tools will be critical to enhancing parliamentary efficiency.

However, the digital and communicational transformation also presents risks and complexities, requiring expertise, strong leadership, and strategic planning. Ambitions should be encouraged, but identifying risks – along with acknowledging cultural, financial, and resource constraints – means that limitations will always exist and must be accounted for.

**Keywords:** digitalization, parliaments, legislation, administration, cybersecurity.

### **1. Introduction**

Parliaments and their administrative bodies must continuously keep pace with the rapidly evolving technological environment. Consequently, legislation and its administration cannot be excluded from the digital transformation. By the 21st century, legislative drafting had already become an interdisciplinary

process, as laws have long ceased to be created on paper. Moreover, official legal texts are no longer published in printed format, but instead are released in electronically authenticated and promulgated forms (e.g., the Hungarian Official Gazette). As a result, IT specialists have replaced typists and stenographers, working alongside legal experts in codification. Due to the rapid and dynamic flow of information, the legislative process must now handle such large volumes of supplementary data that a paper-based system would be excessively slow and practically unmanageable.<sup>1</sup>

In the Hungarian Parliament, establishing and developing an IT infrastructure has been a long-term, high-priority task spanning multiple legislative cycles, especially following the regime change, which led to the creation of a new administrative structure.<sup>2</sup> Initially, IT developments were not system-wide, but rather isolated projects.<sup>3</sup> However, with ongoing digital advancements, the Parliamentary Legislative IT System (ParLex) emerged as a key achievement. Developed within the Office of the National Assembly, which was established in 1989, ParLex was a direct response to the continuous demand for technological progress. Today, ParLex stands as a cutting-edge IT development in Europe, automating key aspects of the legislative process within Parliament.<sup>4</sup>

The aim of this analysis is to examine how the modernization and digitalization of institutional communication within parliamentary offices can enhance the efficiency, transparency, and accessibility of legislative procedures. Special attention is given to the Hungarian Parliament, where digital transformation – particularly through systems such as ParLex – has reshaped internal workflows, document management, and communication channels between administrative units, legislators, and the public.

A research hypothesis, among others, is that *“the digitalization of parliamentary procedures significantly increases the efficiency and speed of legislative workflows.”* According to this hypothesis, the transition from paper-based systems to automated processes reduces processing delays, minimizes human error, and accelerates the circulation of draft legislation.

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<sup>1</sup> Vide etiam: Zódi Zsolt: „Introduction: Legal Technologies” in Zódi Zsolt (ed.): *Legal Technologies – Digital Legal Application* (Budapest, Ludovika University Publishing House, 2022.).

<sup>2</sup> The regime change of 1989 was one of the most significant events in 20th-century Hungarian history, leading to the establishment of the new Hungarian National Assembly and its administrative structure. Vide etiam: Nógrádi – Kerekes Margit – Németh Csaba (eds.): *The Hungarian National Assembly*. Országház Publishing, 2022.

<sup>3</sup> The previously used TAIR system operated as a local network-based, Access-based database system. Vide etiam: Pálfi Edina: „The Advancement of E-Solutions in the Legislative Process – The Functioning of ParLex and IJR from a Practical Perspective”, in: *Parliamentary Review*, 2021, nr 1, s. 152.

<sup>4</sup> Soltész István: „The History of the Office of the National Assembly: From an Administrative Bureau to a Professional Institution”, *Parliamentary Review*, 2017, nr 2, s. 150–163.

Another hypothesis is that *“the successful digital transformation of parliamentary communication depends not only on technological infrastructure but also on organizational adaptation and staff competencies.”* According to this hypothesis, even advanced systems – such as ParLex – can operate effectively only when supported by adequate training, procedural development, and cooperation between organizational units.

In connection with the modernization of institutional communication in parliamentary offices and the digitalization of parliamentary procedures, the following research methods may be applied: Qualitative document analysis, such as the examination of parliamentary rules, procedural regulations, and official reports related to digitalization (e.g., ParLex documentation). This method helps identify structural, procedural, and technological changes. Additionally, conducting personal interviews is essential, as they reveal practical experiences, communication patterns, and opinions regarding the use of digital systems.

## 2. The Role of Codification Systems in Supporting Legislative Work

The Legislative Support IT System (TIR) has its origins in the early 1990s. In 1992, the Office of the National Assembly developed the Legislative Support IT System (TAIR), an Access-based database system that operated exclusively on a local network. While TAIR required significant manual administrative effort, it facilitated the background work for processing budget bills. However, by the early 2010s, the system had become outdated, relying on obsolete technological solutions. Processing budget bills through TAIR was time-consuming, often taking days or weeks, even with a larger workforce. The process involved manually entering legislative proposals into the database line by line, as well as manually handling paper-based amendment proposals submitted by Members of Parliament (MPs.)<sup>5</sup>

The primary objective of developing the ParLex parliamentary IT system was to replace the previously used TAIR system (an Access-based database) with a more modern, user-friendly application capable of adapting to the continuously evolving IT landscape.<sup>6</sup> In 2013, the leadership of the Office of the National Assembly approved the concept for a new system.<sup>7</sup> This initiative aimed not only to automate the processing of budget bills – thus reducing the time required

<sup>5</sup> OGYH ParLex Presentation: Introduction and Functions (PowerPoint Presentation).

<sup>6</sup> User Manual for the „Parliamentary Legislative IT System (ParLex)” Development: <https://www.parlament.hu/documents/10181/773675/Parlex+k%C3%A9zik%C3%B6nyv+I.+r%C3%A9sz/f72a4bae-ce41-4dda-9d84-f228d277181e> [pobrano dn.: 9.02.2025].

<sup>7</sup> According to Section 30 (2) of Parliamentary Resolution 10/2014 (II. 24.) OGY on certain rules of procedure, in 2016, the Speaker of the National Assembly designated ParLex as the official platform for electronic document submission.

for administrative tasks – but also to incorporate mechanisms that would facilitate legislative drafting for proposers, including the government, MPs, and committees. These mechanisms ensured compliance with legislative formatting requirements and codification standards. The concept envisioned a web-based system that would be accessible anytime, from anywhere in the world, while ensuring data security. This system was designed to increase efficiency in both parliamentary and administrative work. Additionally, by integrating with other IT systems of the National Assembly, it enabled a transition from cumbersome, paper-based procedures to streamlined electronic document management.<sup>8</sup>

By 2013, the limitations of TAIR had become evident, and demand for a modernized system had grown. Researching international best practices provided<sup>9</sup> valuable insights for mapping Hungary's legislative processes. Based on these findings, the leadership of the Office of the National Assembly presented a proposal to the Speaker of Parliament for the development of a new IT system. The web-based functionality would allow users to access the system from any location, while ensuring the security of data and processes. Legislative documents could be edited and submitted electronically, significantly accelerating workflow efficiency. The goal was to provide participants in the legislative process with more time for substantive work than had previously been available.<sup>10</sup>

In 2013, with the available budget in mind, the Office of the National Assembly successfully prepared the technical specifications of the system and conducted a competitive selection process to identify the most suitable IT company for development. Shortly thereafter, the development phase commenced. During development, consultations were held with all key stakeholders in the legislative process, including government officials, MPs, and parliamentary staff. The system was developed using an agile methodology, allowing for continuous refinements based on user feedback. Developers demonstrated new system features every 2–3 weeks, ensuring an iterative approach that aligned with the evolving needs of legislators and administrators.<sup>11</sup>

## **2.1. Implementation of the Parliamentary Legislative Support IT System (ParLex)**

In the autumn of 2016, the National Assembly introduced ParLex, an electronic document editing and workflow management system. As of August 2, 2021, it became a subsystem of the Integrated Legislative System (IJR), which supports

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<sup>8</sup> ParLex Training Material: <https://www.parlament.hu> [pobrano dn.: 9.02.2025].

<sup>9</sup> For example, Denmark uses the Lex Dania system, while the European Parliament operates with the AT4AM system.

<sup>10</sup> ParLex Training Material: <https://www.parlament.hu> [pobrano dn.: 9.02.2025].

<sup>11</sup> OGYH ParLex Presentation: Introduction and Functions (PowerPoint Presentation).

legislative processes and workflows.<sup>12</sup> Today, the IJR covers the entire spectrum of governmental decision-making and preparatory processes while also facilitating the legislative activities of the National Assembly. By integrating central personnel registries, government authentication systems, and the national legal database, the system provides a comprehensive solution for the legislative process.<sup>13</sup>

In October 2016, the Speaker of the National Assembly designated ParLex as the official platform for electronic document submission.<sup>14</sup> The implementation process was carried out in two phases. The first phase, launched on October 17, 2016, introduced the system with limited functionality, primarily for staff within the Office of the National Assembly. To ensure secure real-world testing and application, members of the ParLex working group processed paper-based legislative and resolution proposals, recorded incoming amendment proposals in the system, and prepared committee amendments concluding detailed debates, as well as committee reports and summary reports. The latter were submitted electronically with the approval of committee chairs, assisted by parliamentary staff.<sup>15</sup>

The second phase, initiated at the beginning of the 2017 spring parliamentary session, aimed to establish a hybrid system allowing for both electronic and paper-based submissions.<sup>16</sup> From the start of the spring session, electronic submission became available but was not yet mandatory – proposers could still submit their motions in paper format. However, as of April 4, 2017, a House Committee resolution made electronic submission compulsory for legislative and resolution proposals. On November 9, 2018, the range of submissions

<sup>12</sup> Vide etiam: Kántor Ákos: „*Digitalization and Automation Opportunities in Legislation*” Parliamentary Review, 2023, nr 2, s. 39–56.

<sup>13</sup> Speaker of the National Assembly’s Notice on the Introduction of the Integrated Legislative System:

[https://www.parlament.hu/documents/10181/5568475/HB\\_t%C3%A1j%C3%A9koztat%C3%B3\\_IJR+bevezet%C3%A9se.pdf/ad4a6e83-7ee1-aada-1a70-6bccf2520a3e?t=1594368443067](https://www.parlament.hu/documents/10181/5568475/HB_t%C3%A1j%C3%A9koztat%C3%B3_IJR+bevezet%C3%A9se.pdf/ad4a6e83-7ee1-aada-1a70-6bccf2520a3e?t=1594368443067) [pobrano dn.: 12.02.2025].

<sup>14</sup> Speaker of the National Assembly’s Designation on the Electronic Submission of Legislative Proposals (Based on Section 30 (2) b) of the Procedural Rules):

<https://www.parlament.hu/documents/10181/773675/Meghat%C3%A1roz%C3%A1s+az+irrom%C3%A1nybeny%C3%BAjt%C3%A1s+elektronikus+form%C3%A1j%C3%A1r%C3%B3l/e2aa25b8-bbe3-4d16-b32a-2ab74ba7932a> [pobrano dn.: 12.02.2025].

<sup>15</sup> Speaker of the National Assembly’s Notice on the Introduction of the Integrated Legislative System:

[https://www.parlament.hu/documents/10181/5568475/HB\\_t%C3%A1j%C3%A9koztat%C3%B3\\_IJR+bevezet%C3%A9se.pdf/ad4a6e83-7ee1-aada-1a70-6bccf2520a3e?t=1594368443067](https://www.parlament.hu/documents/10181/5568475/HB_t%C3%A1j%C3%A9koztat%C3%B3_IJR+bevezet%C3%A9se.pdf/ad4a6e83-7ee1-aada-1a70-6bccf2520a3e?t=1594368443067) [pobrano dn.: 12.02.2025].

<sup>16</sup> The first non-administrative user of the system was Gergely Farkas, a Jobbik MP, who in February 2017 was the first to electronically submit an amendment proposal to Bill No. T/13472, which was processed by the working group.

required to be processed through the system was further expanded.<sup>17</sup> As a prerequisite for the second phase, ParLex was formally introduced at a governmental level during a meeting of administrative state secretaries. Additionally, further necessary system developments, identified during the first phase, were successfully implemented.<sup>18</sup>

## 2.2. Objectives of the Codification System

ParLex is a modern IT system designed to support legislative processes. It is built on an XML-based programming language that meets international standards and incorporates role-based access control, comprehensive data security, built-in automation, and template-based functionalities. ParLex serves two primary functions: document and legislative drafting, as well as workflow management.<sup>19</sup>

As part of the IJR, ParLex has undergone significant improvements. Currently, the drafting of legislative texts is carried out through the Electronic Legislative Drafting System (EJR) module. The EJR enables the creation and editing of legislative proposals in compliance with codification rules, which can be done in multiple ways: manually by entering or copying text, importing a Word file, or retrieving an integrated version of the base law from a legal database for editing and modification. This allows the system to automatically generate amendments, including new, supplementary, or revised legal provisions, and ensures the proper formatting of legislative texts. Additionally, the system detects and continuously tracks legal references, providing automated codification checks. The proposer can submit their draft immediately or schedule its submission. Once submitted, the proposal is assigned an official document number, and its text becomes publicly available on the parliament's website.<sup>20</sup>

Beyond document editing, the system also ensures that the legislative process is fully supported electronically. It facilitates the drafting and submission of supporting materials and non-independent proposals within the relevant procedural phase. Specific functions related to these parliamentary workflows require appropriate authorization. The system provides users with notifications and deadline tracking tools. Within the administrative framework, parliamentary

<sup>17</sup> This expansion covered the electronic submission of written and oral questions requiring answers, written responses, and interpellations. House Committee Resolution 5/2018–2022 on the Electronic Submission of Certain Motions:

[https://www.parlament.hu/documents/10181/111782/5\\_\\_2018\\_2022\\_HB\\_AF.pdf/1dof-1832-cb45-8f7c-8483-b68709727aac?t=1539677194000](https://www.parlament.hu/documents/10181/111782/5__2018_2022_HB_AF.pdf/1dof-1832-cb45-8f7c-8483-b68709727aac?t=1539677194000) [pobrano dn.: 20.02.2025].

<sup>18</sup> ParLex as a Predecessor of the IJR and Its Significance in Legislative Modernization – Lecture by Dr. Krisztián Gáva at the IJR Closing Event on August 26, 2021.

<sup>19</sup> OGYH ParLex Presentation: Introduction and Functions (PowerPoint Presentation).

<sup>20</sup> Ibidem.

staff can conduct codification reviews, process amendment proposals, prepare and publish committee background documents, organize submitted MP amendments by committee, and record committee positions. On the proposer's side, ParLex also allows for drafting amendments to already submitted proposals. The system automatically compares the original and modified texts, generating amendments in compliance with parliamentary formatting rules and legislative sequencing. Furthermore, proposers can use the system to prepare legislative summaries, compile consolidated legislative drafts, and leverage the pre-legislation integration feature, which directly incorporates amendments into the bill while automatically renumbering references.<sup>21</sup>

### 2.3. Regulation of Access Rights and Support for Using the System

As previously mentioned, the mandatory use of ParLex was introduced on April 4, 2017, following House Committee Resolution 1/2017 on the electronic submission of legislative proposals. To ensure the effective operation and practical use of the system, it was essential to establish a team of experts capable of sharing their knowledge. Therefore, as part of the system's rollout, a dedicated ParLex working group was formed within the Office of the National Assembly to train and support users. Starting from the end of the 2016 autumn session, the ParLex working group provided training sessions for both government ministries and parliamentary factions on the operation of the system. Over six months, more than 400 participants received training on the system's core functionalities, with hands-on practice available through a training platform. The training sessions followed a structured curriculum, beginning with basic knowledge, followed by advanced training. Each participant attended two 120-minute sessions in an IT training room, with class sizes of 12–15 people. In addition to in-person training, users were also supported by a user manual and instructional videos.<sup>22</sup>

In practical use, users are assigned different roles within the system. A broad range of individually assigned authorizations is available for government officials, MPs, parliamentary staff, and faction employees. While general functions are accessible to all users, specific administrative and legislative processes require strict authorization controls. Tasks within parliamentary workflows can only be performed by users with the necessary permissions. Proposers can edit and submit their legislative documents directly, and in cases where

<sup>21</sup> Integrated Legislative System: <https://www.parlament.hu/web/guest/ijr-20210802> [pobrano dn.: 20.02.2025]

<sup>22</sup> ParLex Training Information: <https://www.parlament.hu/documents/10181/5568475/IJR+honlapra+oktat%C3%A1si+t%C3%A1j%C3%A9koztat%C3%B3.pdf/fc55acbo-bed4-6136-08ced52424a7420d?t=1594368732422> [pobrano dn.: 21.02.2025].

additional authorization is requested, parliamentary staff can also assist in preparing submissions.<sup>23</sup>

## 2.4. User and System Security Responsibilities

Digitalization, the accelerating development of internet and mobile networks, the spread of smart devices, and the increasing volume of digital data – combined with artificial intelligence technologies – now influence nearly all aspects of life. The interconnected, decentralized, and rapidly expanding electronic information systems that make up cyberspace have become critical not only for everyday life but also for the functioning of governments and societies.<sup>24</sup>

In parliamentary administration, security issues have become a key concern in the 21st century. It is no longer sufficient for parliaments to ensure the personal security of their members and staff; they must also safeguard the democratic process and the constitutional integrity of parliamentary institutions. Since public security typically falls within the jurisdiction of the executive branch, several parliaments have established their own police forces or security agencies to maintain independence and uphold the separation of powers.<sup>25</sup> With increasing political polarization and risks of violence, ensuring the physical security of parliamentary spaces has become a major challenge, adding additional responsibility for the safety of MPs and staff members.<sup>26</sup>

Beyond physical threats, there is growing concern about data security in storage and transmission. Like many public and private institutions, parliaments are also vulnerable to cyberattacks, which can be particularly damaging due to their central role in democratic governance. These attacks may target confidential or privileged information or seek to manipulate decision-making processes. In a rapidly evolving threat landscape, ensuring parliamentary cybersecurity is a continuous challenge that requires constant adaptation. Cybersecurity has become a top priority, with most parliaments incorporating cybersecurity measures into their national legal frameworks.<sup>27</sup> Additionally, more than half of democratic

<sup>23</sup> ParLex as a Predecessor of the IJR and Its Significance in Legislative Modernization – Lecture by Dr. Krisztián Gáva at the IJR Closing Event on August 26, 2021.

<sup>24</sup> Vide etiam: von Lucke, J., Fitsilis, F., & Etscheid, J.: *Research and Development Agenda for the Use of ai in Parliaments*. Proceedings of the 24th Annual International Conference on Digital Government Research, 2023. s. 423–433.

<sup>25</sup> For example, in the Hungarian Parliament, the Parliamentary Guard, as a central budgetary institution performing law enforcement duties, is responsible for maintaining parliamentary security. Vide etiam Dukán, Ildikó – Varga, Aida (eds.): *The Functioning, Duties, and Powers of the National Assembly, Related Institutions*. Office of the National Assembly, Budapest, 2022, s. 385–387.

<sup>26</sup> Thomas Christiansen, Elena Griglio, Nicola Lupo: „A Global Perspective on the Role of Parliamentary Administrations” in: *The Routledge Handbook of Parliamentary Administrations*, 2023, s. 11.

<sup>27</sup> Ibidem.



parliaments have established internal cybersecurity strategies. In the past two years: 79% of parliaments have conducted cybersecurity training for staff members. 63% of parliaments have provided cybersecurity training for MPs.<sup>28</sup>

Representative democracy cannot be taken for granted, and it must be properly protected. At the same time, security measures must be balanced with the traditional autonomy of parliaments, ensuring that this responsibility is not entirely delegated to the executive branch.

## **2.5. Products of the Legislative Support IT System**

The Parliamentary Legislative IT System has significantly contributed to enhancing the quality of legislation. The submitted proposals are structured, transparent, and standardized. Since its implementation, the system has ensured efficiency, well-founded decision-making processes, information security, and simplified authorization management. ParLex has made internal workflows more streamlined and effective. Following its introduction, feedback from training sessions and subsequent user experiences has been overwhelmingly positive. User satisfaction has steadily increased with the regular use of the system.

In 2019, the Office of the National Assembly submitted the ParLex project for the European Public Sector Award (EPSA), a prestigious competition held biennially. The call for applications sought innovative and sustainable public sector solutions. The application was submitted electronically on May 17, 2019, to the European Institute of Public Administration (EIPA), where an independent panel of European experts evaluated the submissions through a consensus-based decision-making process. Competing against 81 projects in the highest-level European and national category, ParLex underwent an extensive evaluation process over several weeks. On June 17, 2019, the EIPA notified the Office of the National Assembly via email that the expert jury had awarded the ParLex project a “Best Practice” certification.<sup>29</sup>

Another key achievement of ParLex is that government ministries can now efficiently draft bills and unified legislative proposals within the system. Additionally, it facilitates the electronic submission of responses to written parliamentary questions. Written questions are among the most commonly submitted motions by MPs, and with ParLex, these can be easily processed and submitted electronically to the Government, individual ministers, the Commissioner for Fundamental Rights, the President of the State Audit Office, the Prosecutor General, and the Governor of the Hungarian National Bank. Furthermore, parliamentary faction staff can use the system to assist MPs in drafting legislative proposals. For

<sup>28</sup> IPU: World e-Parliament Report 2024: <https://www.ipu.org/resources/publications/reports/2024-10/world-e-parliament-report-2024> [pobrano dn.: 21.02.2025].

<sup>29</sup> OGYH Report on the EPSA Award Ceremony, Maastricht, November 18, 2019.

parliamentary staff, the system simplifies the preparation of background materials for debates, as well as the drafting of non-independent motions, particularly those related to committee work. The system also allows MPs and the Government to submit their proposals outside regular working hours, ensuring more flexibility and additional time for preparation. Since the introduction of mandatory electronic submission in 2017, the vast majority of legislative proposals are now processed through ParLex. The elimination of time and location constraints has made the system highly convenient, which is why most users prefer it.<sup>30</sup>

The primary objective of developing and implementing ParLex was to digitally facilitate the legislative process within the National Assembly. Today, the IJR (Integrated Legislative System), which includes ParLex among several subsystems, provides comprehensive support for the legislative process. It covers all aspects of legislation, from local government regulations to national lawmaking, including EU notifications and the promulgation of laws. The IJR ensures a precise and up-to-date legal registry that meets modern standards and is trusted by both legislators and legal practitioners.<sup>31</sup>

### 3. Conclusion

Beyond cybersecurity concerns, the broader digital transformation presents new challenges for parliamentary administration. Digitalization affects every aspect of administrative work and also has significant implications for the political functions of parliament. Therefore, achieving a „paperless parliament” requires continuous political and administrative efforts to promote digital organizational development. This transition represents a fundamental shift in parliamentary administration<sup>32</sup>, and many legislatures have been working towards this goal for quite some time. Some parliaments have been slower to adapt to digitalization, but the COVID-19 pandemic accelerated digital transformation across both administrative procedures and political activities, as well as in engagement with society.<sup>33</sup>

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<sup>30</sup> OGYH Report Based on an Interview with Gábor Molnár, December 28, 2021 (Online Consultation).

<sup>31</sup> ParLex as a Predecessor of the IJR and Its Significance in Legislative Modernization – Lecture by Dr. Krisztián Gáva at the IJR Closing Event on August 26, 2021.

<sup>32</sup> Among others, Israel, Ireland, Korea, and Switzerland have implemented similar digital legislative systems. See more: IPU: World e-Parliament Report 2024: <https://www.ipu.org/resources/publications/reports/2024-10/world-e-parliament-report-2024> [pobrano dn.: 25.02.2025].

<sup>33</sup> Vide etiam: Rozenberg, Olivier: *“Post Pandemic Legislatures. Is real democracy possible with virtual parliaments?”* European Liberal Forum, Discussion Paper, 2, July 2020.

In summary, based on several years of experience following the introduction of ParLex, it is clear that the system provides numerous advantages, leading to high user satisfaction. The use of ParLex – and now the broader IJR – has significantly advanced paperless, efficient legislative processes. Furthermore, ParLex played a crucial role during the pandemic, ensuring seamless operations and efficient task management.

These new IT developments have simplified the work of the Office of the National Assembly (e.g., planning sessions, agendas, and voting schedules) and have also greatly benefited MPs. Many of these functions are also publicly accessible through the parliamentary website, enhancing transparency and allowing for greater public insight into parliamentary activities.<sup>34</sup>

The transition to a digital parliamentary organization requires both technological and human resource adaptation. On the one hand, it depends on new technological infrastructures. On the other hand, digitalization necessitates the involvement of personnel with advanced digital expertise, ensuring that the parliament maintains autonomy and technical capacity in IT resource management and content creation. Parliamentary administrations are setting ambitious goals in their approach to modern technologies and digital processes, aiming to enhance openness and transparency<sup>35</sup> in legislative activities. These efforts are crucial in providing efficient governance solutions for present and future generations.<sup>36</sup>

This summary is scientific-research in nature, as it synthesizes empirical observations, evaluates institutional developments, and provides an analytical perspective on the digital transformation of parliamentary administration. Its purpose is not merely descriptive; rather, it aims to contribute to the academic understanding of how digitalization reshapes legislative processes, administrative structures, and democratic transparency.

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<sup>34</sup> The Office of the National Assembly currently operates approximately 1,100 office workstations within its IT network. Vide etiam : Soltész, István: „*The History of the Office of the National Assembly: From an Administrative Bureau to a Professional Institution*” Parliamentary Review, 2017, nr 2.

<sup>35</sup> Dr Darren, O’Donovan: *Evaluating Automation: The Need for Greater Transparency* In J. Boughey and K. Miller (eds.), *The Automated State: Implications, Challenges and Opportunities for Public Law*, 2021. Federal Press.

<sup>36</sup> For example, applications related to shorthand and minutes are in use in Estonia and Japan, while e-petitions have been introduced in Belgium, Estonia, and Luxembourg. See: Christiansen, Griglio, Lupo, op. cit., s. 12.

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## **Modernizacja komunikacji instytucjonalnej w biurach parlamentarnych, ze szczególnym uwzględnieniem digitalizacji procedur parlamentarnych na Węgrzech**

### **Streszczenie**

W XXI wieku biura parlamentarne stały się coraz ważniejszymi instytucjami wspierającymi demokratycznie funkcjonujące organy ustawodawcze, zapewniającymi profesjonalizm i ekspertyzę. Analiza komunikacji instytucjonalnej w parlamentach jest niezbędna do oceny rozwoju struktur parlamentarnych oraz wyzwań, przed którymi stoją.

Wraz z postępem technologii informacyjnych kluczowym celem parlamentarnych struktur administracyjnych stało się wdrażanie nowoczesnych systemów technologicznych wspierających pracę ustawodawców. Komunikacja instytucjonalna oraz transformacja cyfrowa to szeroko zakrojona inicjatywa obejmująca cały parlament, której celem jest przewidywanie przyszłych potrzeb i redefinicja środowiska technologicznego. Do 2025 roku narzędzia te będą kluczowe dla zwiększenia efektywności parlamentu.

Jednak przemiany cyfrowe i komunikacyjne niosą ze sobą również ryzyko i złożoność, wymagając ekspertyzy, silnego przywództwa oraz strategicznego planowania. Ambicje powinny być wspierane, ale identyfikacja ryzyk – wraz z uwzględnieniem uwarunkowań kulturowych, finansowych i zasobowych – oznacza, że ograniczenia będą zawsze istniały i należy je uwzględnić.

**Słowa kluczowe:** cyfryzacja, parlamenty, ustawodawstwo, administracja, cyberbezpieczeństwo.