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Electronic document management systems as a key area in the digitisation of criminal proceedings

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Abstract

This article analyses the document management systems in operation within law enforcement agencies and the criminal justice system. The author presents individual solutions in a comparative framework, highlighting key areas in the context of the effective digitisation of criminal proceedings. An important aspect of the study is the issue of system compatibility, ensuring they can be used not only for the needs of a specific public administration body. Following the analysis, the author formulates conclusions regarding the proposed systemic solutions, which would certainly enhance the effectiveness of efforts to digitise the criminal justice process and ultimately speed up proceedings. The key challenges associated with the practical application of the discussed solutions are also presented.

Keywords

Digitisation, document, document management, efficiency of proceedings, procedural steps.

Introduction

In my previous discussions on the aspects of digitisation and computerisation, I have addressed two key concepts, namely the digitisation and computerisation.¹ However, in the context of further discussion, it is necessary to clarify the terms cited, which are used by authors in the literature covering court proceedings (criminal, civil, administrative). J. Gołaczyński and D. Szostek² used

¹ See, inter alia, J. Kosowski, Directions for the effective digitisation of criminal proceedings, Bulletin of the Association of Graduates and Friends of the Faculty of Law, Catholic University of Lublin 2022, vol. XVII, 19 (1), pp. 151–170; J. Kosowski, Deformalisation and digitisation as a direction for the development of criminal proceedings [in:] ed. B. Śliwczyński, L. Łuczak-Noworolnik, E-Justice in a European Context, Poznań 2016, pp. 111–21.

² J. Gołaczyński, D. Szostek, Computerisation of civil proceedings. Commentary, Warsaw 2016, pp. IX–XI.

the term ‘computerisation’, pointing to the introduction of electronic registers (the National Court Register, land and mortgage registers), but drew attention to the introduction of electronic summary proceedings. However, they did not define the term ‘computerisation’. A. Arkuszewska³ pointed out that computerisation involves the use of information and communication technologies, which already relates to information processing. A. Kościółek⁴, on the other hand, did not use any of the terms mentioned, limiting herself to statements regarding the application of modern technologies or electronic procedural steps.

The Polish Language Dictionary defines computerisation as the use of modern methods of information processing in proceedings⁵. Electronisation, on the other hand, refers to the introduction of electronic devices into proceedings.⁶ In my previous remarks, I noted that both of the terms cited are therefore applicable to the issue under discussion. It seems, however, that the concept of electronisation is primary in nature, whilst computerisation is secondary. The starting point is, after all, the introduction of electronic devices into proceedings. Examples include: computer hardware, audio-visual equipment for video conferencing, transcription software, and electronic signatures. The introduction of electronic devices paves the way for computerisation, i.e. the use of modern methods of information processing. It should be borne in mind, however, that we are not always dealing with the use of modern methods of information processing, but merely with the simple use of equipment, e.g. in videoconferencing, electronic signatures, e- s of evidence, etc.⁷ For this reason, it is appropriate to use the term ‘electronisation’ for the purposes of this study.

The prerequisites for effective digitisation include, amongst other things, the tools used for the day-to-day administrative operations of law enforcement agencies and the criminal justice system. The aim of this study is to analyse the tools currently in use for electronic document management within the aforementioned units of the public administration in the broad sense, as well as to identify directions for further legislative changes that would enable the effective digitisation of criminal proceedings, taking into account all participants.

Given the nature of the subject under investigation, this study employs both historical-legal and dogmatic-legal methodologies. Statistical data are not included in this work due to the fact that the institutions described do not maintain aggregate data within the scope of the analysis. Instead, aspects related to the implementation of public procurement in the area of access to document management systems are presented.

Electronic document management systems in the public prosecutor’s office

The PROK-SYS system is currently in use across public prosecution offices; it was implemented as part of an IT project entitled ‘Development of a system for the digitisation of case files in criminal investigations’. This project was co-financed by the European Regional Development Fund under the Digital Poland Operational Programme. By the end of 2021, the project “Development of the ISDA 2.0 system for the digitisation of pre-trial case files in criminal

³ A. Arkuszewska, *Computerisation of Arbitration Proceedings*, Warsaw 2019, p. 21.

⁴ A. Kościółek, *Electronic procedural steps in civil court proceedings*, Warsaw 2012, pp. 18–19.

⁵ <https://sjp.pwn.pl/szukaj/informatyzacja/.html> [accessed: 07.12.2025]

⁶ <https://sjp.pwn.pl/szukaj/elektronizacja.html> [accessed: 07.12.2025]

⁷ J. Kosowski, *Directions for the...*, p. 152.

matters”, worth nearly PLN 190 million, had been implemented. The overall objective of the project was to reduce restrictions on access to and the transfer of materials in pre-trial proceedings by expanding the IT system supporting processes related to the provision of access to pre-trial case files in criminal cases, as well as processes related to the collection and transmission of information concerning ongoing proceedings. The project was a continuation of a series of measures undertaken by the Public Prosecutor’s Office; in particular, it is a continuation of a project implemented using funds from the Innovative Economy Operational Programme, under which a system was implemented to digitise the files of pre-trial proceedings in criminal cases conducted by district and regional public prosecutor’s offices, which was subsequently continued using funds from the Digital Pol Operational Programme (the iSDA project), but due to the contractor’s inability to complete the contract for the development of the System’s software, the project was discontinued. It aimed to achieve the project’s objective through: the design, development and implementation of the System’s software; the implementation of the Central Infrastructure Services necessary for the provision of e-services for the sharing of files; and the procurement of the necessary infrastructure.⁸

The primary function of the PROK-SYS system is the digitisation of files relating to pre-trial proceedings conducted by public prosecutors’ offices. When evidence, such as interview transcripts, documents, photographs or other evidence, is received by a public prosecutor’s office, staff scan these documents using specialised scanners. The system automatically recognises the type of document and assigns it to the relevant case and the appropriate section of the file. Each scanned document is tagged with metadata, such as the date of creation, document type, file reference number and case reference. The system uses OCR (Optical Character Recognition) technology, which allows the content of scanned documents to be searched.

The PROK-SYS IT system, which enables, amongst other things, access to digitised case files from criminal investigations, was rolled out across all organisational units of the Public Prosecutor’s Office last year. Access to the files is available via the File Viewing Portal⁹. To gain access to the files, you must first check with the relevant organisational unit of the Public Prosecutor’s Office conducting the proceedings to ascertain whether the files for the criminal case in question have been digitised, and then submit a request to the prosecutor in charge of the proceedings for permission to access these files via the internet. Once the prosecutor has granted consent and specified the duration of access, the applicant will be provided with a username and password to log in to the portal.

A key challenge associated with the portal’s operation is that access to files is only possible where they have been digitised, which is not currently the norm and does not apply to 100% of cases. As of 13 May 2025, the file digitisation process had already covered 1.2 million cases. The digitisation rate for cases in district public prosecutor’s offices is 40%, in regional public prosecutor’s offices 76%, and in regional public prosecutor’s offices 84%.¹⁰ From the perspective of the largest number of cases, it is precisely the small percentage of digitised files

⁸ <https://www.gov.pl/web/popcwsparcie/rozwoj-systemu-digitalizacji-akt-postepowan-przygotowawczych-w-sprawach-karnych>, [accessed: 07.12.2025]

⁹ <https://portalzewnetrzny.prokuratura.gov.pl/>, [accessed: 10.12.2025].

¹⁰ <https://www.gov.pl/web/po-warszawa/dostep-online-do-akt-postepowan-karnych-za-posrednictwem-portalu-przegladania-akt> [accessed: 7.12.2025]

from preliminary proceedings conducted by district prosecutor's offices that will constitute a barrier to the effective digitisation of the criminal process in its initial stage. Also significant is the lack of links between the system in question and other law enforcement agencies, i.e. non-prosecutorial bodies, which conduct the majority of investigations and some of the inquiries.

Electronic document management systems in courts

The Sędzia 2 system

The SĘDZIA 2 system is a product of ZETO-Świdnica Sp. z o.o., based at 15 Grodzka Street in Świdnica. This company is the sole owner of the copyright to this software. According to the tender documentation, the licence for the system is granted for an indefinite period.

The SĘDZIA 2 system was built as a web application with a three-tier architecture. This means that it consists of three main components: a central SQL Server database, an application server, and a user interface accessible via a web browser. At the heart of the system's operation is the management of the case register, i.e. the record of all cases handled by the court. When a new claim or application is received by the court, a registry clerk registers it in the system. SĘDZIA 2 automatically assigns a case reference number, which consists of the department code, the type of case, and a sequential number and year. The SĘDZIA 2 system records all correspondence relating to the case. When a letter is received from a party to the proceedings, a representative or another participant, it is registered in the system with the date of receipt, the sender and a brief description of the content. If a document is received in paper form, a member of staff may scan it and attach the scan to the electronic case file.

Public procurement procedures relating to the SĘDZIA2 system are conducted on a decentralised basis. For example, in 2024, the Regional Court in Poznań carried out a contract for IT support for the SĘDZIA2 system used by the Regional Court and twelve subordinate District Courts specifically in Grodzisk Wielkopolski, Nowy Tomyśl, Wolsztyn, Chodzież, Śrem, Kościan, Oborniki, Środa Wielkopolska, Złotów, Gostyń, Rawicz and Września. Legal basis for the procedure used: The contract was awarded pursuant to Article 214(1)(1)(a) and (b) of the Public Procurement Law. This is a so-called single-source contract, i.e. without a competitive tender. Interestingly, contracts relating to the system in question are implemented in a wide variety of ways. For example, in 2022, the Regional Court in Elbląg carried out a public contract for IT support for the entire ZETO system package, comprising the SĘDZIA 2 system, the Court Receivables Register 2, the KURATOR 3 system, the Court Curators' Portal and the Central Printing module. An analysis of data from the eGospodarka.pl portal shows that ZETO-Świdnica won contracts worth a total of nearly nineteen million zlotys. It won the most tenders in 2022, when it secured eighteen contracts. The Regional Court in Poznań awards it contracts most frequently. The largest single contract awarded to ZETO-Świdnica was for the supply of licences for an e-office system, including implementation, maintenance and training, for the District Court for the Capital City of Warsaw. The value of this contract amounted to over 865,000 zlotys.¹¹

¹¹ <https://www.przetargi.egospodarka.pl/kto-wygral/13941290,zeto-swidnica-sp-z-o-o.html>, [accessed: 7.12.2025]

The system integrates with twelve other platforms, including e-Payments, the Information Portal, e-Minutes and the ReCourt system for recording court hearings. The court hearing calendar offers a graphical room booking system with automatic generation of summonses and SMS/email notifications for participants in the proceedings. Timeliness monitoring operates in real time with a delay alert system, enabling the early detection of arrears. The Court Receivables Register 2 (KNS 2) automatically calculates fees, monitors arrears and generates payment reminders, maintaining a complete financial record. The KURATOR 3 system supports the work of probation teams through a register of clients, a meeting calendar and automatic reports for judges.

When analysing the functionalities of the SĘDZIA 2 system, key areas can be identified, such as time savings for staff, better planning of day-to-day activities, , and more efficient customer service. With regard to case numbering, it is worth noting the absence of numbering errors, the elimination of duplicates, and a full history of changes. Document workflow is characterised by the elimination of errors in addresses, faster document creation, and consistency of documentation. The integration of the SĘDZIA 2 system with the ReCourt tool for recording hearings is intended to ensure the accuracy of testimony, the ability to listen to excerpts, and the elimination of disputes over the content of the transcript, provided that the shortcomings associated with real-time automatic transcription of speech into high-quality text are resolved. An important aspect is the functioning of the archive, including real-time full-text search, the prevention of document loss, and the tracking of change history and accountability for the process. In terms of reporting, it is important to have an objective assessment of effectiveness, rapid identification of problems, and the automatic generation of reports in accordance with the guidelines and recommendations of management and supervisory bodies.

The Currenda system

The CURRENDA system is a product of CURRENDA Sp. z o.o., which is the dominant provider primarily in the Warmian-Masurian region and, to a lesser extent, in the Masovian Voivodeship. It is the second-largest supplier of case management and office systems for courts in Poland. The CURRENDA system performs the same basic functions as SĘDZIA2, namely case management, case registration, document management, hearing scheduling and the generation of statistics. The differences mainly concern technical implementation details and the user interface. CURRENDA also offers a separate product called CURRENDA BOI, which is a Customer Service Office system. This is specialised software designed to assist people visiting the court to submit a document, enquire about a case or collect documents. The BOI system integrates with the main case management system, retrieving case data from it, but offers a simplified interface tailored for use at a customer service desk.

As with the SĘDZIA 2 system, the CURRENDA system was procured on a distributed basis through public procurement. One example is the tender conducted by the Regional Court in Kraków in 2024 ; the highest-valued contract awarded to CURRENDA that year did not concern the case management and office system itself, but an innovative solution. The Regional Court in Kraków announced a tender for the supply and implementation of a system for marking files using RFID tags. The value of this contract amounted to over 762,000 zlotys, making it the most expensive single contract awarded to CURRENDA. According

to the manufacturer, Currenda – RFID is a comprehensive solution facilitating the quick and simple recording and retrieval of files within premises. RFID stands for Radio-Frequency Identification, i.e. identification using radio waves. This technology enables the reading, transmission of data and powering of electronic chips that store information. Depending on the type of sticker (RFID tag) and the chip embedded in it, data can be written to or read from a distance ranging from several dozen centimetres to even several metres. The system allows for the simultaneous reading of many different tags within the range of the RFID reader or antenna.¹²

An analysis of public procurement leads to the conclusion that an important area is not only the purchase of a licence, but its subsequent operation after the initial period has ended. For example, in May 2023, the District Court for Warsaw-Mokotów announced a contract with reference number OG-26-2-5/23 concerning the continuation of the CURRENDA software. This procedure was conducted as a contract with a value of less than 130,000 zlotys. The very term 'software continuation' indicates an extension of a previously existing service contract.¹³

CURRENDA Sp. z o.o. has won a total of one hundred and fifty-nine public contracts with a combined value of over twenty-nine million zlotys. The record year was 2024, when the company won forty-two tenders. The Regional Court in Olsztyn awards it contracts most frequently. In Olsztyn, CURRENDA won as many as forty-six tenders with a total value of nearly seven million zlotys. Warsaw comes second with twenty-one tenders worth over four million zlotys. Next are Łomża (nine tenders, over 1.7 million zlotys), Białystok (seven tenders, over 800,000 zlotys) and Siedlce (six tenders, over one million zlotys).¹⁴

When analysing the functionalities of the Currenda system, as with the Sędzia 2 system, key areas can be identified, such as time savings for staff, improved planning of day-to-day activities, and more efficient customer service. In terms of case numbering, it is worth noting the absence of numbering errors, the elimination of duplicates, and a complete history of changes. Document workflow is characterised by the elimination of errors in addresses, faster document creation, and consistency in documentation. An innovative solution in the area of document management is the RFID module described above, which ensures the security of files, eliminates the possibility of them being lost, reduces the risk of theft, and fully defines responsibility for files by providing an audit trail and ensuring the efficient determination of their last location.

An important aspect is the functioning of the archive, including real-time full-text search, the elimination of the possibility of documents being lost, tracking of change history, and accountability for the process.

The Orcom system

The Orcom system is also in use in the ordinary courts. The ORCOM system is a product of the ORCOM Computer Systems Design Department, a general partnership of three partners. Unlike the SĘDZIA 2 and CURRENDA

¹² <https://www.currenda.pl/produkty-i-uslugi/dla-sadow/moduly-dodatkowe/currenda-rfid/>, [accessed: 7.12.2025]

¹³ <https://mokotow.sr.gov.pl/og-26-2-523-kontynuacja-oprogramowania-currenda,new,mg,245,292.html,2244>, [accessed: 7.12.2025]

¹⁴ <https://www.przetargi.egospodarka.pl/kto-wygral/14014440,currenda-sp-z-o-o.html>, [accessed: 7.12.2025]

systems, which are comprehensive case management and office systems, ORCOM specialises primarily in systems for handling court receivables and other specialised applications.

The OrCom.Web Court Receivables System is used to record and enforce monetary claims arising from court judgments. When a court issues a judgment ordering a party to pay a specific amount, this information is entered into the receivables system. This may, for example, be a fine in a criminal case, compensation for the victim, maintenance payments in a family case, or awarded court costs. The system maintains a register of debtors, recording all claims awarded against them. When a debtor makes a payment, the system automatically posts it and allocates it to the relevant claim. If the debtor does not pay voluntarily, the system supports the debt recovery process by generating reminders, enforcement orders and documents for enforcement authorities. From the above description of the system, it is clear that its application to the administration of justice in criminal matters will not be significant. However, it is worth noting the Victim Support and Post-Release Assistance Fund module, which records receipts into the Fund with automatic accounting and reporting.

Conclusions

The presented analysis of existing electronic document management systems within law enforcement agencies and the criminal justice system leads to a key conclusion. The activities undertaken are fragmented and are carried out within individual groups of agencies. This fragmentary nature also applies to the tool's functionality, i.e. whether it is treated as a simple document management system (EZD) or as a comprehensive tool covering proceedings at every stage. Whilst the system operating within the Public Prosecutor's Office is consistent across all its units, the courts already deal with several distinct systems. The operation of various electronic tools for process management is not a desirable solution. This is illustrated by the situation regarding the implementation of the electronic document management system (EZD) in public administration bodies. It must therefore be recognised that a single, consistent system in place across all units of the Public Prosecutor's Office is the optimal solution, compared to the multiple systems in use within the judiciary. However, it should be advocated that all bodies operating within the criminal justice system use a single system, which would streamline work and the transfer of documents (files, correspondence) between these entities without the need for additional data migration activities.

From the many commercial products available on the market, administrative bodies selected various tools, which did not promote uniformity and interchangeability.¹⁵ The development by NASK of the EZD RP tool as the successor to EZD PUW should therefore be viewed positively. The idea of implementing the tool at a central level is to ensure an increased level of security for users and resilience to the volatility of the commercial market, which could result in excessive increases in system maintenance fees following the significant expenditure associated with its earlier implementation. It is also significant that

¹⁵ See, inter alia, P. Hic, R. Nowakowski, Electronic document management as an example of the computerisation of public administration, *Acta Universitatis Wratislaviensis Law* 2017, No. 323, pp. 25–34; M. Smoczyński, The EZD PUW electronic document management system and internal regulations governing document management in local and central government administrative units in the field (2011–2021), *Selected aspects*, *Archeion* 2022, vol. 123, pp. 184–217.

the proposed tool incorporates the Common Courts Information Portal, a tool that was intended to be a breakthrough for the Polish justice system befitting the 21st century, but which currently fails to meet the expectations of those involved in proceedings, given its limited functionality.

It is therefore necessary to advocate the application of analogous solutions to the EZD RP tool, which would ensure uniformity for all law enforcement and judicial authorities in criminal matters. I am referring here to both prosecutorial and non-prosecutorial law enforcement authorities. Only comprehensive implementation across all authorities would ensure the effectiveness of efforts to digitise the criminal justice process, and consequently its speed. The argument for the seamless transfer of data (i.e. cases, documents) within a single system between authorities, without the need for other – parallel – IT tools, is not without significance. In this regard, it will be important to draw on experience in implementing the commercial tools mentioned in this study, including end-user feedback during the evaluation phase and the removal of key barriers to operational efficiency. The various additional modules available in commercial tools should be implemented within a single, coherent system, which would ensure a high standard of process management, whilst also significantly reducing the workload on administrative staff – the key personnel responsible for the daily ‘struggle’ to maintain procedural efficiency amidst the millions of documents in circulation.

In summary, the implementation of the recommendations outlined should take place without delay. To this end, consideration should be given to expanding the Digital Court project, which has been progressively implemented over the past few months.¹⁶ Admittedly, the project envisages the creation of a tool for the electronic transfer of documents from the public prosecutor’s office to the courts; however, this still implies the existence of two or more systems.

The development and improvement of document management systems currently pose a challenge to the efficiency of criminal proceedings. Data presented in 2026 show that the time taken to process cases is increasing.¹⁷ This indicates that the existing, piecemeal attempts at digitisation are not yielding the intended results. It should therefore be assumed that developments in electronic document management systems will affect the time taken to carry out individual tasks, which, combined with the faster implementation of electronic correspondence with parties to the proceedings, will result in a real acceleration of the processing of criminal cases.

Apart from the fundamental conclusion outlined above, it would be remiss not to mention other areas of change arising from current experience. From the perspective of carrying out the duties of a professional legal representative, the efficiency of access to case files is of the utmost importance to me. The data cited regarding the digitisation of pre-trial proceedings files in district public prosecutor’s offices does not paint an optimistic picture, given the large number of cases handled by non-prosecutorial bodies outside the cited system. Furthermore, the systems in operation within the courts do not provide access to case files, not to mention the provisions of subordinate legislation. These issues,

¹⁶ <https://www.gov.pl/web/sprawiedliwosc/program-cyfrowy-sad-zmieni-wymiar-sprawiedliwosci> (accessed: 01.02.2026)

¹⁷ <https://www.rp.pl/w-sadzie-i-w-urzedzie/art43932631-mialo-by-szybciej-a-jest-wolniej-ile-czekalo-sie-na-wyrok-sadu-w-2025-r> (accessed: 10.03.2026)

combined with the shortcomings of the Common Courts Information Portal¹⁸, highlight the need for a swift decision at the political level regarding amendments to the relevant legislation and, crucially, the allocation of funds to create a tool that is not merely a simple electronic document management system, but also containing additional modules to streamline and accelerate the day-to-day work of law enforcement agencies and the judiciary in criminal cases.

Bibliography

- Arkuszewska A., Computerisation of arbitration proceedings, Warsaw 2019.
- Gołaczyński J., Szostek D., Computerisation of civil proceedings. Commentary, Warsaw 2016.
- Hic P., Nowakowski R., Electronic document management as an example of the computerisation of public administration, *Acta Universitatis Wratislaviensis Law* 2017, No. 323.
- Kosowski J., Directions for the effective digitisation of criminal proceedings, *Bulletin of the Association of Graduates and Friends of the Faculty of Law, Catholic University of Lublin* 2022, vol. XVII, 19 (1).
- Kosowski J., De-formalisation and digitisation as a direction for the development of criminal proceedings [in:] ed. B. Śliwczyński, L. Łuczak-Noworolnik, *e-Justice in a European context*, Poznań 2016.
- Kościółek A., *Electronic procedural steps in civil court proceedings*, Warsaw 2012.
- Smoczyński M., The EZD PUW electronic document management system and internal regulations governing document management in local and central government administrative units in the field (2011–2021), *Selected aspects*, *Archeion* 2022, vol. 123.

¹⁸ This opinion is not altered by the Portal's piecemeal changes regarding the possibility of submitting a small proportion of documents via the Portal, but only through professional representatives (see the Act of 9 July 2025 amending the Act – Code of Criminal Procedure and certain other acts, *Journal of Laws* of 2025, item 1178).