Europäisches Patentamt
European Patent Office
Office européen des brevets

Digital Transformation Report 2024

Annex to the Annual Review

epo.org

Executive summary

The Digital Transformation Report 2024 outlines the activities aimed at enhancing the EPO's digital infrastructure and services. Guided by the Strategic Plan 2028 (SP2028), we are committed to leveraging technology to improve efficiency, quality and sustainability.

Our overall goal is to set up a robust digital ecosystem. This means removing dependencies on outdated legacy systems, incorporating secure cloud technologies and ensuring the high availability of IT systems. But that is only part of the equation. There is also a drive to simplify processes prior to their digitalisation. This reflects our aim to genuinely improve workflows, rather than merely replace them with imperfect digital copies.

In 2024, we reached a significant milestone by fully digitalising examiner actions with workflows. The introduction of AI-supported classification improved accuracy and consistency too. Furthermore, ANSERA was fully adopted by the examiner community, becoming the exclusive tool for searching and viewing prior art. The launch of the web search assistant (WSA) also made it far easier to access scientific and academic records. Lastly, we prioritised environmental sustainability by providing cited patent literature exclusively in electronic format, saving six million pages of paper annually.

In the corporate applications domain, significant strides were made towards modernising and simplifying systems. Achievements included the introduction of user-friendly self-service tools supporting HR processes. We also transitioned to an activity-based budgeting model, enhancing financial transparency and efficiency, and rolled out a new procurement tool, streamlining procurement processes and improving supplier management. The document management platform was further developed and a new retention policy implemented to promote sound record management. We piloted MS Copilot, an AI-powered assistant, and achieved positive outcomes, indicating strong uptake and potential for further adoption.

Expanding the MyEPO services suite and releasing new functionalities throughout 2024 enabled us to significantly enhance the quality and transparency of online services by improving the user experience with new options, streamlined workflows and enhanced self-service capabilities. Additionally, the development of business-to-business application programming interfaces (APIs) facilitated seamless data exchange between MyEPO services and various intellectual property (IP) systems. Growing interest was also seen in the "shared area" feature which allows for real-time collaboration between examiners and representatives, further improving efficiency and user satisfaction.

The EPO is working closely with key partners and stakeholders to accelerate the digital transformation of the IP industry. We successfully conducted three working group sessions on IT co-operation, involving over 140 delegates from more than 30 countries. As well as supporting member states in implementing Front Office and ANSERA-based SEARCH, we also enhanced interoperability between the EPO and national patent offices (NPOs). Interoperability will be further facilitated through the Digital Toolkit, APIs and interconnectors. We continued to collaborate with the member states on information security matters.

Retiring several legacy tools and systems contributed to modernising our infrastructure and improving operational efficiency. Key achievements included the decommissioning of legacy classification and search tools. In the corporate domain, the legacy data analytics service was replaced by an open-source platform, generating significant cost savings. Several online tools were also decommissioned, including the legacy Mailbox, MyFiles and Administration facilities services. The transition to two-factor authentication allowed for the phasing out of smartcards, further enhancing the security of our online services.

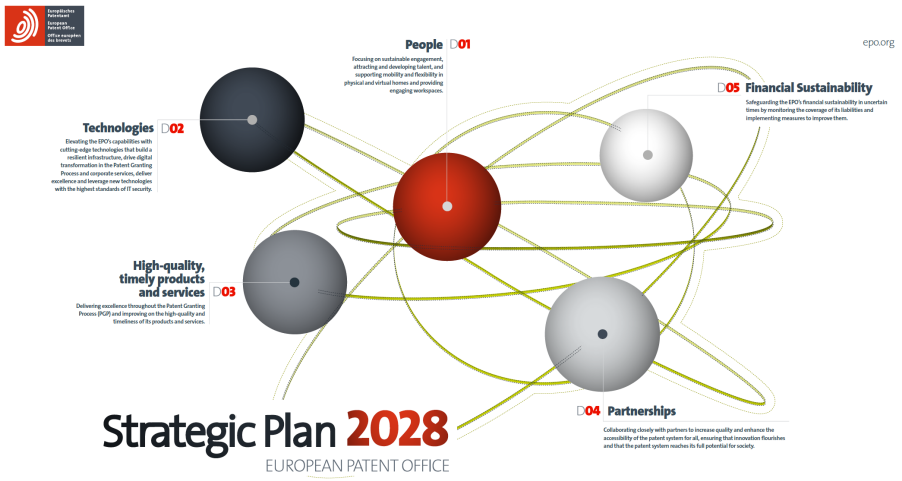
Our digital transformation journey in 2024 was marked by clear advances across various domains. As we continue to innovate and collaborate with our partners, the EPO remains committed to exploring how technology can help us to meet the evolving needs of our users and shape the future of intellectual property.

Contents

1. Strategic context of the digital transformation at the EPO

The SP2028 outlines a comprehensive strategy guiding us towards long-term success and sustainability in various aspects of our operations. The five drivers that will enable us to build a more sustainable patent office are our people, our technologies, our high-quality products and services, our financial sustainability and the partnerships we develop.

Figure 1 – Five drivers of the SP2028



Source: EPO

The SP2028 shapes our digital transformation ambitions for the period 2024-2028, emphasising the importance of leveraging technology to enhance the efficiency, quality and sustainability of the patent system. We aim to establish a robust digital ecosystem that supports future growth by removing dependencies on outdated legacy systems, incorporating secure cloud technologies and ensuring the high availability of IT systems. This resilient digital infrastructure is crucial for maintaining uninterrupted services for users worldwide.

Process simplification is the key to successful digital transformation

The SP2028 emphasises the importance of process simplification in the context of digital transformation. It highlights that simplification is a crucial step before digitalisation, to ensure that processes are genuinely improved rather than just replaced with digital versions. Simplification boards play a pivotal role in streamlining processes, preparing them for complete digital integration and ensuring that the transformation maximises benefits while minimising complexities and inefficiencies.

We continue our digital transformation journey by adopting a user-centric approach with fast iterative deployment cycles. This involves releasing minimum viable products, which are subsequently improved iteratively. It also means integrating active change management into the delivery approach to ensure a successful adoption of the new or updated technologies. By placing the end user at the centre of technology deployment, we aim to provide better tools that cater to diverse needs, fostering a more streamlined and efficient patent granting process (PGP).

To deliver excellence through digital tools, we aim to connect the PGP back-office with online user tools, resulting in a fully end-to-end digital solution. This includes

modernising backend tools and leveraging internal knowledge bases to support applicants in preparing higher-quality applications. The integration of digital tools will enable seamless exchanges through fully digital formats, enhancing the overall user experience and efficiency of the patent system.

In line with our human-centric approach to artificial intelligence (AI) adoption, we will continue leveraging AI for classification-related tasks and integrating AI-supported functionalities in other tools used daily by our examiners and formalities officers to enhance the quality and efficiency of the patent examination process. AI will be also integrated into administrative support tasks such as minute taking, data analysis and knowledge sharing.

We outline the future of corporate applications by emphasising the importance of digital transformation to optimise operations, enhance decision-making capabilities and improve overall efficiency. This includes modernising HR solutions, financial processes and communication services. The SP2028 highlights the significance of a hybrid work environment, where investments in our "digital homes" will enhance productivity and foster a culture of self-service and collaboration. Additionally, we will ensure that the adoption of the latest technologies is guided by sustainability principles and done in a value-driven manner.

Safeguarding digital assets: reinforcing security measures to maintain trust

Furthermore, we are committed to securing our data and protecting our systems by strengthening our cybersecurity infrastructure with enhanced detection capabilities, a more dynamic network approach and an improved security operations centre. By reinforcing our security measures, we aim to safeguard our digital assets and maintain the trust of our users and partners.

Last but not least, the SP2028 highlights the importance of IT co-operation by emphasising collaboration with member states and partners to create a more efficient and accessible patent system. We aim to develop a single digital IP toolkit for users across different jurisdictions, supporting various processes like filing and formalities checks. We will also focus on enhancing interoperability across the IP landscape, including co-operation with NPOs, the EUIPO and World Intellectual Property Organization (WIPO). Information security will remain a top priority in our partnerships with NPOs.

To conclude, the SP2028 sets out a clear vision for our digital transformation journey, emphasising the importance of innovation, collaboration and user-centric approaches. By leveraging advanced technologies and fostering strong partnerships, we are committed to creating a more efficient, secure and sustainable patent system. Together we will shape the future of intellectual property, ensuring that our services continue to meet the evolving needs of users worldwide.

2. Implementation highlights

The pipeline approach is a cornerstone of the successful implementation and rollout of SP2028, building on the lessons learned from SP2023, where effective pipelines were crucial to achieving the plan's benefits. It helps to ensure the alignment and co-ordination of parallel activities, to manage dependencies and to provide a clear and structured view of progress, allowing stakeholders to track key deliverables.

Leveraging pipeline approach for effective implementation and rollout

By making pipelines available to all staff, we maintain open communication, foster transparency and ensure that all stakeholders are aligned with our priorities and timelines. This approach not only enhances accountability but also supports informed decision-making, resource management and business change. Additionally, it allows our staff to be aware of what has been accomplished and what is to come.

2.1 PGP pipeline

The PGP pipeline focuses on our core business, the patent granting process. It encapsulates all changes that directly affect our examiners and formalities officers, from new and improved processes and tools and the way they leverage AI, to the decommissioning of legacy technologies.

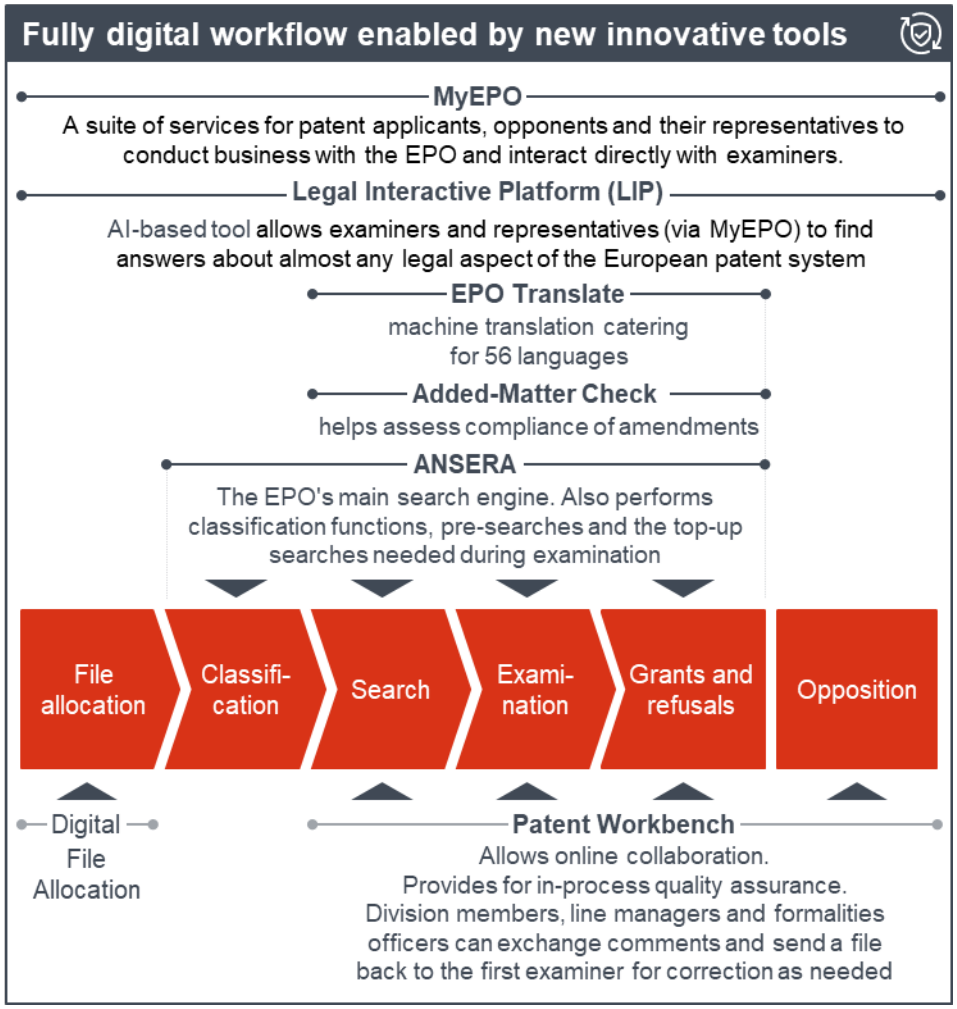
Our examiner tools have undergone rapid modernisation in the last few years. A new modular back-office platform now supports the delivery of a suite of products and tools enabling paperless processes, electronic workflows and a digital file archive. In 2024 we reached a major milestone on this journey by delivering 100% digitalisation of examiner actions with digital workflows. We also continued developing our flagship tools – patent workbench,[1] digital file repository[2] and digital file allocation[3] – to ensure that they accommodate changes in processes and procedures, as well as continuously meet user requirements.

[1] The patent workbench is a tool used for managing various patent-related workflows and processes. It provides a single interface for all the incoming workload of the examiners, formalities officers and team managers.

[2] The digital file repository (DFR) is a digital archive storing all the relevant documents of a file, and also a tool allowing collaboration and sharing of intellectual work.

[3] Digital file allocation is a system for the allocation of work to examiners and formalities officers. It leverages AI and other techniques to provide the best technical match between a file and an examining division.

Figure 2 – Overview of tools in the EPO core business domain



Source: EPO

We also advanced patent administration digitalisation and improved efficiency by replacing manual processes with automated ones. The dispatch of "notification of loss of rights" became automated or semi-automated depending on the complexity of the case in question. In the majority of cases (c. 50 000 per year), the notification is processed without any human intervention.

In October 2024, we started providing cited patent literature in search and examination proceedings under the EPC and PCT exclusively in an electronic format. Users of MyEPO Portfolio continue to receive these documents electronically, while others can access them via Espacenet. This change is part of our efforts to enhance environmental sustainability by saving six million paper pages per year, which is equivalent to three million double-sided A4 sheets, stacking to a height of 185 metres.

In 2024, we further modernised our publication services with the completion of a challenging project to insource and rebuild the European Publication Server[4] and the Linked Open EP Data[5] services. As a result of this significant milestone, we

[4] The European Publication Server (EPS) is the legally authoritative source of all patent applications and patent specifications published by the EPO. Moreover, the EPS provides free online access to all these documents for research, translation and instant download.

[5] The Linked Open EP Data (LOD) is a service allowing the combination of datasets relating to patent applications and granted patents with other resources such as business data in a variety of formats, including for presentation on webpages.

no longer depend on external providers and discontinued a contract, saving EUR 320 000 per year. This also ensures that both services can be sustainably run to the highest standards and further developed as required to meet changing user needs.

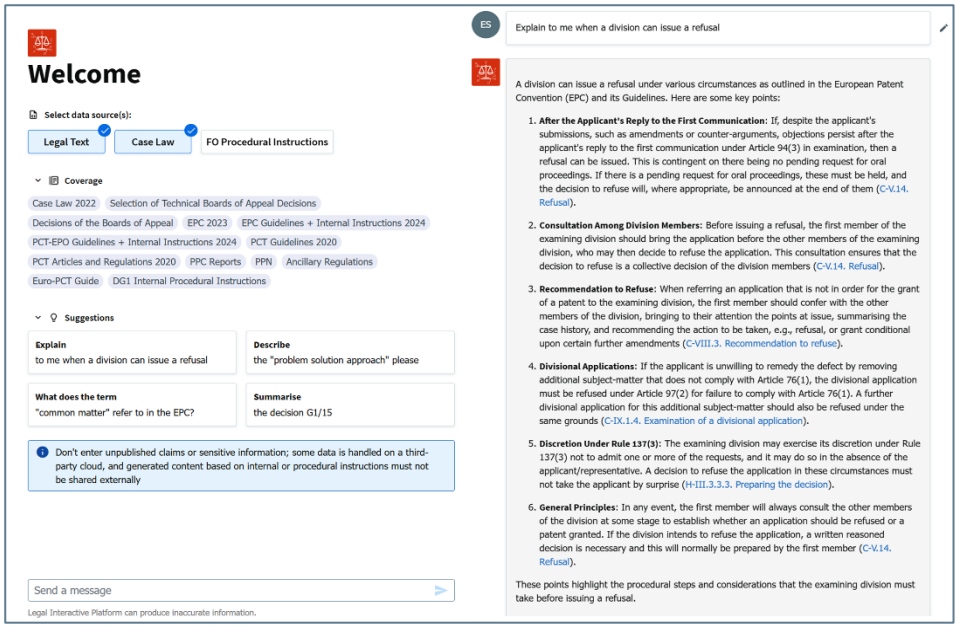
One of the main goals of SP2028 is to leverage AI to deliver high-quality services and enhance efficiency. This was reflected in the 2024 CodeFest, the second edition of a competition which featured innovative proposals for using generative AI and natural language processing to extract new insights from patent data that can be used to promote innovation. Participants became the first users of the EPO's Technology Intelligence Platform,[6] a cutting-edge tool for processing, analysing and visualising patent data.

This platform, launched to the public during the Patent Knowledge Forum 2024, aims to facilitate access to data by empowering researchers, businesses, innovators and everyday users to run advanced patent data analysis and gain insights. By giving businesses and users the data to make informed decisions, the platform supports sustainable entrepreneurship and innovation.

AI-powered legal assistance to enhance access to information about the European patent system

Another example of our efforts to leverage AI is the EPO's AI-based Legal Interactive Platform, launched in May 2024, which allows examiners, legal experts and even non-experts to answer any type of query about almost any legal aspect of the European patent system. The interface is easy to use and queries can be formulated in a conversational manner. Structured search results are generated swiftly, complete with short summaries and direct links to the relevant legal documents. Other functionalities include generating summaries of cases from the Boards of Appeal.

Figure 3 – User interaction with the Legal Interactive Platform



Source: EPO

[6] In addition to our searchable databases or tools, EPO patent information data is available as linked open data, bulk data sets or via our web services. The Technology Intelligence Platform complements the portfolio of data services and can be accessed via https://tip.epo.org/.

The Legal Interactive Platform is offered to the EPO's internal users, Boards of Appeal and pilot participants of the MyEPO services. In the first days following the launch, the tool handled over 4 000 queries, and since then has established itself as a quality source of information and a helpful tool for daily work. User feedback is continuously gathered and reviewed to further improve the service.

Towards 90% automation: AI-supported classification enhances quality and consistency

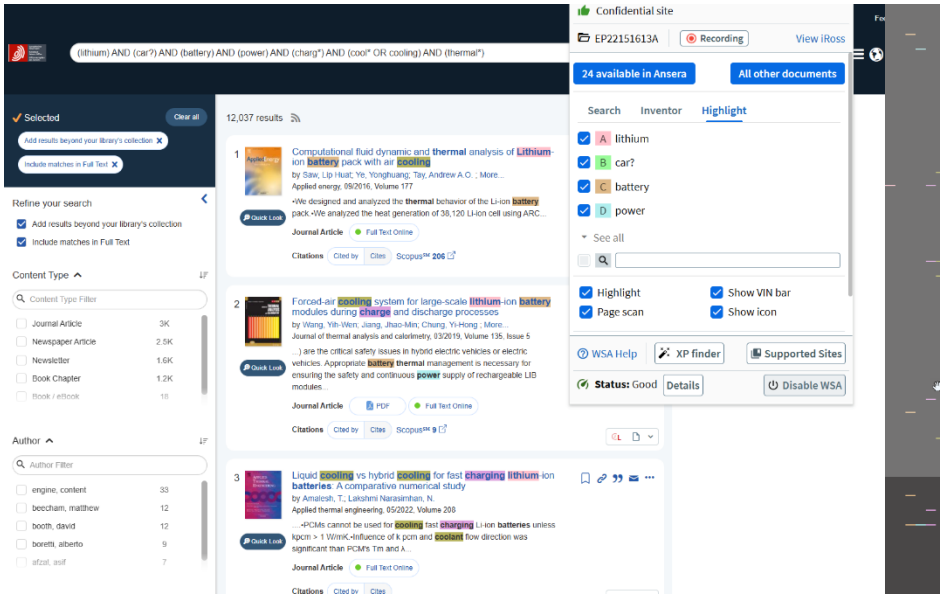
In 2024, following the successful use of AI in pre-classification and reclassification, we introduced AI-supported classification in the majority of technical fields. We have observed benefits in terms of improved accuracy and consistency, as well as efficiency gains and a reduction in manual work, which ultimately contribute to better quality. The KPI measuring the proportion of classification tasks no longer requiring human intellectual classification due to AI support increased from 15% to 47% in 2024 and is well on the way to reaching the 90% target set for 2028.

Over the past few years, our search tools have been converging into one main search platform. In 2024, the essential features of the legacy tools – or their alternatives – were integrated into ANSERA. This means that, by the end of the year, every examiner was able to use ANSERA exclusively for searching and viewing prior art, and the legacy tool could be decommissioned.

To achieve this goal, significant changes were made in non-patent literature (NPL) search. The web search assistant (WSA) ensured that bibliographic data, images and full text of NPL documents became immediately available in ANSERA whenever a new NPL reference was created. This new feature removed one of the final obstacles to the full adoption of ANSERA.

The WSA extends the search beyond the ANSERA in-house NPL collection to provide access to billions of records from leading scientific and academic publishers. It also transforms the online search experience. While browsing internet pages, the WSA provides the same highlights experience as in ANSERA, with quick navigation between them. Webpage enrichment makes it is easy to see which documents were published prior to the filing date and can be cited. The WSA points to the full text found either online or in ANSERA, enhancing access to the prior art.

Figure 4 – ANSERA-style markers and features on an external website accessed via a standard web browser with the WSA plugin



Source: EPO

The WSA is also designed to match and transfer online scientific and patent documents to the EPO's internal document collections, even in bulk. It comprises the internet record of search strategy (iRoss) in order to keep track of different actions performed during online searches. Moreover, WSA indicators show on which websites it is safe to search directly for an invention thanks to the confidentiality agreements with the providers of some websites.

From legacy to ANSERA: the journey to enhanced data quality and modern search practices

Another pivotal moment in the transition from the legacy tools to ANSERA was achieved with the full integration of the standards documents search. Standards have a recognised significance as prior art, especially in the information and communications technology (ICT) sector, and the EPO has developed extensive collections of standards, now comprising millions of documents. Examiners can now fully rely on ANSERA and benefit from enhanced data quality and modern search practices to leverage this wealth of information.

Active change management has been instrumental in the successful transition from the legacy toolset to the new search platform. The co-ordination of the programme deliveries with business roadmaps, training and stakeholder engagement, including senior management, was a cornerstone of our approach. To maximise the impact of training activities, the examiners were offered ANSERA skills self-assessment, micro-learnings to address any skill gaps, as well as targeted coaching in their teams. As we move forward, additional training opportunities will be offered to maximise the benefits of the new search environment.

2.2 Corporate pipeline

The corporate pipeline aims to modernise and simplify the systems supporting our corporate functions and to ensure that our external and internal IT systems are built on resilient and secure infrastructure. This pipeline highlights the progress made towards digitalising and improving existing processes within domains such as HR, finance and procurement. It also outlines the implementation of standardised tools across all areas of the EPO, contributing to

a simpler and more sustainable IT function that ensures high availability and a secure digital environment.

In 2024 we continued to improve the efficiency of our HR processes by introducing user-friendly self-service tools. A single point of entry was introduced to enable staff to declare potential conflicts of interest and request authorisation for supplementary activities. As a result, the process of managing potential conflicts of interest is much simpler and more transparent, helping the EPO and its staff to demonstrate integrity, objectivity and impartiality.

We also launched My HR Calendar, which is designed to help line managers and staff plan effectively throughout the year by offering an overview of important dates and Office events relating to the full spectrum of HR matters. It also provides links to relevant resources and publications, including those that advance the Office's framework for a flexible and healthy work-life balance.

Our learning tools were improved to make information about learning opportunities more accessible to staff, facilitating active management of their individual development plans and encouraging professional growth. Additionally, new features were introduced to assist line managers, such as a service to support the follow-up of language learning by staff recruited with language requirements within the first 5 or 10 years of employment.

Building on the lessons and achievements of the two-year new ways of working pilot, the EPO implemented the teleworking policy endorsed by the Administrative Council in June 2024. Our tools were updated to facilitate more effective planning and co-ordination among colleagues and managers through information dashboards, promoting a collaborative work environment. Other enhancements help staff to manage their way of working, including integration of booking workplaces and automated reminders for complying with the applicable quotas.

Back in 2023, we introduced a new budgeting approach by incorporating the concept of activities, representing the purpose of expenditures. This made our budget clearer and more understandable and was well received by our governing bodies. In 2024, we successfully transitioned to the activity-based model in our finance and procurement systems.

Activity-based budgeting enhances financial transparency and efficiency

All financial and procurement processes were adjusted to enable business units to report their expenditures by activity and compare them against the budget. The expenditure approval workflow was streamlined and improved to enhance the direct involvement of management. We also delivered a new set of expenditure monitoring dashboards. With these advances, the EPO took a significant step towards financial transparency by allowing all units to report the purpose of expenditures and better monitor their budget consumption in a consistent manner.

Following a successful pilot, the new procurement tool has been rolled out to all EPO departments involved in purchasing activities. The tool enhances procurement processes by making them more efficient and transparent, reducing manual work and boosting productivity. It serves as a centralised system for managing supplier data, contracts, purchase requisitions and more. The platform supports electronic signatures, simplifying contract signing. It also improves the supplier experience through a dedicated portal and ensures seamless data integration with financial systems, minimising errors.

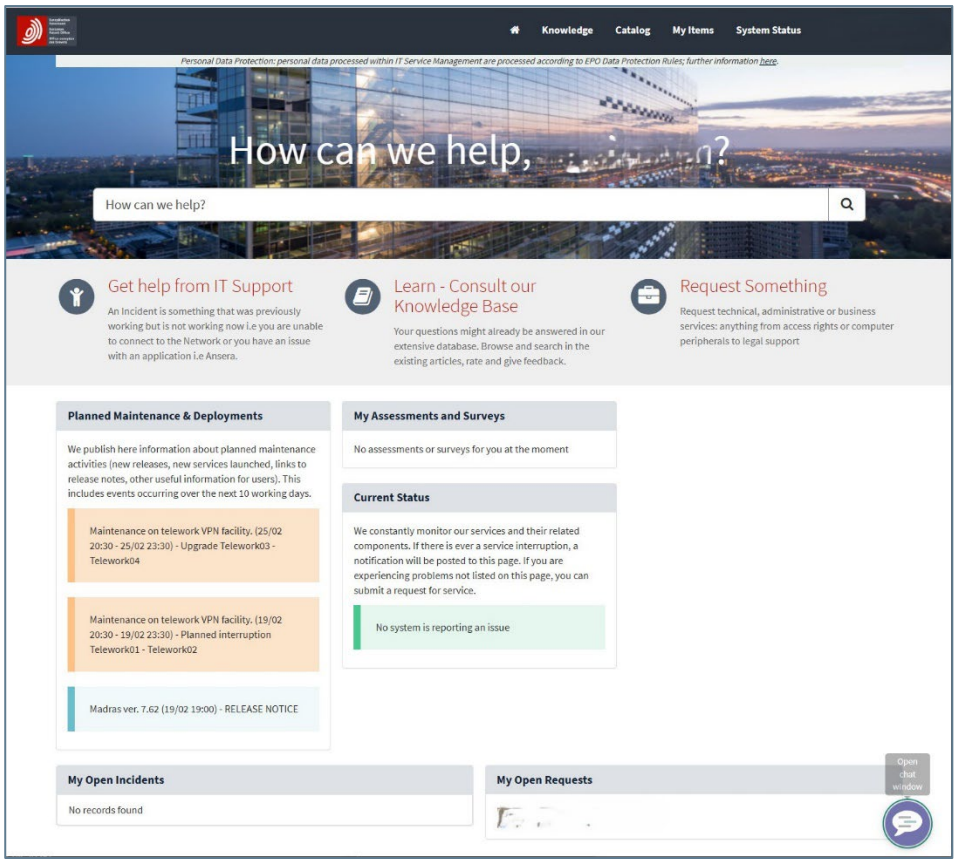
Last but not least, at the end of the year we launched the new e-invoicing solution, allowing us to fulfil our legal obligations while improving the efficiency of our invoice processing workflows.

Our document management platform continued to evolve in 2024 to meet the needs of the entire organisation. The document collections of the majority of our units have been successfully migrated to the new environment, with final migrations planned for the first months of 2025. Security clearance levels have been defined and assigned to all documents, restricting access to certain families of documents, beyond the normal access control mechanisms. This provides a more secure environment and better protects strictly internal information.

To guarantee administrative certainty and further contribute to long-term sustainability, the EPO is committed to promoting sound and reliable record management. The new retention policy establishes a comprehensive, Office-wide framework in this regard and serves as a crucial component of our digital transformation efforts and commitment to reducing paper use. The policy was implemented in the new document management platform and the first review resulted in the removal of 77 000 obsolete administrative documents for which the retention period had expired.

The EPO Service Request Portal, which serves as the central platform for reporting issues and requesting services across various business areas, saw significant development in 2024. Initially used for handling IT-related requests, the platform was expanded to include additional services such as cleaning, waste disposal and security-related services such as access rights, visitor registration, badge issue and parking permits. Another major update included the addition of HR services and requests, with particular attention paid to data confidentiality.

Figure 5 – User interface of the EPO Service Request Portal



Source: EPO

The Service Request Portal facilitates direct routing to the relevant units for professional handling of requests and also enables users to raise tickets, track their status and access a knowledge base for assistance with their issues and queries. The move of different systems towards a single platform simplifies and streamlines our IT infrastructure, making it more efficient and eliminating the risks associated with the use of outdated solutions which are no longer covered by corporate support.

EPO explores further adoption of MS Copilot after successful pilot

In line with our approach to adopting the latest technologies in a value-driven manner, we conducted a pilot of MS Copilot, an AI-powered assistant designed to enhance productivity and streamline tasks within Microsoft 365 applications. A limited number of licences were distributed based on use cases which fitted with the current possibilities of the technology and had the potential to yield concrete benefits, while not representing a risk for the organisation in terms of information disclosure or reputation.

The evaluation of the pilot was based on the usage statistics and assessment of benefits as declared by the users in a structured feedback survey. Over 80% of users that received a licence have used it actively and 75% would recommend it to colleagues, which indicates a strong uptake. 90% of users associated Copilot with positive attributes, among other things being a productivity enhancer (39%) and a smart personal assistant (17%). On average, respondents declared time savings of 74 mins per week, adding up to 4h 56 mins per month. Based on this positive outcome, we are exploring options for further gradual adoption of MS Copilot in our organisation.

Acting on our commitment to consistently enhance our working environment, we installed 1 600 new monitors and other hardware in shared workplaces across all sites. This upgrade created a more streamlined and modern workspace. It also replicates the set-up used in home offices, making the movement between home and the Office workspaces seamless. We also provided 3 000 staff with new laptops, equipped with the latest technology to enhance collaboration and performance, with special consideration also given to comfort and ergonomics.

In support of our building investment programme, we vacated IT facilities in the Shell building in The Hague and deployed modern infrastructure, including Wi-Fi 6, in the new offices in Vienna.

Raising staff awareness to prevent phishing attacks

Vigilance is crucial in addressing the challenges of digital communication and cybersecurity. Phishing remains a significant data protection threat, with criminals now using AI to craft sophisticated emails that tempt users into disclosing sensitive information. To assess our handling of phishing attempts, we regularly send simulation emails to train colleagues and raise awareness of new risks. In 2024, we used a generally available AI chatbot to generate the form and content of a phishing simulation email sent to all staff, demonstrating how authentic AI-generated emails can appear. This allowed us to illustrate to all EPO staff how new technologies require an ongoing awareness of their potential threats.

We continue our efforts to educate staff on a range of aspects related to cybersecurity by offering eLearning courses, organising security-related escape room competitions during campus days and publishing an example of phishing email attempts intercepted by the EPO's systems on a weekly basis.

The ISO audit of 2024 formally confirmed our certification in the information security management areas as well as the successful transition of our framework from ISO27001:2017 to ISO27001:2022, which reflects our commitment to maintaining high standards of information security management.

2.3 Online user engagement pipeline

The online user engagement pipeline aims to increase the quality and transparency of our online services by offering intuitive solutions that address the diverse needs of our users. Additionally, it seeks to empower users by expanding the range of self-service capabilities available to them.

MyEPO services are an integrated suite of services designed to make it easier for patent applicants, opponents, and representatives to conduct their business with the EPO. The services include functionalities for filing patent applications, managing fees and refunds, and interacting with the EPO on various proceedings such as European Patents, Unitary Patents and international patent applications (PCT).

Some key features of MyEPO services include Online Filing 2.0, a web-based service for filing EP and PCT applications and submissions in opposition, appeal and other proceedings; MyEPO Portfolio, a platform for interacting with the EPO during proceedings, receiving Mailbox communications, accessing digital files, submitting requests and replies, and interacting online with examiners; and Central Fee Payment for paying fees related to patent procedures and claiming refunds.

Figure 6 – Overview of services in the MyEPO suite

Source: EPO

MyEPO services are continuously developed, with new functionalities released to the public twice a year. Following our best practice, these improvements are developed and trialled in close collaboration with our pilot user groups, comprising 200 companies. We had two such releases in 2024.

MyEPO Services: continuous innovation and pilot user collaboration

The April 2024 release of MyEPO services extended the range of replies and requests that users can perform and provided new administrative options. Users are able to file amendments to international (PCT) applications upon valid entry into the European phase, provided the EPO had drawn up an international or supplementary international search report, or an international preliminary examination report. Additionally, users can request free-of-charge certified copies of documents related to an application or a granted patent, including a Unitary Patent.

The release also allows users to request the registration of transfers of rights and the registration/cancellation of licences concerning the use of a patent free of charge. Users can upload a list of applications and submit a request that applies to all applications listed, specifically for licence management and transfers of rights. Furthermore, any user of MyEPO Portfolio can open any public European patent, Unitary Patent or Euro-PCT application and submit requests concerning licence management, the transfer of rights, or certified copies. Lastly, representatives may grant permissions for support staff to manage their personal entry information.

In mid-2024, in close co-operation with the Institute of Professional Representatives before the European Patent Office (epi), enhancements were implemented in the Representative area which enables professional representatives before the EPO to swiftly request changes to their profile data, eliminating the need for paper-based forms. The new feature made it easier for 2024's successful EQE candidates to request their entry in the list as they took up their duties as European patent attorneys.

The November release of MyEPO services extended and simplified workflows, improved design and expanded self-service capabilities. The workflow for preparing actions and requests has been enhanced with an additional step, allowing for advanced preparation and the option to save drafts. The various formats of receipts for submitted actions have been harmonised to provide more comprehensive information. The requirement to receive a refund code and PIN number by post in order to claim a refund was removed, rendering the procedure fully paperless.

In discussion with our user groups, we started reviewing the design of key MyEPO screens. The first improvement includes the overview list of all procedures (including for Unitary Patents and opposition) as well as the detail screen for applications. A complete overhaul of the MyEPO starting page and subsequent pages will follow in 2025. In terms of self-service, access rights can now be allocated at a more granular level and users can select the deposit accounts they wish to be linked with when requesting to join a company in MyEPO. Moreover, users can manage changes to the composition of an association on their own.

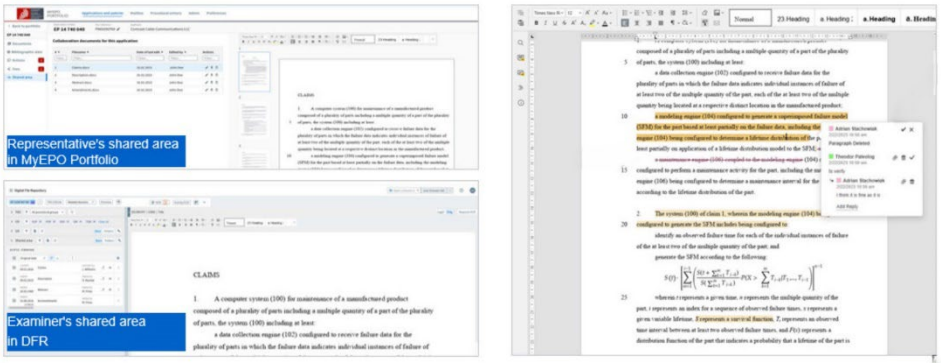
Enhanced data exchange with MyEPO APIs for seamless IP management

Recognising that many companies rely on their own IP management systems, we began to develop business-to-business technical interfaces, known as Application Programming Interfaces (APIs), to facilitate seamless data exchange between MyEPO services and various IP systems. In 2024, we deployed two new APIs: the MyEPO Portfolio API for retrieving and updating Mailbox content and information about applications, and the Online Filing 2.0 API (OLF2.0 API) for submitting EP forms. By the end of the year, the Mailbox API had 65 regular users and the OLF2.0 API ten.

MyEPO APIs are in line with WIPO recommendations for processing and communicating intellectual property data using web APIs, specifically WIPO Standard ST.90.

Throughout the year, the "shared area" introduced in 2023 continued to attract interest from users. It allows examiners to interact online with representatives during a live consultation. The tool, available in the MyEPO Portfolio and accessible via DFR, offers applicants and examiners the possibility to work simultaneously on documents. Amendments can be proposed and discussed on the spot, allowing for swift resolution of errors or misunderstandings and avoiding lengthy exchanges.

Figure 7 – Collaboration in the "shared area"



Source: EPO

User feedback received by the EPO firmly endorses MyEPO services, especially for their intuitive interface, simplified procedures and time-saving features. The success of our strategy is demonstrated by the growing number of users benefiting from our online services. Some 22 000 IP professionals from patent attorney firms, industry and research institutes regularly use MyEPO services for their professional needs and over 8 600 receive communications electronically using the EPO Mailbox. In mid-October, our online Mailbox services exceeded the milestone of ten million electronically sent mail items.

2.4 IT co-operation pipeline

The IT co-operation pipeline aims to drive the digital transformation of the IP landscape in collaboration with key partners and stakeholders. The pipeline focuses on transcending traditional barriers between IP rights by enhancing digital tools, decommissioning legacy systems and fostering interoperability across various platforms.

IT co-operation meetings foster collaboration and innovation

In 2024, we successfully conducted three sessions of working groups dedicated to IT co-operation. Each session involved eight working groups of 15 to 20 members each, with the participation of 140-plus delegates from over 30 countries on average. These sessions provided a platform for hands-on demos, tests, and experience exchanges, leading to a better understanding of user and NPO needs and how best to address them. The conclusions from these sessions have been made available on the Single Access Portal for widespread dissemination.

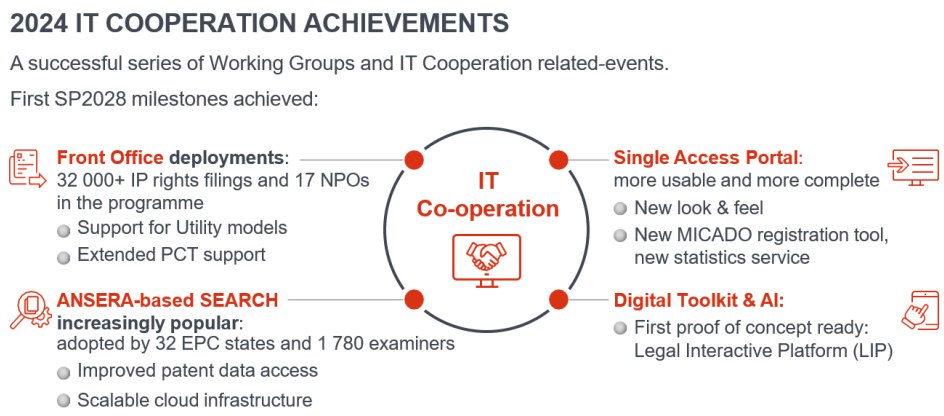
Our 2024 activities primarily focused on supporting member states in implementing Front Office and ANSERA-based SEARCH. We have also initiated

the work on increasing interoperability between the EPO and NPOs through the Digital Toolkit, APIs and interconnectors, paving the way for NPOs to build their own end-to-end solutions using standard modules.

In the realm of Front Office, 17 countries have begun their journey towards implementation, with over 38 000 filings received across various IP rights. This marks a significant advance in our digital transformation efforts. Front Office implementation will enable the complete decommissioning of the legacy eOLF solution by the end of 2025.

ANSERA-based SEARCH gained popularity as a replacement for EPOQUE Net. In February 2024, the Estonian Patent Office became the first national office to switch to using the ANSERA-based SEARCH tool exclusively, and several other countries are preparing to complete the switch. We have supported the decommissioning process across the EPN and beyond, offering necessary training to support the adoption of ANSERA-based SEARCH. By the end of 2024, ANSERA-based SEARCH was live across 32 EPC states, with more than 1 800 active examiners. The system fully leverages cloud scalability, offering unprecedented responsiveness and improved patent data access.

Figure 8 – Overview of the IT co-operation achievements in 2024



Source: EPO

In the Single Access Portal, we have continued migrating legacy services and implementing new concepts, revamping the website and deploying a new registration tool for participants in Administrative Council meetings. We piloted a delegations reimbursement service and developed a Reports and Statistics service to publish important figures on patent applications and publications. We also launched a new subscription tool for email notifications on subjects of interest.

Innovative proof of concept: connecting "bricks" to streamline IP filing and grant processes

The Digital Toolkit has introduced modular "bricks" to integrate IP filing and grant processes, benefiting from various cloud infrastructures. A proof of concept demonstrated how different modules could be connected to implement business processes. We also explored AI best practices and future needs through AI functional bricks which could be integrated into the Digital Toolkit.

Information security remains a vital issue in the context of IT co-operation, especially as the use of cloud-based solutions increases. Continuous improvements have been implemented based on third-party security assessments of the ANSERA-based SEARCH and Front Office systems.

We made substantial progress in enforcing multi-factor authentication for member state user accounts (Z8 accounts). This initiative aims to enhance the security of user accounts by requiring additional verification steps before access is granted. The revalidation of Z8 accounts has begun, ensuring that only active and authorised users have access to critical systems.

Last but not least, a new channel for sharing threat and vulnerability information has been created between the EPO and member states. This channel aims to facilitate the exchange of security-related information among national offices, enhancing collective security awareness and response.

2.5 Decommissioning pipeline

The SP2028 outlines our ambitions for the decommissioning of several legacy technologies to modernise our infrastructure, improve operational efficiency and reduce maintenance costs.

The projects undertaken under SP2023 successfully developed a new classification service (Classera/Canopée) integrated in the search engine ANSERA and covering a full range of classification tasks. It allowed the decommissioning in March 2024 of the legacy tools Doctool, Clip-on, Classtool, +Cla and REPA, contributing to streamlining and optimisation of the examiner toolset.

Similarly, search-related deliveries described under the PGP pipeline resulted in legacy decommissionings. The applications previously used for NPL search – CiteNPL, SearchNPL and EPOQUE External – were discontinued in September 2024 following developments in the WSA and ANSERA. Full integration of standards documents search in ANSERA allowed for Seastar – a tool developed by the EPO specifically for this purpose over ten years ago – to be phased out.

By the end of the year, all EPOQUE full-text databases were replaced by ANSERA. The EPOQUE Internal specific search functions, e.g. for glasses and alloys, were also made available. This meant that EPOQUE Internal was no longer required for searching and could be decommissioned at the end of 2024.

Transition to ANSERA completed: a new era in prior art search and viewing

The ANSERA viewer became the only one for examiners thanks to ergonomic and performance improvements. The legacy viewer still allows consultation of existing working lists but does not support creating new ones or adding documents. Content from the legacy viewer can be migrated to ANSERA for resuming work in the new environment. This marks the dawn of a new search era, with ANSERA becoming the exclusive search and viewing tool for all examiners.

We reached a major milestone in the area of corporate applications by decommissioning our legacy data analytics service. The new open-source data analytics platform WYRM was introduced in 2021. After a gradual migration of our data services, WYRM has become the go-to tool for analysts across the Office and is used to support various business areas. The transition to the new platform was completed in 2024 and allowed us to terminate external licence and service contracts, generating savings of EUR 590 000 per year.

We also achieved major savings by optimising our storage disk capacity. Thanks to the optimisation introduced in October 2024, our IT operating costs will reduce by EUR 1 424 000 per year.

In 2024 we migrated our external website epo.org to the cloud, which increased scalability while boosting security and availability on top of the existing website features. The legacy technical platform hosting the website was decommissioned.

Since the launch of the first online filing tool in 2001, we have been working towards a modern, fully digitalised patent granting process. New tools and features have been added, old ones replaced and functionalities redesigned to create a suite of services that support a simplified, easy-to-use and interactive process.

On 1 July 2024, we decommissioned several external users' tools and services. The legacy Mailbox was taken out of service and replaced by MyEPO Mailbox, which continues to be regularly enriched with more functionalities and offers a multitude of features not available in the legacy system. The MyFiles and Administration facilities services were replaced by MyEPO features, allowing easier access to files and file administration.

As of the same date, the EPO no longer accepted submissions by fax. Having stopped sending faxes in March 2023, all fax services relating to EP and PCT as well as Unitary Patent procedures ceased completely, being replaced by the web-based Online Filing 2.0 and, in emergency cases, the Contingency Upload Service via our website.

As part of our effort to offer high-quality and secure online services, we introduced two-factor authentication (2FA) for our external users accessing MyEPO. The login process itself involves an extra layer of security in addition to username and password, allowing MyEPO users to choose between phone, email, Google Authenticator or Okta Verify.

Enhanced security and efficiency: EPO adopts two-factor authentication and discontinues smartcards

As of 31 December 2023, we stopped issuing new smart cards. We offered a grace period until the end of September 2024 for users filing with national offices that did not offer an alternative to the EPO smart card. The transition was accomplished on 31 December 2024, when smartcard access was ultimately disabled. With the discontinuation of smartcards, we not only offered our users more secure and convenient authentication methods but also achieved savings of approximately EUR 660 000 per year.

Finally, to further consolidate our filing tools around Online Filing 2.0, two additional legacy tools were decommissioned on 1 January 2025. The Webform filing tool was discontinued for document submission and eOLF software Version 5.14, which did not support the 2FA login, was phased out together with the smartcard system.

Our ambitious plans for the decommissioning of legacy technologies necessitate proactive change management to ensure the successful implementation of new tools, a seamless transition and minimal disruption to business operations. We remain dedicated to integrated business and IT planning, effective communication and comprehensive training. These efforts are crucial in addressing the concerns of both internal and external users familiar with previous systems.

By engaging stakeholders throughout the process and providing clear guidelines, we are mitigating risks to ensure that our digital transformation journey progresses smoothly and delivers the benefits expected.