Annual Review
2023
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Foreword

2023 was an historic year for the EPO. As we celebrated the successes of the past, we also looked forward to an exciting future for invention and patent protection in Europe. The achievements of this year – built on our talent, dedication to quality and a commitment to sustainability – will shape the Office for many years to come.

During 2023, we marked the 50th anniversary of the European Patent Convention (EPC) and witnessed the long-anticipated launch of the Unitary Patent and Unified Patent Court (UPC). We introduced the Observatory on Patents and Technology and launched a new EPO website. Moreover, as we neared the end of the Strategic Plan 2023 (SP2023), we began the transition to the next strategic plan: SP2028.

The 50th anniversary of the EPC was celebrated with a programme of activities and initiatives developed by 150 EPO staff volunteers. These activities and initiatives – spanning art, sports and the environment – celebrated the EPO’s contribution to the all-important UN Sustainable Development Goals.

Boosting understanding and awareness of inventions and patents is key to making the patent system more accessible and transparent.

In June, we closed a decisive gap in Europe’s IP architecture with the launch of the Unitary Patent, which today offers users across the globe a simpler, more cost-effective route to obtaining and maintaining patent protection in Europe. During the first six months, demand for the Unitary Patent exceeded expectations, securing cross-industry interest, especially from traditionally hard-to-reach entities like SMEs.

Boosting understanding and awareness of inventions and patents is key to making the patent system more accessible and transparent. In service of this, we founded the Observatory on Patents and Technology, which published studies on patents and invention against cancer, and hydrogen patents for a clean energy future.

Furthermore, we introduced the Deep Tech Finder, which enables potential investors and business partners to find out what inventions are being developed in specific technology fields and assess their levels of protection by European patents. Once
again, outstanding inventors were recognised with the European Inventor Award and Young Inventors Prize, and we established the European Inventor Network, which funds inventors’ outreach work to inspire the next generation of inventors in schools.

Stakeholders also benefitted from advances in our digital transformation. As well as launching a new external website, the Patent Workbench became the central hub of the patent grant process and we digitalised virtually all patent grant actions. Evolutions in the MyEPO services user interface now makes it easier for inventors, companies and their representatives to conduct their EPO business online.

All of these initiatives contribute to our endeavour to deliver high-quality products and services. Building on this work, we revised and expanded the Stakeholder Quality Assurance Panels (SQAPs), with three sessions held in 2023. Feedback from these sessions has helped to inform the first publicly accessible Quality Action Plan for 2024, and the Quality Dashboard.

Quality is built on attracting, training and recruiting the best talent. In 2023, we saw more job applications and increased the overall diversity of staff. We invested in initiatives to foster knowledge sharing and reconnect staff, including the first Campus Days, and we held the first iLearn Together day, which brought together staff from the EPO and National Patent Offices.

We believe that the best staff need the best tools. As such, we invested in new digital technologies to improve workflows, enhance quality and boost efficiency. In 2023, we received a record 199,275 applications. To better navigate this growing mass of patent data, the EPO uses artificial intelligence tools, increasing efficiency and consistency.

The successful delivery of the five goals in SP2023 has put the EPO in a strong position to confront the challenges of the future. The Strategic Plan 2028, unanimously approved by the Administrative Council in March 2024, will build on these achievements. Its strategic priorities are an evolution of those which defined SP2023, all working in harmony towards the overarching goal of sustainability. This will be underpinned by five drivers: people, technologies, quality products and services, partnerships, and financial sustainability.

Stakeholders will be able to monitor the progress of SP2028 through a series of key performance indicators. As part of our commitment to transparency and knowledge sharing, the EPO launched the transparency portal, which makes available key documents and information related to operations and sustainability efforts as well as Administrative Council documents, annual reports and certifications. Crucially, the portal also equips member states with all the information they need to fulfill their governance role for the EPO.

Looking back over the five years of the SP2023, we have delivered close to 250 programmes, projects and activities. These have contributed to building an engaged, knowledgeable and collaborative organisation; simplifying and modernising the Office’s IT systems; delivering high-quality products and services efficiently; building a European patent system with a global impact; and securing long-term sustainability. Because of this, we are now on a strong footing to confront challenges of the future and embrace its opportunities. Working closely with all our stakeholders, we will be guided by the five drivers of SP2028 in the evolution of this formula towards the ultimate goal: a more sustainable Office, patent system and society.

As part of our commitment to transparency and knowledge sharing, the EPO launched the transparency portal, which makes available key documents and information related to operations and sustainability efforts as well as Administrative Council documents, annual reports and certifications.
Executive summary

2023 was a landmark year for the European patent system as it marked the 50th anniversary of the signing of the European Patent Convention (EPC). The EPO’s 50th anniversary celebrations honoured all those – our member states, our staff, our partners, our users and all the inventors – who have worked to realise the vision of the signatories of the EPC, united in the belief that closer co-operation between European states benefits innovation and supports peace and prosperity.

2023 was a notable year in other respects too. It was the final full year of the Strategic Plan 2023 (SP2023) and the EPO made progress toward fully delivering the five goals of SP2023.

Under Goal 1, the Office continued to invest in attracting, developing and retaining the best talent through agile recruitment, meaningful training and sustainable career development. In 2023, we hired 100 new examiners, who reflect the diversity of the organisation in terms of nationality, gender balance and professional experience. Five of the new examiners were either current or former members of the Pan-European Seal Young Professionals Programme, demonstrating its importance in developing young talent.

The EPO is now more diverse than ever before: 45% of recruits in 2023 were women, compared to 30% in 2019. To promote transparency in assessing the impact of the Office’s efforts in increasing diversity and inclusion, a D&I Dashboard was launched in 2023. The dashboard provides information on important key performance indicators (KPIs) such as geographical diversity and gender balance of staff and managers.

The Office invests significantly in learning and development. Based on the skills framework (which identifies expiring, evolving and emerging skills for different job profiles) in 2023 we launched development programmes for profiles including legal professionals and finance and data protection experts. By the end of 2023, 91% of EPO staff were covered by a tailored development programme. The pilot New Ways of Working scheme provides staff with flexibility to balance personal and professional lives and contributes to staff wellbeing.

Under Goal 2 of SP2023, the EPO prepared for the decommissioning of several legacy tools. At the same time, we reflected on our digital transformation journey and identified lessons for the future.

The proportion of processes digitalised in the patent granting process (PGP) and in corporate areas has grown from 51.3% in December 2019 to 87.8% at the end of 2023. During this period, we accelerated the implementation of remote work solutions and paperless workflows and implemented new procurement and financial planning and analysis tools.

During 2023, the Patent Workbench (PWB) evolved, becoming the central hub for the PGP. By the end of the year, we had successfully digitalised 99.5% of patent grant actions. We also integrated new tasks related to user data management into the PWB and introduced a new tool enabling staff to easily...
perform changes to multiple files simultaneously. This simplified the work of formalities officers and generated efficiency gains by considering the phase of different proceedings. Most of these services will also be offered online to external users via MyEPO Portfolio.

In 2023, we successfully completed two pilot trials to test new features of MyEPO Portfolio and released new features to all users. Notable new functionalities include the Shared Area, which supports a more collaborative and non-sequential examination process by allowing the examining division and the applicant to work together in real time and at an early stage in the examination process. This early alignment and common understanding between the division and the applicant will ultimately lead to better quality.

The adoption of MyEPO Portfolio is rapidly increasing, and many users now benefit from the convenience of accessing their digital communications through the user-friendly EPO Mailbox – with more than 7,500 patent attorneys connected to the Mailbox by the end of the year, compared to just 2,300 at the end of 2019.

In September 2023, we launched the new external EPO website, which features an improved search experience, informative sections for inventors and SMEs and a Transparency Portal. A “New to patents” page explains the fundamentals of intellectual property protection to non-patent experts. The new EPO website has been optimised for all devices and is designed to meet the evolving needs of users in the digital age.

Information security is a priority across all our tools and in 2023 the EPO successfully passed our first surveillance audit for the ISO 27001 information security standard. Work on improving the availability and stability of our IT systems continued and at the end of the year we reached our target of 98% availability.

Search quality audit shows that the proportion of findings that are potential ground for opposition of a future patent fell from 8% of the sampled files in 2022 to just 6.8% in 2023. Novelty and inventive step remained stable at around 6%, demonstrating that standards with this assessment were maintained despite an ever-increasing volume of prior art and increasing complexity and integration of applications. In only 4% of search reports sampled in 2023 did auditors find a better prior art document.

The quality of search and grant (Goal 3) remained stable at high levels throughout the SP2023 period, demonstrating our commitment to deliver high-quality products and services efficiently. During SP2023, the EPO has intensified efforts to deal with the examination stock and to handle old examination files effectively while processing the high incoming search workload. As a result, at the end of 2023, 77.2% of standard examination products were delivered within 36 months.

In 2023, we revised and expanded the Stakeholder Quality Assurance Panels (SQAPs), an important means of reviewing quality. Three sessions were
held, in which 50 EPO experts and experienced European patent attorneys assessed the quality of EPO actions and identified opportunities for improvement and best practices with regard to search and written opinions, intermediate communications and grants. EPO staff and SACEPO Working Party on Quality members joined these sessions as observers. Feedback from the 2023 SQAPs provided valuable input into the EPO’s 2024 Quality Action Plan.

Our efforts on quality are founded on the world’s most extensive prior art collection. The number of patent publications increased from 146 million in 2022 to 153 million in 2023. This represents 86 million patent families, including 60 million from China, Japan and Korea.

Artificial intelligence is essential in helping us manage the classification of this volume of prior art to deliver high-quality searches, building on the Cooperative Patent Classification (CPC) provided by other Offices. The high accuracy of AI classification systems ensures that classification quality is according to our internal standards.

Our examiners also have access to more than 126 million groups of non-patent literature, such as articles in scientific journals. In 2023, non-patent literature made the highest contribution to total citations in the area of pure and applied organic chemistry. With a collection of over 5 million standards-related documents, the EPO is the worldwide focal point of expertise for standards search.

Timeliness is an important aspect of quality and legal certainty: 86.4% of search, examination and opposition standard files were produced on time in 2023. Search timeliness (standard cases) also remained strong, with 92.3% of searches and written opinions being despatched on time and a mean duration of 5.0 months.

Demand for EPO products and services remained high in 2023, and the EPO received a record 199,275 patent applications. We received 2.9% more requests for searches than in 2022, 77% of them second filings.

The EPO is committed to strengthening our network of partners supporting the European patent system (Goal 4). Since June 2019, the number of reinforced partnerships has grown from two to 13 and the population coverage from 0.87 billion to 2.16 billion, resulting in an increase in the size of the market for European patents of almost 1.3 billion inhabitants (+150%). At the beginning of 2024, the EPO covered 39 member states, one extension state and five validation states.

2023 saw the completion of Europe’s patent architecture as the Unitary Patent system became a reality on 1 June, offering a simpler, more cost-effective alternative for obtaining and enforcing patent protection across the 17 participating member states.

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exceeded expectations, with over 22% of European applications turning into a Unitary Patent since the system was launched in June.

2023 was an eventful year for cooperation, with the working agreement on search with Austria coming into force and the signature of a new agreement with Slovenia. The EPO successfully launched two new professional mobility initiatives in 2023 to support European Patent Network (EPN) expertise and knowledge sharing. Under the Seconded National Experts (SNEs) scheme, national experts from 12 member states applied to join various EPO services. By December 2023, 12 SNEs from seven NPOs had started their secondment and 21 member states showed interest in hosting an EPO Young Professional in the framework of the EPO Young Professional Secondment scheme. By the end of the year, three EPO Young Professionals began their secondments at National IP Offices. A revision of the EPO’s fee policy enhanced the accessibility of the patent system for our stakeholders, especially SMEs and micro-entities.

In 2023, the EPO Academy’s live online training activities reached 26,480 participants, a 20% increase compared to 2022. Additionally, 18,748 active users are registered in the EPO e-learning centre, from both member and non-member states, with the greatest growth coming from non-member states.

During 2023 we published a series of patent insight reports on state-of-the-art technological fields such as quantum computing, quantum simulation, mRNA technologies and offshore wind energy. We also ran the second edition of the European Patent Administration Certificate (EPAC). The EPAC training course had 869 participants in 2023 and the EQE pre-examination tutored course had 661.

The EPO is committed to building a more sustainable future and in 2023 we made significant progress in environmental sustainability, societal impact, governance and transparency, and financial sustainability (Goal 5). In terms of environmental sustainability, we have reduced the EPO’s overall carbon footprint by 56% during SP2023.

The Observatory on Patents and Technology, launched on 6 October 2023, quantifies and explores trends and challenges throughout the innovation ecosystem, offering reliable evidence for informed decision-making by industry, innovators, investors, policymakers and other stakeholders. Serving as a globally accessible digital platform, which facilitates transparent and open discussions on innovation, it provides valuable insights into technology trends that will shape the lives of current and future generations. The Observatory’s first online event, “Boosting startups with intellectual property”, took place on 17 October 2023.

Other developments in 2023 included the launches of the Deep Tech Finder, a free new digital tool for the public to explore investment-ready deep tech startups in Europe, and a new technology platform in Espacenet, which makes patent data more easily accessible to the public through smart searches.

In July, the EPO’s flagship European Inventor Award and Young Inventors Prize again promoted the benefits of innovation for society. The 2023 award ceremony was streamed live from Valencia, Spain to more than 25,000 viewers. It reached more than 28 million social media users and generated 4,500 media reports.

The EPO continues to uphold the highest standards of governance and our operations maintained the ISO certifications for occupational health and safety management, information security management, and quality management. We also maintained diligent oversight of our financial health. Despite challenging macroeconomic conditions, the coverage ratio of assets to liabilities improved by 8% in 2023 and reached 76.6% at the end of the year. We continued to monitor our long-term financial situation with a new Financial Study. The first phase of the study was completed in 2023 and found that the measures implemented by the Office since the previous study in 2019 have had a positive impact on the Office’s financial situation. The study will continue in 2024.

The successful delivery of the five goals of SP2023 puts the EPO in a very strong position as we build on these achievements in SP2028, to create a more sustainable patent office.
50 years of the European Patent Convention

EUROPEAN PATENT OFFICE

Annual Review

2023

epo.org
50 years of the European Patent Convention

The 50th anniversary of the signing of the European Patent Convention (EPC) made 2023 a landmark year for the European patent system. The aim of the EPO’s 50th anniversary celebrations was to honour all those – our member states, our staff, our partners, our users and all the inventors – who have worked so hard to realise the vision of the signatories of the EPC, united in the belief that closer co-operation between European states benefits innovation and supports peace and prosperity.

A programme with sustainability at its core, shaped by volunteers and successfully delivered thanks to Office-wide engagement and collaboration.

To celebrate this milestone, a team of 150 staff volunteers developed ideas and created a diverse programme of activities and initiatives, rooted in the EPO values, that contributed to a broad selection of UN Sustainable Development Goals (UN SDGs).

The programme was structured around five objectives:

- celebrating the spirit of co-operation among the broader EPO community
- sharing our story with the public
- connecting people through art and innovation
- inspiring young people and
- strengthening our culture of diversity and inclusivity.

Close collaboration between volunteers and operational units across the Office led to successful project implementation across all sites and departments, with around 320 staff involved in the organisation and realisation of activities. The programme closed on a positive feeling of pride shared by all contributors.
Figure 1 – A programme of activities structured around five objectives and with a strong focus on sustainability

**OBJECTIVES**

1. CELEBRATING A SUCCESS STORY OF EUROPEAN CO-OPERATION
2. SHARING OUR STORY AND PASSION FOR INNOVATION
3. CONNECTING PEOPLE THROUGH ART AND INNOVATION
4. INSPIRING INNOVATION
5. PROMOTING EPO VALUES AND A CARING CULTURE

A programme designed to keep up the momentum throughout 2023.

The mix of activities was spread throughout the year to maximise exposure and public awareness of the historic anniversary.

Impactful campaigns accompanied each event, resulting in extensive reach across social media.

‘50 Years’ EPC activities were systematically promoted to EPO staff and the public. Ten campaigns on social media generated 1.7 million views, with content receiving an above average level of engagement. Staff were kept well informed throughout the year: over 50 news items were published on the Intranet, with 44 videos promoting activities, sharing highlights and participant testimonials, as well as competition results and in-depth interviews.

Overall, this content attracted 120 000 views across the Office. The major public event on 5 October attracted more than 18 000 viewers, most of
whom joined via social media. Some 1,700 EPO staff also participated on the day at public viewing areas in the canteens of EPO sites. The remaining 50 Years EPC events attracted over 6,000 participants in total, representing a mix of staff members, families and local residents. For example, on its public opening, Isar’s A&T 5-10 Culture Space received 1,200 visits from Munich residents (including staff) during the city’s Long Night of the Museums.

The remaining 50 Years EPC events attracted over 6,000 participants in total, representing a mix of staff members, families and local residents.
Figure 3 – Visibility and awareness were impactfully generated by using unique, consistent branding across all communication channels and throughout the entire campaign.

Source: EPO
A long-term investment.

Many of the anniversary activities that took place will continue to bring lasting benefits in terms of outreach.

The video statements made by member states on epo.org convey strong, public-facing messages concerning the unity and diversity of the European Patent Organisation.

The A&T 5-10 Culture Space is an internal event location for hosting workshops and team-building activities, as well as stakeholders and partners visiting our Isar headquarters. Staff can also explore the space during breaks. The 2024 Girls’ Day event in Munich will use the space to present the Office’s activities to the younger generation. A programme is being prepared for visits by local schools as well as the EPO’s participation in the city’s Long Night of the Museums in October 2024.

The Kids’ Collaborative Art competition helped establish positive relationships with various schools around the world. This competition is promising for the EPO’s future educational activities for younger audiences.

Paper transformation artworks: Following a public call for artists, the four winning works of art are now part of the EPO art collection, with one work of art for each EPO site. They will remain a powerful symbol of the transition of the Office into the digital era.

EPO Games: Building on the success of the 2023 edition, the EPO Games will be part of the Campus Days in 2024. They will contribute to team building and staff engagement.

Come and Clean the Green will be repeated in 2024, as local clean-up events are a great opportunity to get together with colleagues and support our local communities.

Some of our 50 leading tech voices will be featured in a series of podcasts on the latest developments in technology and sustainable innovation.

The short story competition also generated a podcast published at the beginning of 2024, which is helping to promote diversity and inclusion.
Key achievements
Strategic key performance indicators

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In 2023, the EPO made progress towards the goals set out in the **Strategic Plan 2023 (SP2023)**. The balanced scorecard key performance indicators (KPIs) show the impact and benefits of our activities.

Under Goal 1, a dedicated dashboard shows results from the **Staff Engagement Survey** conducted in 2022. Compared to the previous survey, improvements are evident in 10 out of 13 categories, including empowerment, diversity and inclusion, collaboration, agility and flexibility. This outcome reflects our efforts to create a collaborative working environment with engaged and knowledgeable people.

With a view to **simplifying and modernising our IT systems**, activities under Goal 2 focused on delivering reliable, innovative and efficient solutions to ensure long-term digital resilience and agility. We monitored the availability of our systems as we gradually introduced new tools and adapted our infrastructure. The relevant KPI (“Availability of existing and new tools”) shows steady progress since the end of 2022, when the major infrastructure projects were consolidated into business-as-usual. By the end of 2023 the KPI reached the target of 98% availability, thanks to decommissioning of old legacy systems, investment in state-of-the-art tools and improvements in monitoring incidents.
The proportion of processes digitalised in the patent granting process (PGP) and in corporate areas grew by 71% during the SP2023 reporting period, rising from 51.3% in December 2019 to reach 87.8% at the end of 2023. In addition to improvements in the corporate area with the implementation of for example a new procurement tool (iValua) and the tools for financial planning and analysis, the global pandemic accelerated the implementation of remote work solutions and paperless workflows in the PGP.

Improvements and investments in online tools and fee payment services, the popularity of the register services and administrative services such as the Mailbox have all contributed to high levels of satisfaction among users, with the relevant KPI showing 84.5% satisfaction among internal and external users in 2023. The enhanced digital interactions through the user area in MyEPO Portfolio allowed us to increase both the efficiency and the quality of communications with users. By the end of 2023, 7,584 patent attorneys were connected to the Mailbox (up from 2,332 at the end of 2019) and the number of mailboxes increased from 558 at the end of 2019 to 1,609 (+188%).

User satisfaction with PGP products and services also remained high, with 79.3% of users saying they were satisfied in the latest user satisfaction survey in 2023.

The quality of search and grant remained stable at high levels throughout the whole SP2023 period, demonstrating our commitment to deliver high-quality products and services efficiently (Goal 3).

In the course of SP2023, the EPO has intensified its efforts to deal with its examination stock and to handle old examination files effectively while processing the high incoming search workload. As a result, at the end of 2023, 77.2% of standard examination products were delivered within 36 months.

The EPO is committed to strengthening our network of partners supporting the European patent system. Goal 4 activities of SP2023 brought a notable expansion in geographical outreach, reflecting both the broader geographical coverage of the European patent system and the increased utilisation of EPO work products (search and examination) by non-member states. Since June 2019, the number of reinforced partnerships has grown from two to 13 and the population coverage from 0.87 billion to 2.16 billion, resulting in an increase in the size of the market for European patents of almost 1.3 billion inhabitants (+150%).
With the aim of monitoring the impact of co-operation efforts, a dedicated KPI measured member state participation in the various working groups, projects and activities. Thanks to the improved offering of projects in the co-operation catalogue, tailored to the needs of the member states, and the EPO’s financial commitment to co-operation with an increased budget, at the end of 2023 the participation rate reached 84%, exceeding the set target. Overall, 74% of the member states participated in the convergence working groups on allowable features in drawings and on issuing and accepting electronic priority documents and 80% in the IP outreach project.

The number of visits to a range of online patent information services has grown from 3.9 million visits per month in June 2021 to 11.9 million visits per month at the end of 2023, showing a significant increase in the demand for patent information online services.

To secure long-term sustainability, the EPO has made significant strides in enhancing environmental sustainability. Overall paper consumption was reduced by 88% during SP2023, driven mainly by the impact of digitalisation and the adapted working environment in the New Ways of Working. At the end of 2023 daily paper consumption per person was 12 sheets compared to a target of 15.

Our commitment to reducing our environmental footprint is also shown by the efforts in reducing energy consumption. The introduction of emergency measures to save energy, the implementation of planned improvements in the buildings and the reduced occupancy rates contributed to lowering the energy consumption by 24.4% at the end of 2023 compared to the end of 2021. Despite a slight increase in carbon emissions in 2023, which was due to cooling agent losses caused by ageing infrastructures, the carbon emissions KPI indicates an overall reduction of over 41% in CO2 equivalent emissions since 2020.

Also in 2023, we remained steadfast in upholding the highest standards of governance. Committed to continual improvement, our operations maintained the ISO certifications for occupational health and safety management, information security management, and quality management.

Finally, we maintained diligent oversight of our financial health to uphold the financial sustainability measures adopted in 2020. Despite challenging macroeconomic conditions, the coverage ratio KPI improved by 8% in 2023 and reached 76.6% at the end of the year.
GOAL 1
BUILD AN ENGAGED, KNOWLEDGEABLE AND COLLABORATIVE ORGANISATION
Goal 1
Build an engaged, knowledgeable and collaborative organisation

The EPO’s people are at the centre of its success as an organisation. In 2023, the Office continued to invest in attracting, developing and retaining the best talent. We intensified efforts to foster engagement and a sense of belonging while the New Ways of Working continued to provide flexibility.

**ATTRACTING, DEVELOPING AND RETAINING TALENT**

The EPO continued to attract the brightest talent from across Europe in 2023. The Office received 11,246 job applications in 2023, compared to 8,204 in 2022. This illustrates the EPO’s attractiveness as an employer of choice.

We recruited 100 new examiners in 2023. The recruits reflect the diversity of the organisation in terms of nationality, gender balance and professional experience. Demonstrating the success of the Pan-European Seal Young Professionals Programme in developing young talent, four of the 100 new examiners were current Young Professionals in year two or three of the programme, and one was a former Pan-European Seal trainee from an earlier cohort.

**Figure 5 – New examiners recruited in 2023**

- 38% women
- 17 nationalities represented
- 25% with experience from academia
- 25% with public sector experience
- 64% with private sector experience
- 64% holding or completing a PhD

Source: EPO

The recruits reflect the diversity of the organisation in terms of nationality, gender balance and professional experience.
Following the strategic pipeline approach, whereby a pipeline of suitable candidates for different profiles is established, there was also an improvement in the timeliness of recruitment. This approach enables the EPO to react in a fast and agile manner to changes in workload and business needs, resulting in 75% of newly recruited examiners in 2023 starting in the first half of the year, compared to less than 50% in previous years. This helps to get needed resources to the examination teams earlier and allows for knowledge transfer.

The EPO maintained efforts to attract diverse talent, through attending targeted events such as the IT Futures Talent Summit, the Top Women in Tech IT Summit and herCAREER events for gender diversity, and the Sticks & Stones job fair aimed at LGBTQ+ inclusion. For the first time we also hosted the MyAbility network event, which supports talents with disabilities, in the fifth year of partnering.

The EPO’s language policy, introduced in 2022, supported our diversity objectives by enabling people from underrepresented nationalities to join the EPO and acquire the three official languages in subsequent years – nine individuals joined the EPO in 2023 under this policy.

Further contributing to the diversity of the organisation is the Pan-European Seal Young Professionals Programme. The launch of the 2023-24 edition in September saw 79 new Young Professionals joining the Office. They represented 22 nationalities and over 70% of them were women. This includes 24 allocated to the PGP area. The programme now counts 141 university partners – an increase from 103 in 2022 – with more than 80% offering degrees in science, technology, engineering and maths.

1 The 10 inclusive behaviours at the EPO are: be open, involve me, no blame, care, leave no-one behind, behaviour, safety, inclusive communication, value differences, empowerment.
Looking at all new recruits (both core business and corporate areas), the EPO is now more diverse than ever before, with 45% of women among the new recruits in 2023, compared to 30% in 2019. To promote transparency in assessing the impact of the Office’s efforts in increasing diversity and inclusion, a D&I Dashboard was launched in 2023. The dashboard provides information on important KPIs such as the geographical diversity of staff, the gender balance of staff and managers and a focus on the Young Professional community.

In 2023, the EPO continued to invest in the development of its staff following the established 70/20/10 approach – comprising learning on the job (70%), peer-to-peer networks and knowledge sharing (20%) and official training (10%). This approach to learning is underpinned by the skills framework, which identifies expiring, evolving and emerging skills for different job profiles, and uses skills self-assessments to target tailored training for each individual. Based on the skills framework, the EPO provides development programmes targeted at specific job profiles to ensure maximum impact. In 2023, development programmes for further profiles were launched, including legal professionals, management assistants and finance and data protection experts. These programmes ensure that staff keep up to date with the latest developments in their fields.

Figure 7 – Diversity of EPO staff in 2023

35 nationalities represented
35% women staff
28% women managers

KPI:
91% of EPO staff covered by a tailored development programme by the end of 2023

Source: EPO

In 2023, development programmes for further profiles were launched, including legal professionals, management assistants and finance and data protection experts.
A focus in 2023 was the training provided to the EPO’s examiners and formalities officers. The 100 newly recruited examiners have started the two-year initial examiner training (Academy for new examiners). Upskilling activities were offered to all examiners and formalities officers around new digital tools to ensure that the full benefits of digital transformation can be reaped. For example, focused training was taken by 1 600 examiners on the use of ANSERA, the EPO’s search engine, to enhance their search skills and ensure they can make the best use of this tool. In terms of peer-to-peer learning, 8 iLearn days were organised for all staff, more than 370 Continuous Knowledge Transfer (CKT) events took place in different business units, and 250 “CKT day tips” on good practices were shared with all staff via the Intranet homepage.

The EPO’s managers have a key role to play within the organisation, in terms of fostering engagement, ensuring alignment with the EPO’s strategy and catalysing change. The EPO Management Community is an internal business school aimed at fostering collaboration and knowledge sharing among managers; 594 managers were members at the end of 2023. There were 25 learning events on various topics from strategic to operational, with 2 522 participations over the course of the year. Resources offered during the year included 64 micro-learning, 12 manager briefing kits and 26 courses related to EPO people management skills such as managerial communication, team building and collaboration or change management. An example of the impact of these activities, measured via a survey of managers, was a 40% increase in managers’ understanding of EPO strategic priorities and alignment.

In the spirit of finding synergies between the EPO’s internal and external training offerings, as well as strengthening the European Patent Network through knowledge sharing, the first iLearn Together Day was held in October 2023. The event brought together EPO staff and staff from national patent offices to discuss topics such as the Unitary Patent, the EPO Observatory on Patents and Technologies, Patenting AI and various search techniques.

Fostering Engagement and a Sense of Belonging

With engagement continuing to be a fundamental goal of the organisation, follow-up on the results of the previous staff survey, conducted in 2022, continued with the organisation of many activities to bring staff together and strengthen the sense of belonging. This included the 50 Years EPC celebrations (see special feature on the 50th anniversary above) and the Campus Days. The first Campus Days were organised in September 2023 around the main themes of Focused-Connected-Supported with the aim of strengthening the sense of belonging among staff within the New Ways of Working environment. The event was composed of a variety of presentations, workshops, keynote speakers and social/networking events that staff could attend on a voluntary basis. More than 3 000 staff were present on site per day and feedback was very positive, especially with regard to the various networking possibilities and opportunities to reconnect with colleagues that were offered in the programme.

Figure 8 – Learning facts and figures

- 112 799 hours of instructor-led learning (around 24 hours per employee who followed instructor-led courses)
- 5 861 hours of external online courses (4 hours per employee who used LinkedIn, Coursera or Udemy)
- 9 700 hours of peer-to-peer knowledge sharing CKT events
- 8 iLearn Days organised in 2023 with 10 575 attendees

Source: EPO
Part of fostering staff engagement is ensuring that all staff members feel included in the EPO community. A key objective in the modernisation of the EPO’s internal legal framework was achieved in 2023 with the approval of a change in the recognition of partnerships. All partnerships are now recognised as equal to marriage, with the benefits and obligations for staff being fully aligned. Moreover, the Office continued to strengthen the role of Diversity & Inclusion Promoters, as key interlocutors supporting the EPO’s D&I activities, and to promote inclusive behaviours,¹ as well as providing support to three staff-led groups (the Women’s Network, the Rainbow Group and the Special Needs Network). The EPO continued to celebrate international events putting a focus on gender diversity (International Day of Women and Girls in Science, International Women’s Day, Girls Day, Women in IP) and LGBTQ+ inclusion (Vienna Pride and Rainbow Parade, Christopher Street Day Pride Munich, Pride Month Berlin, Amsterdam Pride, LGBTQ+ people in STEM). We also supported the inclusion of people with disabilities, with a special networking event to celebrate the International Day of People with Disability and a panel on inclusion and disabilities during the 50 Years EPC celebrations.

¹ The 10 inclusive behaviours at the EPO are: be open, involve me, no blame, care, leave no-one behind, behaviour, safety, inclusive communication, value differences, empowerment.
The pilot New Ways of Working scheme was in place during 2023, providing staff with broad flexibility to balance their personal and professional lives. This flexibility contributes to staff wellbeing, while maintaining the strong sense of belonging within the EPO community and the EPO’s high quality standards. In 2023, the flexibility provided by the pilot scheme was widely used by almost all staff, with 98% having teleworked for at least one day during 2023. About 54% of staff used all types of work (on-site, teleworking from the country of employment or teleworking from another EPC contracting state). On average around half of all staff’s total working time was on-site. Full compliance with the minimum on-site attendance (60 days) foreseen by the scheme was observed (with only 16 cases in 2023 requiring intervention from the Office). The New Ways of Working Planning Tool was also used by staff to plan their working patterns and enable them to meet colleagues for collaboration and exchange. The EPO monitored the implementation of the pilot scheme in 2023, in preparation for presenting an evaluation report to its governing bodies in 2024, including a proposal for a future scheme.

CREATING AN ATTRACTIVE, SUSTAINABLE AND HEALTHY WORKING ENVIRONMENT

In 2023, the EPO continued with initiatives aiming to enhance the working environment in its buildings. As our professional homes, the Office’s buildings remain crucial in the New Ways of Working as places for staff to connect and collaborate. The ‘bringing teams together’ project was completed in Munich, Berlin and The Hague, ensuring a more sustainable use of office space through new ‘workplaces for a day’ while bringing staff members closer to their team colleagues, to support collaboration and a sense of community in the New Ways of Working.

There was significant progress on the Vienna Green Hub project in 2023, which remained on track to be completed on time and within budget. The new building will provide Vienna staff with a modern and engaging working environment. In 2023, the installation of the façade was completed, and the interior works began. Vienna staff are expected to move back into the renovated building before the end of 2024.

Finally, the set of priority works to ensure the health and safety of staff and visitors as well as the sustainability of the EPO’s buildings continued to be implemented. In the PschorrHöfe buildings, necessary measures were implemented to maintain compliance with fire safety regulations. Additionally, the Uninterrupted Power Supply for the IT servers and the cooling machines for these servers were upgraded to meet the latest standards, resulting in an annual saving of 167 MWh of electrical energy. Elevators were refurbished to enhance accessibility for individuals with disabilities and improve building efficiency, leading to a further saving of 90 MWh/year of electrical energy. All light fixtures were replaced with LED lights by the first half of 2023, resulting in an additional saving of 1 435 MWh/year of...
Enormous ongoing projects, such as the replacement of the water treatment system and the renovation of data centres in Isar and in The Hague, are expected to be completed by 2024.

**FOSTER SOCIAL DIALOGUE**

In 2023, the EPO continued to foster social dialogue with its staff representatives and unions on a range of topics contained in the Social Agenda 2023. We held seven meetings of the General Consultative Committee (GCC) and four meetings of the Central Occupational Health Safety and Ergonomics Committee (COHSEC), leading to concrete results that benefit staff, on topics such as simplifying reimbursement requests for educational costs, recognition of PhDs for part-time work, and extending the recognition of partnerships. In addition, 19 technical and working group meetings were held with staff representatives prior to the submission of the documents to the GCC, to ensure a deeper consultation on topics that are important to staff.

The Joint Working Group on the Appeals Committee was concluded in 2023, resulting in the amendment of Circular 356 and leading to appointments by the Central Staff Committee (CSC) to the Appeals Committee in February. Staff Committee elections were also successfully held.

The EPO also continued to pursue constructive dialogue in the resolution of conflicts. This saw positive results in 2023 with a 19% reduction in management review cases registered and a 67% decrease in ILOAT complaints compared to 2022.

In 2023 fewer individuals filed more internal appeals: 118 internal appeal cases were registered in 2023, compared to 58 in 2022, while the number of individual appellants associated to these appeal cases dropped to 336 in 2023 from 620 in 2022 (a 46% decrease). The most common topic in internal appeal cases in 2023 (44% of cases) was the Education and Childcare Reform.
GOAL 2
SIMP Marcos and MODERNISE IT SYSTEMS
In 2023, the EPO finalised SP2023 deliveries and intensified our business change efforts in preparation for the decommissioning of several legacy tools. At the same time, we reflected on our digital transformation journey and identified lessons for the future.

**DIGITALISATION OF THE PGP**

The Patent Workbench (PWB) has evolved, becoming the central hub for the PGP. By the end of 2023, we had successfully digitalised 99.5% of patent grant actions. The PWB was expanded to include the remaining workflows in examination and to integrate quality approvals made by the chairperson and line manager in search and examination. Extending the coverage of digital workflows streamlines the process and enables quality improvement, as well as increasing efficiency compared to sending emails for the same actions.

In 2023, the Digital File Allocation service integrated in the PWB evolved from a prototype to a fully functional tool equipped with artificial intelligence (AI), which helps to allocate the right file to the right examiner. New features (such as AI suggestions for file allocation and redistribution) were implemented, including an extension to the opposition procedure. The implementation of AI support has reduced the need for manual support in re-routing files by 75%, resulting in improved quality and timeliness. For the remaining cases that still require manual intervention, files are re-routed and the tool is continuously refined to increase its accuracy.

In 2023, the Digital File Allocation service integrated in the PWB evolved from a prototype to a fully functional tool equipped with artificial intelligence (AI), which helps to allocate the right file to the right examiner.
Additionally, in 2023, we integrated new tasks related to user data management – such as changes of name, appointment of representatives and transfer of rights – into the PWB. A new tool was introduced within the PWB that enabled staff to easily perform batch changes to multiple files simultaneously. This simplified the work of formalities officers and generated efficiency gains by taking into account the phase of different proceedings. Most of these services will also be offered online to external users via MyEPO Portfolio. The success of the new tool enabled the legacy Universal Formalities Officer’s tool (UFO) to be decommissioned, further simplifying our IT infrastructure.

The Digital File Repository (DFR), a digital archive storing all the relevant documents of a file and a tool allowing collaboration and sharing of intellectual work, is another key component of our PGP digital backbone. DFR was gradually extended to all areas of the organisation in 2023, including legal teams and the Boards of Appeal. This provided everyone with access to a single source of data, eliminating the need for cumbersome transfers between systems and improving efficiency of the document handling. Following extensive internal consultation and a substantial number of improvements in ergonomics and performance, we were able to smoothly decommission the legacy digital archives (Di+) for all users, contributing to the simplification of our IT toolset.

In the area of publication, some services were insourced, such as bulk data distribution, reducing risks and costs for the organisation. Each month, we distribute 10 terabytes of bulk data sets to 300 subscribers, providing them with non-confidential, structured and standardised data collections from internal EPO databases. In 2023, we also completed the insourcing of the production of the European Patent Bulletin. Since 2005, the Bulletin has been published every Wednesday in the form of a 6 000-page PDF that lists bibliographical data relating to newly published grants. Since the ninth edition of the Bulletin in 2023, we have been producing the PDF version in-house, and the contract with the external provider has come to an end.

**IMPROVEMENTS TO CLASSIFICATION AND SEARCH**

Quality in the PGP begins with high-quality classification and search. In 2023, our focus remained on enhancing the performance and usability of ANSERA, making it the primary search tool for the majority of our examiners. For instance, redesigned drawers in ANSERA were delivered to improve document management during searches and ease the transition from the legacy JViewer to the ANSERA Viewer, which is a necessary step before decommissioning the legacy EPOQUE search environment. The growing maturity of ANSERA’s rich full-text search allowed us to decommission X-Full (an application that allows searching across full-text databases) for 95% of examiners, with the plan to fully discontinue this tool in January 2024, simplifying our IT environment and further consolidating search and classification tasks in ANSERA.

In 2023, our focus remained on enhancing the performance and usability of ANSERA, making it the primary search tool for the majority of our examiners.
Moreover, ANSERA TopUp (ATopUp) has replaced the former top-up search tool, XTopUp. ATopUp offers ranked results and filtering capabilities from within ANSERA and enables examiners to detect earlier national rights prior to grant, which is an essential component of the quality assurance of the EPO grant procedure and a requirement of the Unitary Patent procedure.

Since its launch in 2021, ANSERA PreSearch has been continually improved, incorporating the latest developments in machine learning and AI. The new tool improves the quality of search and written opinion by ensuring that the most comprehensive and advanced pre-search is performed efficiently for every search, based on a ranked list of highly relevant documents which can be filtered and further searched. User feedback, including from early adopters, has been taken into account for these enhancements, allowing for the decommissioning of the legacy pre-search tool for all examiners.

In 2023, new classification tools – Classera and Canopée – made significant advancements, encompassing the full range of classification tasks. Given the progress made in modernising the search and classification ecosystem and consolidating it around ANSERA, we plan to decommission the legacy classification tools in early 2024, followed by the gradual decommissioning of the legacy search tool EPOQUE.

An essential part of our efforts to improve quality and efficiency is our ability to master the wealth of prior art published in many languages. We have extended our in-house machine translation service to new language pairs, providing examiners with access to 99% of high-quality translated patent data in our databases.

The number of combinations of two languages used in the translation process (so-called language pairs) available to EPO examiners increased from 32 in 2019 to 56 in 2023.
Digital transformation is a journey that begins and ends with our users. With this in mind, we have focused on enhancing the ways in which we interact with our users throughout their customer journey.

As a fundamental part of our approach to developing our external tools, we work closely with our users to test major new features of MyEPO Portfolio during the pilot phase. In 2023, we successfully completed two pilot trials and released new features to all users. Among the most notable new functionalities is the Shared Area which supports a more collaborative and non-sequential examination process, by allowing the examining division and the applicant to work together in real time and at an early stage in the examination process. This early alignment and common understanding between the division and the applicant will ultimately lead to better quality. In addition, the introduction of new business-to-business technical interfaces, known as application programming interfaces (APIs), enable users to streamline and improve their processes, both internally and while interacting with the EPO.

The adoption of MyEPO Portfolio by our users is rapidly increasing, and many are now benefiting from the convenience of accessing their digital communications through the user-friendly EPO Mailbox. In March, we reached a new milestone with the partial discontinuation of fax usage. While we will continue to accept incoming faxes from users until mid-2024, we no longer send them as part of the patent granting process. By phasing out obsolete communication channels we are continuing to modernise access to our services, simplifying user communication and supporting a fully digital and paperless PGP.
In 2023, we launched our new external website, featuring an improved search experience, informative sections for inventors and SMEs, a Transparency Portal, and a "New to patents" page, which explains the fundamentals of intellectual property protection to non-patent experts. The new EPO website has been optimised for all devices and designed to meet the evolving needs of our users in the digital age.

In line with ambitions outlined in SP2023, we continued moving towards cloud and cloud-native technologies and away from legacy technologies to simplify and modernise our IT landscape. As part of this transformation, our revamped external website epo.org and New Espacenet, which provides access to the world’s largest free collection of patent documents, have been successfully migrated to the cloud, ensuring better performance and availability.

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In response to staff feedback, we have made significant improvements to our workplace booking tool to enhance the user experience and simplify the booking process. A major component of our New Ways of Working pilot has been grouping teams into neighbourhoods within our buildings. To support this approach, we have added new options to the workplace booking tool, making it easier and faster to book a workplace in a team’s dedicated area and bringing colleagues closer together for collaboration and networking and to promote a sense of belonging.

The EPO has made the necessary changes to our financial systems to support activity-based budgeting for all external expenditure in the 2024 budget. We have successfully improved the budget management process and laid the foundations for integrated budget reporting, leveraging data from our financial and procurement systems and SAP Analytics Cloud. With these advances, we took a significant step towards financial transparency by allowing all units to report the purpose of expenditures and better monitor their budget consumption consistently.

Additionally, we have launched a pilot of our new procurement process with a modern tool (iValua), including a new procurement portal for providers. The introduction of our procurement portal for suppliers is a first step towards a joint digital purchasing process, offering optimised communication, collaboration and co-operation between the EPO and our suppliers. Suppliers can maintain their information and contact details, view existing or amended contracts and finalise the contract process using digital signatures.

In 2023, our data analytics platform underwent a significant transition, with statistical reports and data services migrated from the legacy SAS software to the open-source WYRM solution. For 20 years, SAS has provided the Office with valuable statistical reports and data services. However, in recent years it faced limitations in handling increasingly complex data. Since its initial roll-out, WYRM has become the preferred tool for analysts across the Office, supporting various business areas. With over 100 000 monthly visits, the portal is used by approximately 6 000 staff members each month. The legacy SAS platform is scheduled to be decommissioned in early 2024, bringing savings of EUR 590 000 per year.
STRENGTHENING INFORMATION SECURITY

At the EPO, we prioritise information security to protect our users, staff and data across all our tools. In recognition of our efforts, we successfully passed our first surveillance audit for the ISO 27001 information security standard.

We have also refined our authentication solutions, introducing self-service features for external users and extending these to all relevant online systems, including legacy ones. This allows external users to transition away from smartcards to more secure, simpler and more flexible means of online authentication based on two-factor authentication (factor 1: email address plus password; factor 2: another authentication method).

In 2023, we continued to raise awareness of cybercrime through communication campaigns and phishing simulations, with a focus on increasing staff awareness of IT security, physical security and related policies. Although some recipients fall for the phish, the majority of users exhibited high levels of awareness and the ability to identify and report suspicious messages. These findings highlight the significance of our ongoing efforts to combat cybercrime through a cybersecurity education programme.

We also built upon our experiences in securing our cloud applications and infrastructure, investing in the latest solutions for confidential computing and encryption techniques. This ensures that the Office remains in full control of the data entrusted to us, including when it is stored in the cloud.

MODERNISING INFRASTRUCTURE

In 2023, we continued our efforts to improve the availability and stability of our IT systems, recognising the direct impact any failure can have on our activities and our ability to provide high-quality services to users. At the end of the year, we reached our target of 98% availability of our IT systems.

The EPO completed a long-term project to deliver comprehensive disaster recovery capability, allowing us to switch operations from our primary data centre in Luxembourg to our backup data centre in Munich. This was successfully tested, building on major changes to our IT infrastructure, including decommissioning the mainframe, moving the primary data centre to Luxembourg, and implementing a new storage solution.

Our EPO Cloud Policy was updated to incorporate the latest technical, legal, contractual and sustainability requirements, reflecting our experience in using cloud services. As part of the digital transformation, we are increasingly using cost-effective, high-performing and secure cloud services to support our goals. The EPO Cloud Policy, in line with the EPO’s Data Protection Rules, defines the appropriate, controlled use of cloud services during all lifecycle phases and enables fact-based decisions on their use in specific situations.
GOAL 3

DELIVER HIGH-QUALITY PRODUCTS AND SERVICES EFFICIENTLY
Goal 3
Deliver high-quality products and services efficiently

**ASSESSING OUR QUALITY – STRENGTHENING OUR INDEPENDENT AUDIT PROCESSES**

Directorate Quality Audit (DQA) results show that, although there is still work to be done to achieve excellence, there was a positive trend in quality overall in 2023 compared to 2022. Major findings related to grounds for opposition at both search and grant stages were reduced.

Key to the search task is finding the right prior art and evaluating its relevance (in terms of novelty and inventive step) to the claims made in the application. Since search audits began, auditors have checked whether better documents could be found and whether the relevance of the cited documents was accurately indicated. In 2021, the number of audited search files with no findings against these two criteria hit an all-time high of 96.6%. At that time, user feedback indicated that the quality of the written opinion was also important. Responding to this, the EPO implemented an extended search audit in October 2021 with five additional criteria, which enabled the completeness and correctness of written opinions to be evaluated for the first time. Due to these additional stringent checks, audit results from 2021 and before cannot reasonably be compared with the audit results from 2022 onwards.

Figure 18 – Search: quality audit findings

<table>
<thead>
<tr>
<th>Findings potentially affecting validity</th>
<th>2022</th>
<th>2023</th>
</tr>
</thead>
<tbody>
<tr>
<td>Novelty, Inv. step¹</td>
<td>5.9%</td>
<td>6.0%</td>
</tr>
<tr>
<td>Added subject-matter²</td>
<td>1.8%</td>
<td>0.7%</td>
</tr>
<tr>
<td>Sufficiency of disclosure⁴</td>
<td>0.3%</td>
<td>0.1%</td>
</tr>
</tbody>
</table>

Findings not related to validity:

| Clarity⁵ | 0.0% | 0.0% |
| Quality improvements | 9.4% | 11.5% |

No findings:

| No findings | 82.6% | 82.7%⁶ |

¹ e.g. Art. 138 EPC, Art. 65 UPCA
² audit criteria includes e.g. R. 61, 62, Arts. 54 and 56 EPC
³ audit criteria: “added subject-matter”: new information introduced in the application after filing date which impacts scope of claims, e.g. Arts. 76 and 123 EPC
⁴ audit criteria includes e.g. Art. 83 EPC objection missing
⁵ audit criteria includes e.g. Art. 84 EPC objection missing for independent claim
⁶ Confidence interval (no findings): ±2.7%.

Note: Files with multiple findings are only counted in the category of the highest-ranked finding.

Source: EPO
The results show that the proportion of findings that potentially affect the validity of a future patent improved from 8% of the sampled files in 2022 down to 6.8% in 2023. Novelty and inventive step findings remained stable at around 6%, demonstrating that standards with this assessment were maintained despite an ever-increasing volume of prior art and increasing complexity and integration of applications. In only 4% of search reports sampled in 2023 did auditors find a better prior art document. This indicates the continued high quality of the retrieval of the right prior art documents.

Overall, the number of files with no findings was stable at 81.7% in 2023, with a confidence interval of +/- 2.7%.

As intended, the increased granularity of the extended search audit has revealed several opportunities for improvement. The most frequent issue is still the correctness of objections in the written opinion (11.5% of files in 2023). Often the examiner has been too strict in raising concerns. These preliminary opinions on patentability can be adjusted in the examination phase based on the applicant’s arguments.

Moving to grant audit, in 2023 the proportion of sampled grant files for which DQA had no findings increased to 77.9%, an improvement of 1.3% compared to 2022. The number of audited files increased to 1 050, narrowing the confidence interval to 2.5%.

Findings potentially affecting the validity of the future patent improved from around 15.4% in 2022 to around 13.3% in 2023. The most significant improvement was in the assessment of novelty and inventive step (an improvement of 1.6%), while findings in added subject matter also improved (by 0.9%).
The improved granularity of the findings at grant since 2022 enables us to identify further potential areas for improvement, including clarity. Feedback from the 2023 SACEPO Working Party on Quality meetings indicates that a common understanding of the assessment of clarity is important for both applicants and examiners. In 2024 we will therefore look more closely into the underlying reasons for the clarity findings in a workshop with selected users.

Figure 19 – Grant: quality audit findings

![Graph showing the distribution of findings potentially affecting validity and findings not related to validity for 2022 and 2023.]

<table>
<thead>
<tr>
<th>Findings potentially affecting validity¹</th>
<th>2022</th>
<th>2023</th>
</tr>
</thead>
<tbody>
<tr>
<td>Novelty, Inv. step²</td>
<td>9.5%</td>
<td>7.9%</td>
</tr>
<tr>
<td>Added subject-matter³</td>
<td>5.9%</td>
<td>5.0%</td>
</tr>
<tr>
<td>Sufficiency of disclosure⁴</td>
<td>0.0%</td>
<td>0.4%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Findings not related to validity</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Clarity⁵</td>
<td>5.0%</td>
<td>5.3%</td>
</tr>
<tr>
<td>Quality improvements</td>
<td>3.0%</td>
<td>3.5%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No findings</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>No findings</td>
<td>76.6%</td>
<td>77.9%</td>
</tr>
</tbody>
</table>

Note:
1 e.g. Art. 138 EPC, Art. 65 UPCA
2 audit criteria: Arts. 52-57 EPC; majority of findings in this category relate to Arts. 54 and 56 EPC
3 audit criteria: “added subject-matter”: new information introduced in the application after filing date which impacts scope of independent claims; Arts. 76 and 83 EPC
4 audit criteria: Art. 84 EPC
5 audit criteria: Art. 84 EPC
6 Confidence interval (no findings): +/-2.5%.

Source: EPO

Novelty and inventive step: files with at least one finding under Arts. 52-57 EPC raised against an independent claim.

Added subject-matter: files with at least one finding under Art. 123(2) or Art. 76(1) EPC raised against an independent claim (“novelty and inventive step” files are excluded).

Clarity and insufficient disclosure: files with at least one finding under Art. 83 EPC against an independent claim or a finding under Art. 83 EPC (“novelty and inventive step” and “added subject-matter” files are excluded).

Quality improvements: all remaining files, i.e. those with only findings raised against a dependent claim, the description or a drawing.

Number of files audited:

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Files</th>
</tr>
</thead>
<tbody>
<tr>
<td>2022</td>
<td>832</td>
</tr>
<tr>
<td>2023</td>
<td>1,050</td>
</tr>
</tbody>
</table>
SQAPS: ASSESSING QUALITY WITH OUR USERS

The Stakeholder Quality Assurance Panels (SQAPs) are a crucial component of the EPO’s user outreach programme, providing users with a platform to directly engage with EPO experts and discuss product quality of specific files in a collaborative setting. The SQAP format provides the time and space for open and frank discussions on detailed aspects of the quality of specific files. As a result, the feedback gained is extremely rich and substantial. The setup allows users to clearly express their interpretations, needs and expectations with regard to various steps of the PGP, and even specific types of objections. The SQAPs report to the Working Party on Quality which serves as the primary platform for the EPO’s engagement with its users.

In 2023, the SQAPs were revised and expanded. Three sessions were held, bringing together 50 EPO experts and experienced European patent attorneys. They jointly assessed the quality of EPO actions and identified opportunities for improvement and best practices with regard to search and written opinions, intermediate communications and grants. EPO staff and SACEPO Working Party on Quality members joined these sessions as observers. Feedback from the 2023 SQAPs provided valuable input for the EPO’s 2024 Quality Action Plan. The new expanded SQAPs concept was very well received by SACEPO Working Party on Quality and the SQAP programme will continue to evolve under SP2018’s Driver 3.

QUALITY ASSURANCE: A COMPLETE AND ACCURATE SEARCH REPORT AND WRITTEN OPINION

The EPO has the world’s most extensive prior art collection. With an increase from 146 million to 153 million patent publications between 2022 and 2023, the collection now comprises 86 million patent families. This includes 60 million patent families containing 76 million publications of Asian origin (from China, Japan and Korea). An accurate classification of this massive volume of prior art is essential to provide high-quality searches. AI plays an essential role to help us manage these very large numbers: the EPO enhances the Cooperative Patent Classification (CPC) symbols provided by other Offices for their publications with our internal AI classification systems. The high accuracy of the latter ensures that classification quality is according to our internal standards including consistency, while saving resources.

The completeness of the EPO’s search reports also relies on access to non-patent literature, such as articles in scientific journals. The volume of non-patent literature varies by technology and is a fundamental pillar of search quality; for example, in 2023, non-patent literature made the highest contribution to total citations in the area of pure and applied organic chemistry. This is why the EPO has continued to expand our non-patent literature database: it now comprises more than 126 million groups,² compared to 95 million in 2019.

Further to that, our collection contains over 445,000 English-language abstracts and summaries of traditional knowledge documents originally published in India, China and Korea. We also have 13,900 records from the Community Plant Variety Office (CPVO) which enable EPO examiners to provide even more legal certainty to applicants seeking protection for plant-related inventions.

The EPO’s collection of standards-related documents has continued to grow, up from 4.6 million in 2021 to 5.1 million in 2023. Standards ensure the compatibility and interoperability of components, products and services while promoting dissemination of new technologies, effectively constituting a central pillar of the modern knowledge economy. The EPO has signed agreements with a number of standard-developing organisations (SDO) and ensured that the relevant standards documentation can be used in the patent grant process. This makes the EPO the focal point of expertise in Europe and the world when it comes to standards search.

² The term “group” is used to avoid double counting of non-patent literature articles; an article might appear in one or more abstract databases, but we count only one record. A group therefore represents the original article and all published references to the same article (from different sources).
Throughout 2023, the Office maintained its focus on modernising tools and integrating AI when deemed beneficial to our examiners. This ongoing investment underscores our commitment to delivering high-quality end products and services to our users, by ensuring the completeness of the search and accuracy of the written opinion.

The EPO’s pre-classification process is the first step to enabling the right file to reach the right examiner and examining division. The AI-based pre-classification engine launched in 2022 has been upgraded and fine-tuned. The introduction of machine learning makes it possible to automatically adapt the pre-classification service in the event of changes in the definitions of over 1,400 broad technical fields and/or revisions of the classification scheme, resulting in a 90% routing accuracy.

The Digital File Allocation tool piloted in late 2022 has now been fully integrated into the PWB and increasingly leverages the power of AI to identify the appropriate technical area of incoming dossiers, suggesting appropriate examiners and finding related dossiers that must be treated consistently. This more holistic approach to allocating the right file at the right time to the right examiner is now used in over 85% of applications and will bring greater consistency and quality to the products that we deliver.

Following the decommissioning of the Dossier Inspection tool in February 2023, the DFR is now the single repository used by examiners, formalities officers and Boards of Appeal members to access electronic files and citations, upload documents and annotate them, all within a single interface. It currently stores over 1.3 million files and integrates fully with the PWB. DFR is gaining traction as a collaboration tool for members of the division, with 28% of annotated files containing annotations from more than one user.

During 2023 we developed our tools significantly to support a more collaborative procedural approach, for both the division and the applicant. The new Active Division Area has been integrated in the DFR and enables real-time online co-editing of a DocX document.

Figure 20 – Overview of EPO tools
to facilitate consultations and collaborative drafting within the examining or opposition division. Alongside the applicant’s MyEPO Portfolio online service, in July 2023 we launched a new feature called Shared Area. This allows simultaneous collaboration on documents, making informal consultations between the examining division and the applicant or their representative easier.

Collaboration at the search stage has always been encouraged and routinely takes place in many forms – for instance by consulting the chairperson or another expert or a specialist on a specific aspect of an application, by collective group consultation to discuss search strategy and in the form of team search jams. In response to the need to focus more on the completeness of search and written opinions, the EPO piloted a more formal engagement of the division at the search stage in 2022 by involving the chairperson for every file. For the duration of the pilot, the searches/written opinions produced by the six pilot teams were sent to the chairperson for review before sign-off by the line manager. From 1 November 2023, the whole division of three examiners is involved in, and digitally endorses, all searches and written opinions and the team manager is involved in the quality loop. Already we see cases being improved thanks to the interaction and collaboration of all the division members and the team manager on every file. Collaboration will be enhanced in 2024 by expanding the use of mixed divisions of examiners with differing technical expertise to examine applications spanning different fields. Increased use of this collaborative approach will improve the thoroughness of our searches, resulting in higher-quality patents and greater harmonisation.

A THOROUGH, CONSISTENT AND HARMONISED EXAMINATION

During meetings with users, the topic of consistency in the EPO’s approach to applications in emerging technologies has occasionally been raised. This is particularly important in applications spanning multiple traditional fields and comprising a mixture of technical and non-technical features. Following this user feedback, we organised an iLearn day, with a specific focus on AI and computer-implemented inventions (CIIs) in patent applications. Presentations were given on topics including driving innovation through CII; the legal framework for CII and its development (EPC, Guidelines for Examination, Enlarged Board of Appeal decision G 1/19); how to spot and how to handle CIIs (and what to do with them); and examination of AI-based inventions across technical fields in a collaborative, interdisciplinary manner with mixed examining divisions.

Although we do not believe that stringency alone should be a measure of quality, it is important to remind ourselves of the essential role that the PGP plays in helping investors to decide whether it is worth pursuing a development. Our examination services and search and opposition processes are perhaps the most complete in the world. Figure 21 shows that 40% of our patent applications do not make it to grant stage, largely due to the complete opinions of our examiners that allow applicants to gauge the potential scope of their inventions. We are aware that opposition and appeal proceedings are influenced by a myriad of factors and interests. However, the exceptionally high level of legal certainty of our examination actions contributes to less than 1% of European Patents being finally revoked.
**A FAIR AND IMPARTIAL OPPOSITION PROCEDURE**

In the opposition area, harmonisation and continuous improvement are at the core of our quality actions. We also try to leverage the opportunities offered by the evolving digital environment to streamline our processes and improve the dialogue with all stakeholders. One of our focal points in 2023 was to create a more complete and more integrated picture of all internal and external feedback received, building on targeted operational quality checks, regular observation of oral proceedings, regular discussions with experienced chairs, complaints and observations by external parties, and lessons learnt from appeal. These inputs were then discussed and distilled into action plans in quarterly opposition Quality Round Tables bringing together a wide variety of internal stakeholders from the operational, quality and patent law and procedures areas.

The Office has also consolidated best practice for all opposition communications including the handling of the procedural documentation and citations with the support of our procedural specialists and experienced chairs. We have paid special attention to the completeness of the summons ensuring that the preliminary opinion of the opposition division is clear and all relevant facts and submissions are attached. After a pilot at the end of 2023, we plan to extend structured summons and decisions in 2024. This is expected to contribute to a more structured exchange with all parties in opposition proceedings, ultimately benefiting quality, transparency and efficiency.

**OPPOSITION BY VIDEOCONFERENCE**

Now that videoconferencing (VICO) has become the standard for dealing with oral proceedings, we continued in 2023 with dedicated workshops for our chairpersons, with a special focus on soft skills, to ensure an inclusive, objective and effective process to come to a high-quality decision. We have observed that the average duration of an oral proceeding by VICO continued to go down and is now comparable with the situation before the pandemic, with over 90% of cases finished within one day. The new digital
environment has also allowed 20 times more public observers (more than 2,000 per year) to attend oral proceedings, which clearly supports the transparency of the decision-making process.

**TRAINING AND CONTINUOUS LEARNING**

To ensure that new examiners have the in-depth skills to perform their complex tasks to the required high standard, the initial training programme at the EPO is pivotal. The new examiner academy has been developed over recent decades. It is constantly amended and improved based on feedback from course participants and presenters, and as a response to specific needs and changes in procedures or tools. New examiners benefit from 45 to 48 classroom training days, depending on technical background, plus an additional nine days learning through work on their own files. The classroom time is spent in seven courses spread over two years, during which the new examiners are progressively introduced to all the skills and tools needed to deliver high quality and efficiency. This formal, harmonised and controlled classroom training is complemented during the first two years by working closely together with and under the supervision of one or more examiner coaches, who are experienced examiners from the same or a closely related technical field.

Legal training ensures that staff are always up to date on the applicable legal framework, as well as on our users’ IP strategies. In 2023 our main user associations, the EPI and BusinessEurope, started to give lectures to EPO staff on the most recent developments. We also co-operated with the epi and BusinessEurope to implement a new training module for newcomers that increases their understanding of the importance of high-quality patents to industry. This module was rolled out in June 2023 and is delivered by epi and BusinessEurope representatives to every induction academy.

In another development in 2023, and reflecting the increasingly online nature of our interactions, eight iLearn days took place. Organised by colleagues for colleagues, these online presentations and discussions cover practical matters related to the quality of examiners’ daily work – for example writing clear communications.

In addition to the measures to improve consistency in examination mentioned earlier, an iLearn event on the Unitary Patent took place in 2023. This focused on operational matters for examiners and formalities officers such as requests for Unitary Patents, register entries and changes to the ANSERA TopUp search tool. The combined attendance for the three sessions totalled nearly 1,800, meaning this event had the highest average attendance per session of any iLearn event on quality to date.

Continuous training kept our examiners up to date with the latest developments in technology, tools and the law – for example, two days of training for 200 examiners on the latest 6G technology; six hours of training on our search tool ANSERA delivered to 1,500 examiners, resulting in an increase of searches being completed in ANSERA from 63% to 93%; and talks by Unified Patent Court (UPC) and national judges as well as Boards of Appeal members.
LEGAL CHANGES TO SUPPORT DIGITAL TRANSFORMATION

In October 2022, the Administrative Council adopted a first basket of legal changes in support of the Office’s digital transformation. By 1 November 2023, all measures in this basket had been fully implemented. For example, documents cited in search reports are now transmitted to applicants (and made available to the public) via digital services rather than postal delivery, significantly reducing paper consumption. Similarly, the EPO’s notification regime and calculation of procedural time limits have been aligned with digital reality.

Building on the successful implementation of these measures, and in close consultation with its stakeholders, the Office began work on a second basket of changes aiming to make the patent grant procedure simpler to use, and even better suited to our digital age. Having collected over 100 proposals from our users, we identified 20 concrete measures to achieve those objectives – including five changes to the Implementing Regulations, which were adopted by the Administrative Council in December 2023 and will be implemented during 2024. These include increased flexibility in the use of electronic signatures and the definitive decommissioning of fax as a means of filing.
In 2023, the EPO continued its programme of **one-to-one meetings with applicants**, holding 24 such meetings. Four of those took place in a hybrid environment, while the other 20 took place virtually. In 2023, there were 15 technical sessions held with applicants from industry and IP law firms, along with nine high-level strategic meetings involving key applicants from industry and various associations. Among those meetings, we met 11 of the 2022 Patent Index’s top 100 applicants, and users from 14 different countries.

Throughout each exchange, the EPO aimed to collect feedback on strategic and operational matters – in particular on quality, alongside gaining insights into filing strategies, emerging technologies and applicants’ plans. Notably, meetings with SMEs played a significant role in enhancing the Office’s understanding of their requirements while also increasing their awareness of our range of products and services. EPO delegations varied based on the meeting type, but consistently featured senior management, senior experts, examiners and formalities officers. This ensured thorough representation across the technical fields relevant to each applicant’s area of focus.

The topics covered during meetings were mainly selected by the users and therefore reflect the main areas of discussion or concerns from our key applicants such as quality, harmonisation, communication with examiners, timeliness of the PGP, the Unitary Patent and MyEPO Portfolio.

### Figure 23 – Exchanges with users: key figures

- **We held** 24 meetings with 21 different companies
- **We met** 11 applicants from the industry and associations
- **15 technical follow-up meetings** with applicants from industry and IP law firms
- **9 high-level strategic meetings** with key applicants from the industry and associations
- **4 meetings were held in hybrid mode**

Applicant origins:
Most from Germany, followed by United Kingdom, France, United States, Switzerland, Sweden, Japan, Austria, India, Ireland, Netherlands, Denmark and China

The EPO aimed to collect feedback on strategic and operational matters – in particular on quality, alongside gaining insights into filing strategies, emerging technologies and applicants’ plans.
REGULAR MEETINGS WITH USER GROUPS

User feedback is an essential part of our quality assessment, ensuring that we are delivering the expected quality and that the actions in place are the right ones. We count on numerous channels to discuss with and listen to users. We have gradually been expanding the portfolio of user engagement activities, and the transition to the digital ways of working has enhanced the possibilities for dialogue.

SACEPO is the EPO’s main forum for exchanging views with user representatives. It is consulted on all major initiatives relating to the development of the European patent system. In addition to the main SACEPO meeting, nine meetings with the different working parties were organised, comprising one on e-patent process; two on guidelines, including consultation on guidelines; two on quality; two on rules; two on documentation and information; and the SQAP discussed above.

The SACEPO Working Party on Quality comprises 74 user representatives from industry, the patent profession, public research institutions and SMEs. Members come from 42 countries across four geographical areas and represent all fields of technology. In 2023, consultations were held around relevant topics such as EPO quality audits and the User Satisfaction Survey. Detailed discussions in breakout sessions were held on the quality of search and examination — as a result of discussion at the WP Quality the EPO will conduct a review in 2024 of the consistency of its practice on handling third party observations. We further enhanced the transparency of our consultations with the SACEPO Working Party on Guidelines. The preparation for this edition saw a more interactive and transparent consultation process with our internal and external users; we also pursued the gradual introduction of gender-neutral language into our legal texts.

Following the success of the 2022 SQAPs, which focused on grant stage quality, and the feedback obtained from the SACEPO Working Party on Quality, the SQAP programme expanded in 2023 to three sessions, which are discussed in greater detail above.

Another well-established feedback channel is the user satisfaction surveys, which aim to continually improve products and services throughout the PGP. The 2022/2023 cycle was closed in April 2023, following a total of seven in-depth surveys conducted by telephone and online by an independent external service provider. The interviews were held in Chinese, English, French, German, Japanese and Korean.

PROMOTING NEW ONLINE SERVICES SUCH AS MYEPO PORTFOLIO

MyEPO is a good example of the digital transformation the EPO is undergoing. It enables users to interact more smoothly and efficiently with our systems. MyEPO services were launched in 2022 and include Online Filing 2.0 as the tool of choice for initial filing, MyEPO Portfolio for interacting with the EPO on files, and Central Fee Payment for managing fees and refunds.

In delivering MyEPO services, we have engaged closely with user consultation bodies such as eSACEPO and the Online Communication Committee (OCC), focus groups (with 10 meetings and over 135 members in 2023) and pilot companies to better understand users’ needs. We continuously strive to enhance the quality, timeliness and consistency of these services, while improving the user experience at every step.

Regular input from user associations and iterative exchanges with practitioners from both industry and the patent profession are indispensable to continuously enhance the quality of our products and services. In 2023, 30 constructive and mutually advantageous meetings with European and international user associations were held, and MyEPO Portfolio was addressed in the majority of these.
A key event was the annual **User Day**, which was held for the third time in digital format and is an excellent opportunity to engage with users and to provide a platform to share the latest developments at the EPO. In 2023 the User Day had an all-time high attendance of over 10,300 viewers (combined on both days and including live streaming and social media) and representation from 70 countries (compared to 46 in 2022). The event had 55 speakers, including 15 external guests.

In addition, our **key account managers** (KAMs) played a crucial role in promoting MyEPO services to the EPO’s top users, who include IP professionals from across the spectrum, i.e. staff of companies filing directly at the EPO, patent attorneys, paralegals and IP support staff. The KAMs not only supported the main EPO filers, but also presented the tools to the general public during several public seminars. Across 2023 eight virtual seminars in the three official languages were held, attracting 2,800 viewers. Additionally, the KAMs organised 16 tailored workshops with potential users of MyEPO. All these activities were supported and complemented by an intensive campaign via mass mails, newsletters, social media and podcasts.

**DIRECT SUPPORT TO OUR USERS**

Customer enquiries serve as a valuable source of information. Changes in the volume of enquiries or patterns in the types of questions asked can help us identify potential process or quality issues. In total, 74,849 cases were successfully handled across the EPO in 2023, which constitutes an increase of 15% from 65,097 in 2022. This amounts to more than 6,200 per month on average. The main reasons for the increase are a transfer of unanswered calls to the First Line Customer Enquiries Unit (1LCEU) and enquiries coming in on the new Unitary Patent.

The EPO offers different support channels for submitting customer enquiries, which are all used to a similar extent. In 2023 most enquiries came in by e-mail, followed by webform and phone. Total calls received by the agents in 1LCEU increased by more than 9% from 24,411 in 2022 to 26,635 in 2023. The EPO managed to resolve 96.7% of all cases in 2023 (95.8% in 2022) within the set internal time limits (16 business hours, five days or 20 days, depending on the enquiry), above the target of 95%. In fact 95% of phone calls were answered within 10 seconds, and 90% of related cases were resolved within two business days.

2023 also saw the launch of the "**New to patents**" section on the EPO website. This new area is aimed at users with no or very little experience of patents. It guides them through the main decision-making steps, starting with assessing whether a concept should be protected by a patent. The relevant aspects of the PGP are explained in a user-friendly way and there is a reference to some key aspects to be considered before filing an application, such as fees and tools. Tailored guided tours of the new online section are also offered by our experts upon user request.
In 2023 only 214 complaints and feedback cases were filed, down from 265 cases in 2022. In 92% of cases (86% in 2022), complainants received a detailed reply within 20 days, meeting the target of 90%. The number of complaints in search and examination fell from 99 in 2022 to 66 in 2023. Of these, 37 (58%) were deemed justified or partially justified, leading to a re-issued examiner action in 14 instances. However, 2023 saw a rise in complaints related to online tools, increasing from 35 in 2022 to 56 in 2023. In this category, 76% of cases were considered justified or partially justified.
During 2023 there was a steady uptake in use of the Ombuds Office, which received 79 cases. By the end of the year, 75 of these had been successfully concluded with four still in progress. Lessons learned are helping the EPO to develop its integrated management system for continuous improvement in the consistency and predictability of service delivery.

Source: EPO
TIMELINESS: AN ESSENTIAL ELEMENT OF QUALITY

Timeliness is an important aspect of quality and legal certainty. Overall, 86.4% of search, examination and opposition standard files were produced on time in 2023. Search timeliness (standard cases3) remained strong in 2023, with 92.3% of searches and written opinions being despatched on time and a mean duration of 5.0 months.

Figure 28 – Duration of search (in months)

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3 - Standard searches exclude (1) non-unity, (2) unclear and (3) incomplete cases.
Examination timeliness is also an important element of our quality policy – delays in the process can cause unnecessary costs and uncertainty for competitors and society. For standard cases, timeliness deteriorated slightly in 2023 as we focussed on the older files. 77.2% of standard cases were finalised within the 36-month target starting from the valid examination request, with a mean duration of examination of 24.9 months.

Figure 29 – Duration of examination (in months)

![Graph showing duration of examination over years with median, mean, and p95 lines.]

Source: EPO

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4 - Standard examinations exclude cases with (1) more than one request for extension to reply, (2) more than one late fee payment and (3) rescheduling of oral proceedings.
In 2023, we managed to keep the number of old files under control, with only **15.7% of the examination stock older than 36 months**. As the result of targeted action, we finished the year with only 5,194 old examination files pending with a valid examination request from before 2018 that could be processed by examiners (i.e. not awaiting applicants’ action) and there were only 3,416 actions pending in examination without examiner action for more than 30 months. Overall, our processing time from filing to grant in 2023 was 36.9 months for standard cases⁵ (38.4 months for all cases).

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**Figure 30 – Processing time from filing to grant (in months)**

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⁵ - Standard cases are applications with a standard examination – for EP direct: time to grant from European filing date/for PCT: time to grant from entry into the European phase.
In 2023, we managed to reduce the opposition stock to 3,595 pending files, less than the pre-pandemic number of 5,000. With the shift to VICO for oral proceedings in opposition, opposition timeliness (standard cases⁶) is slowly improving again as we deal with the backlog caused by the pandemic. The overall mean duration is 19.3 months (with 43.4% completed within 18 months).

Figure 31 – Duration of opposition (in months)

6 - Standard oppositions exclude cases with (1) multiple opponents, (2) legal members to take evidence and (3) rescheduling of oral proceedings or multiple oral proceedings taking place.
Demand for EPO products and services remained high in 2023. We received 1.9% more requests for searches than in 2022, 77% of them second filings (see Table 1).

Table 1 – Breakdown of incoming requests for search in 2023

<table>
<thead>
<tr>
<th>Search type</th>
<th>Count</th>
<th>First or second filing</th>
</tr>
</thead>
<tbody>
<tr>
<td>European first filing</td>
<td>29,921</td>
<td>first</td>
</tr>
<tr>
<td>European second filing⁷</td>
<td>48,590</td>
<td>second</td>
</tr>
<tr>
<td>PCT Chapter I first filing</td>
<td>6,027</td>
<td>first</td>
</tr>
<tr>
<td>PCT Chapter I second filing⁸</td>
<td>81,140</td>
<td>second</td>
</tr>
<tr>
<td>Euro-PCT (where EPO was not International Search Authority)</td>
<td>65,891</td>
<td>second</td>
</tr>
<tr>
<td>National first filing</td>
<td>24,336</td>
<td>first</td>
</tr>
<tr>
<td>National second filing⁹</td>
<td>1,151</td>
<td>second</td>
</tr>
<tr>
<td>Total search</td>
<td>257,056</td>
<td></td>
</tr>
</tbody>
</table>

Legal certainty and thoroughness contribute to such strong demand, with the EPO remaining the number one International Search Authority (ISA) in the world: overall we find prior art relevant to novelty in close to 90% of our first filings, and even when we carry out a search after another ISA or patent office, for example in PCT-Bis proceedings, we still find potentially relevant prior art in almost 90% of cases.

In terms of examination workload, 175,894 applications entered the European examination phase, with a further 5,000 entering PCT Ch.II, bringing our total incoming workload to 439,838 patent products (searches/written opinions, examinations and oppositions) during the year.
Careful planning and management of incoming work resulted in production in 2023 which was 143 products above budget. This is an increase of 15,862 compared to 2022.

Our renewed focus on examination allowed us to publish 104,609 patents in 2023 (budget target: 96,057).

Figure 32 – Published patents in 2023

Productivity also continued to improve: supported by improved tools and simplified processes, examiners required 9% less time in 2023 to finalise a search compared to 2018. In SP2028 we will focus investment on the tools supporting the examination phase and look for gains in both quality and efficiency similar to those we saw in the search phase during SP2023. Efforts will not just focus on improved tools but also on simplified processes for examiners, formalities and applicants. Overall, examiner productivity improved by 3% in 2023 versus 2022, with 106.4 products per examiner FTE.
GOAL 4

BUILD A EUROPEAN PATENT SYSTEM
AND NETWORK WITH A GLOBAL IMPACT

EUROPEAN PATENT OFFICE

Annual Review 2023

epo.org
Goal 4
Build a European patent system and network with a global impact

UNITARY PATENT PACKAGE

2023 saw the culmination of decades of effort and the completion of Europe’s patent architecture: on 1 June 2023, the Unitary Patent system became a reality, offering a simpler, more cost-effective alternative for obtaining and enforcing patent protection across the 17 participating member states.
Throughout the year, the Office and its partners engaged in a comprehensive communication campaign to promote awareness and disseminate knowledge of the Unitary Patent system among its many actors and stakeholders, for example through events such as the European Judges’ Forum, Opposition Matters, Litigation Matters, the EPO User Day and Guidelines2Day. In parallel, the EPO participated in public events organised by user associations and held bilateral exchanges on the Unitary Patent with user associations in Europe and beyond – such as the US Bar, AIPPI, EFPIA, JPAA, JETRO and Union IP.

The ramp-up to the launch began with the adoption of transitional measures from 1 January 2023, allowing applicants to request early access to Unitary Patent protection, or to delay the grant of their European application until the launch of the system. In all, around 7 000 applications benefited from these transitional measures.

Figure 34 – States participating in the Unitary Patent system at launch

![Map showing states participating in the Unitary Patent system at launch]

Source: EPO

Figure 35 – Requests for Unitary Patents

![Graph showing requests for Unitary Patents]

Source: EPO
By the end of 2023, the Office had received over **17 000 requests for unitary effect** of a European patent. In the period from June to December, over **22% of European applications turned into a Unitary Patent**, greatly exceeding the expected uptake rate of 17%.

To ensure full transparency on the performance of the new system, the EPO launched the **Unitary Patent Dashboard**, which contains detailed information by technology field and geographic origin as well as a list of the top 25 adopters, most of them European. In fact, approximately around two-thirds of Unitary Patents are owned by users from Europe, including from EPC contracting states which are not part of the Unitary Patent system. And 34% of those European users are SMEs or individual inventors – a much higher proportion than for European patent applications.

Additional transparency for users is ensured via the **Unitary Patent Register**, where everyone can see all details of the Unitary Patents registered, including the registration of transfers and licences.

Co-operation between the EPO and the new **Unified Patent Court (UPC)** was essential to ensure the smooth launch of the system and to provide legal certainty for users. Building on this co-operation, the EPO implemented measures to accelerate opposition proceedings when there are parallel pending proceedings before the UPC, providing a swift decision on the patent-in-suit and enhancing the efficiency of the European patent system. These measures entered into force in January 2024.

![Profile of European proprietors of a Unitary Patent](image)


**EUROPEAN CO-OPERATION**

Since its inception, the EPO has been steadfast in its commitment to serving users of the European patent system. The EPO is a central pillar in fostering innovation and protecting intellectual property within Europe, holding the unique authority to grant patents valid across 39 member states, one extension state and, as of 15 January 2024, five validation states. This mission has been significantly bolstered by collaboration within the **European Patent Network (EPN)**, which has played a pivotal role in achieving milestones, especially in the transformative year of 2023.

Central to the EPO’s mission is its collaboration with its member states and extension state to enhance patent products and services. The Office has concluded **39 bilateral co-operation agreements**, which provide a solid foundation for collaboration. These agreements were extended until June 2024 to ensure a smooth transition between strategic plans. New agreements aligning with the objectives of SP2028 will be drafted in collaboration with the member states, enhancing the combined effect of joint activities and initiatives.

Figure 36 – Profile of European proprietors of a Unitary Patent
Under the work sharing pillar of the EPO’s co-operation policy, 2023 saw the **working agreement on search co-operation** with Austria come into force and the signature of a new agreement with Slovenia – taking to 17 the number of contracting states participating in this programme. Collective initiatives aimed at promoting the Unitary Patent system included supporting nine IP outreach events carried out in co-operation with contracting states and translating promotional materials into national languages.

*Figure 37 – A new working agreement on search co-operation with the Slovenian Intellectual Property Office*

*Source: EPO*
In 2023, the European Patent Network (EPN) convened for its **17th annual meeting** in Lisbon, Portugal, to discuss various strategic aspects of cooperation. At this meeting, the EPO also unveiled several platforms, including the firefighting technologies platform, showcasing its commitment to enhancing accessibility to patent information and sustainability.

*Figure 38 – 17th annual meeting of EPC member states*
The EPO successfully launched two new professional mobility initiatives in 2023 to support EPN expertise and knowledge sharing. Under the Seconded National Experts (SNEs) scheme in 2023, national experts from 12 member states applied to join various EPO services. By December, 12 SNEs from seven NPOs had started their secondment and 20 member states showed interest in hosting an EPO Young Professional under the EPO Young Professional Secondment scheme. By the end of the year, four EPO Young Professionals had begun their secondments at National IP Offices. Both schemes continue in 2024.

The EPO’s commitment to co-operation was further evidenced by the sustained increase in expenditure on co-operation activities, which grew from EUR 4.6 million in 2018 to EUR 25.9 million in 2023.
Furthermore, the EPO recognises the importance of a sustained and meaningful partnership with users and in 2023 engaged extensively with user representatives in Europe and across the globe, in particular through national or regional associations including epi, BusinessEurope, AIPLA, EPLAW, KPAA, Ordre, Union IP, FICPI, AIPPI, CIPA, the IP Federation, BDPA and EFPIA. Discussions focused on topics such as the Unitary Patent, digital transformation and quality at source, highlighting our commitment to excellence and responsiveness to feedback from the global IP community.

Figure 40 – Meetings with AIPPI and EFPIA representatives
Through these collaborative efforts, the EPO reaffirmed its dedication to fostering a user-centric and sustainable European patent system, underlining its strategic emphasis on innovation, quality, adaptability and accessibility. In this last regard, the new fee policy – designed in close collaboration with our stakeholders and adopted by the Administrative Council in December 2023 – not only aims at simplifying the fee structure and incentivising efficient digital working methods, but also provides a 30% reduction on various fees for micro-entities, including universities and public research organisations.

Co-operation efforts with European Institutions continued in 2023. In February, the EPO finalised an annual work plan with the European Institute of Innovation and Technology and on 30 March we signed Phase II of the pilot project with the European Innovation Council and SMEs Executive Agency (EISMEA). The EPO also made the first steps in deepening co-operation with the European Commission Directorate General for Trade (DG TRADE) with an exchange of letters in 2023.

EUROPEAN CONVERGENCE AND HARMONISATION

The convergence of practice programme was one of the pillars of the EPO’s Strategic Plan 2023. It was launched in December 2019 with six jointly selected topics for convergence on the agenda, for which common practices were agreed based on the invaluable input from working groups that bring together experts from EPC contracting and extension states and from the EPO as well as user representatives. The initial work programme was concluded with the adoption of the last pair of common practices in March 2023, on claim drafting and structure and examination practice for CII and AI.

In view of this success, and the considerable positive feedback from member states and users, a new convergence cycle was launched at the beginning of 2023. The EPO identified six new topics to be dealt with in pairs again. The work on the first pair, on allowable features in drawings and issuing and accepting electronic priority documents, was launched in January 2023 and had delivered common practices by the end of year, which were eventually adopted by the Administrative Council in March 2024.

For increased transparency toward users, the EPO also developed a new convergence dashboard that provides an overview of the implementation of agreed common practices across member states. The concept, including a preview of the dashboard, was presented at the meeting of the Committee on Patent Law in November 2023. The dashboard was published on the EPO’s website at the beginning of 2024. It showed that, on average, each of the agreed common practices has been adopted, at least in part, by almost three-quarters of contracting states.
Looking farther afield, the EPO continued its activities in the framework of Substantive Patent Law Harmonisation (SPLH) with the objective of creating a more streamlined and sustainable global framework for the protection of innovation through a multilateral effort. A two-part symposium held in March and May in hybrid format brought together delegations from 32 states, as well as 25 European user associations and the European Commission. The symposium marked the launch of a European alignment exercise on outstanding matters relating to the grace period, conflicting applications and prior user rights.

In July, the EPO hosted the annual plenary meeting of Group B+ and reported on the progress of the European alignment process. The Group B+ Working Group on SPLH presented a comparative analysis of user views and proposed a workplan for further investigation. The Group confirmed the mandate to continue work on SPLH.

Figure 42 – Meetings with the Lao PDR and Ethiopia

Beyond Europe, the EPO pursued an extensive co-operation agenda in 2023, aiming to extend the reach and effectiveness of the European patent system for its users. Validation agreements were a significant focus throughout the year. Preparatory work concluded for the entry into force of the agreement with Georgia while the groundwork was laid for agreements with several countries, including Costa Rica, the Lao PDR and Ethiopia. These agreements aim to enhance accessibility to the global patent system and support innovation in those regions.
Reinforced partnerships were also forged with Chile and Ukraine, alongside a work plan with the Saudi IP Office as part of an ongoing Reinforced Partnership initiative, fostering collaboration and knowledge exchange. Technical co-operation initiatives, such as bilateral agreements with the US Patent and Trademark Office (USPTO) and IP Australia, and renewed in-person examiner exchanges with the Japan Patent Office (JPO), aimed to enhance access to patent information and improve patent quality.

Figure 43 – Technical co-operation with IP Australia and the IP Office of Singapore

Source: EPO
The EPO participated in **multilateral co-operation** efforts within the IP5 group, focusing on addressing global challenges such as climate change through sustainable innovation, and harnessing the latest technologies to enhance co-operation, including through the blockchain-based IP5 Global Assignment project. The 2023 Trilateral Conference, hosted by the EPO, aimed to devise collaborative strategies to fulfil the UN SDG 4: “Ensure inclusive and equitable quality of education”. Discussions in this session emphasised the importance of education to inform and nurture intellectual property among young people.

**Figure 44 – 2023 Trilateral Conference**
March 2023 marked the 10th anniversary of the CPC, with events involving both participating offices and industry associations. A noteworthy development was the launch of an AI-powered classification predictor tool.

Under the Patent Co-operation Treaty (PCT), the EPO collaborated with WIPO to improve international patent systems and support users. Efforts include enhancing patent filing tools such as ePCT integration into the Front Office platform, streamlining application processes for member states. Additionally, amendments proposed by the PCT Minimum Documentation Task Force, led by the EPO and USPTO, were adopted, aiming to enhance the legal framework for PCT documentation by 2026.

**PATENT INTELLIGENCE**

Aiming to provide high-quality training and education on intellectual property to European countries and beyond, the European Patent Academy offers training in three main areas: patent granting, technology transfer and patent litigation, relying on the pillars of digitalisation, modularity, co-operation and certification. The principles of accessibility and democratisation guide the means of delivery and most training is done digitally and free of charge.

2023 marked the introduction of the Modular IP Education Framework (MIPEF) designed to be integrated into university curricula. The learning offer in the area of certifications was consolidated, with courses for candidates to the EPO’s flagship exams enjoying high demand. The Academy also supported the deployment of the Unitary Patent with new offerings such as the Litigation Matters conference, and strong partnerships with the main players in the field, including the UPC, IJA, EPLAW and EPLIT. Last but not least, in 2023 the EPO launched several initiatives aimed at fostering the values of innovation and entrepreneurship among younger audiences, combining learning modules and science fairs.

**Modular IP Education Framework (MIPEF)**

**Goals and format**

- Expand the academic curriculum with a free of charge IP course co-labelled with the EPO
- Customisable offer for Master’s and PhD students
- Obtain EPO certificate and earn 6 ECTS
- Complement existing IP education with hands-on practitioners’ perspective based on case studies
- Variety of teaching and assessment methodologies, including live sessions, interactive tutored fora and marked exercise

*Figure 45 – Modular IP Education Framework (MIPEF)*

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**Table: MIPEF calendar**

<table>
<thead>
<tr>
<th>MIPEF platforms open (Entry and Advanced level)</th>
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<th>MIPEF platforms open (Entry and Advanced level)</th>
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<tr>
<td>Apr to Jun 2024</td>
<td>MIPEF</td>
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<td>Nov 2024 to Jan 2025</td>
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<td>May to Jul 2025</td>
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**Part 1: Entry level**

- **Module I**
  - Introduction to IP
- **Module II**
  - Patent essentials
- **Module III**
  - Introduction to patent information
- **Module IV**
  - Patent information in practice
- **Module V**
  - Developing an IP strategy

**Part 2: Advanced level**

- **Module I**
  - Grant of patents
- **Module II**
  - Enforcement of patents
- **Module III**
  - Scouting and assessment of technology
- **Module IV**
  - IP commercialisation
- **Module V**
  - Use of IPRs
In 2023, the live online training activities offered by the Academy reached 26,480 participants. This is a 20% increase compared to 2022, surpassing the previous record for the third year in a row. Additionally, 18,748 active users are registered in the EPO e-learning centre, from both member and non-member states. Efforts in international cooperation, especially with validation states and reinforced partnership countries, have resulted in higher growth of new users among non-member states, confirming a growing global interest in the European patent system and, more broadly, in the EPO learning offer.

Experience in 2023 indicates that digital formats have a positive impact in terms of gender parity: 53% of participants in Academy training in 2023 were women. Some areas, notably those learning towards certification, largely attract women. In terms of evaluation, the average rating of the Academy training was 4.35 (out of 5), which is in line with the ratings received in previous years.

As of January 2024, the PATLIB network includes 320 information centres in 37 countries offering advice and services on IP, patent information and technology transfer to local industries, SMEs, researchers and individual innovators. The EPO supports the PATLIB centres by providing training, funding, certification and networking events such as the PATLIB annual conference. By the end of 2023, 26 African countries and 64 universities had joined the Knowledge Transfer to Africa (KT2A) programme, which aims to strengthen technology transfer capacity in the continent by promoting cooperation between the PATLIB network and African universities.
Central to our patent knowledge strategy are simplifying and digitalising our portfolio, democratising access to our data and maximising our impact. The implementation of this strategy has started to deliver results. Notably, the integration of Unitary Patent data into our patent knowledge products has culminated in the comprehensive update of 13 products, significantly enriching our portfolio. Our patent collection in Espacenet continued its upward trend, reaching almost 150 million patent documents and 445 million legal events in 2023.

Figure 47 – Espacenet approaching 150 million documents in 2023.

![Image of a person working on a computer with a graph showing the growth of patent documents from 1998 to 2024, reaching 150 million in 2024.](image)
We published a series of patent insight reports on state-of-the-art technological fields such as quantum computing, quantum simulation, mRNA technologies and offshore wind energy in 2023. These reports have garnered over 23 000 downloads, underscoring the high demand for and relevance of our insights. In addition, we launched specialised platforms dedicated to specific technologies, including firefighting and clean energy, with a particular focus on carbon capture and storage technologies. These platforms attracted over 14 000 page views, reflecting a growing interest in sustainable and life-saving technologies.

In our commitment to sustainable patent intelligence, the EPO ceased the distribution and sale of all physical books and papers, a significant pivot given we had sold over 5.3 million books since 2002. Moreover, we removed the yearly service fee to our data platform, lowering the barrier to entry and facilitating broader access to our valuable data. Our Patent Knowledge Week event set a record with nearly 5 000 online viewers from 92 countries, highlighting our advancements in AI, the Unitary Patent and data analytics.

2023 also saw the second edition of the European Patent Administration Certification (EPAC), co-created with the member states, and developed and implemented in close cooperation with external partners including epi and the European Platform of Intellectual Property Administrators (epipa). Since its launch in 2022, more than 850 candidates from 26 EPC contracting states as well as 12 non-member states have sat the examination in a fully digital format. Successful candidates demonstrated that they possess the required knowledge and skills to deal independently and autonomously with the procedures associated with the filing, prosecution, grant and maintenance of European and international patent applications before the EPO, as well as with post-grant procedures.

An extensive reform process spearheaded by the EPO and epi concluded with the Administrative Council’s approval of a revised regulation on the European Qualifying Examination (EQE) for professional representatives. This has paved the way for the formal launch of the new EQE in 2025. Its phased introduction, leading to full implementation by 2027, will ensure a smooth transition for all EQE candidates, accommodating different situations and professional needs.

With the early launch of EPO legal texts on the new epo.org, a longstanding wish of users has been achieved: all issues of the Official Journal from 1978 to the present can be searched using a single interface. The Office has taken important steps in a complex and comprehensive end-to-end revision of the process for publishing the EPO’s legal texts with the aim of simplifying, streamlining and digitalising our legal text publication process.
In 2023, the IT co-operation programme of SP2023 was completed, with teams reorganised and reinforced to support the practical implementation of projects in participating member state NPOs. Knowledge-building and technical support activities were consolidated.

The programme accomplished several milestones, including the successful implementation of Front Office across five countries (Spain, Lithuania, North Macedonia, Greece and Iceland), with nearly 10,000 filings made using the software. This allows NPOs to plan the decommissioning of the decades-old eOLF system where it is still in use. eOLF has become very complex to maintain, both in terms of hardware and software, making its planned replacement by NPOs an important objective for the next few years.

Over 1,000 users in 27 countries either started using ANSERA-based SEARCH on a daily basis or participated in the pilot. Based on the EPO’s internal ANSERA search tool and updated to take advantage of cloud technology, ANSERA-based SEARCH benefits from a rich feature set, scalable and secure implementation, and a continuous improvement path. The tool has matured over time, including in security aspects, and now offers necessary capabilities to replace EPOQUENet.

The data quality working group continued leveraging the data transfer platform, with data exchange established with Denmark, the Czech Republic, Malta, San Marino, Türkiye and Italy to facilitate the transmission of high-quality prior art data. In total this represents the reception and integration of approximately 450,000 new documents in our prior art data collection. The automation of this data flow and standardisation of the data structure has also helped to increase data quality.

The Single Access Portal saw further improvements, becoming a powerful information hub by offering rapid, secure methods for exchanging information and training between NPOs and the EPO. MICADO, the system used since the mid-1990s to access Administrative Council documents, was rebuilt and integrated into the Single Access Portal, providing sophisticated search possibilities and state-of-the-art document filtering. The Single Access Portal makes it easier for the EPO’s member states to access and exchange information.

We also launched a new AI-powered text categoriser to make it easier to find suitable terms in the CPC. This online symbol predictor makes the CPC system more accessible, returning suitable CPC symbols from text inputs in English, French or German in a fraction of a second.

Information security and cloud solutions have become a core part of our work in IT co-operation. NPOs continued to align and exchange knowledge on these topics in 2023, with a focus on implementing security features for the ANSERA-based SEARCH tool and exploring other security-related projects.
GOAL 5
SECURE LONG-TERM SUSTAINABILITY
Goal 5
Secure long-term sustainability

In 2023, the EPO remained committed to building a more sustainable future and made significant progress in environmental sustainability, societal impact, governance and transparency, and financial sustainability.

ENVIRONMENTAL SUSTAINABILITY

Acknowledging the critical urgency of the climate crisis, and aligning our ambitions with concrete actions, the EPO is committed to achieving carbon neutrality by 2030. This contribution towards a lower carbon future provides a further instance of the EPO supporting the global realisation of the UN SDGs. The EPO’s long-term, holistic approach to environmental sustainability is reflected by compliance since 2009 with the EcoManagement and Audit Scheme (EMAS), which was re-certified in 2023.

Within the four years of Strategic Plan 2023, the EPO reduced its carbon footprint by 56%. However, in 2023 the EPO’s total carbon emissions increased by 9% compared to 2022, mainly due to the loss of cooling agents caused by ageing infrastructure (see the Environmental Report 2023 for more details). To help ensure that the EPO continues to reduce its environmental footprint, several actions were taken in 2023 and reported in accordance with the Global Greenhouse Gas Protocol.

Particular attention was given to the reduction of the energy consumption of our buildings. Examples of energy-saving initiatives include vacating the buildings PschorrHöfe 5-7 in Munich and the Shell building in The Hague, as well as the implementation of software for weather-dependent regulation of the heating and cooling of the buildings in The Hague and in Munich Isar. LED lighting was installed in Munich PschorrHöfe. Consequently, the EPO’s overall energy consumption was reduced by 10% compared to 2022, to 46 GWh, a saving equivalent to the yearly energy consumption of 632 households in Germany. Our newly implemented environmental dashboard provides comprehensive data on the energy consumption of the buildings owned by the EPO.
The EPO expanded its efforts concerning overall environmental impact, including by focusing on reducing waste and paper consumption. Waste reduction activities included offering surplus office furniture and supplies to staff in The Hague and Munich, and the extension of the e-waste pilot project on e-waste. Thanks to this, between June 2022 and June 2023 52% of our 6 000 decommissioned IT assets were either repaired or reused, and the rest were 100% recycled. As part of the EPO’s digital transformation journey, further EPO forms were discontinued in 2023, leading to an estimated saving of 500 000 sheets of paper each year. Overall, 2023 saw the amount of paper procured fall to 13.8 million sheets (a reduction of 89% compared to 2019) and a record low number of 13.9 million printed sheets. This is thanks to the benefits of the increasingly digitalised PGP.

Emissions originating from staff commuting were also tackled, with the installation of electric chargers in Munich and The Hague, allowing staff to charge their electric and hybrid vehicles for free with green electricity.

Finally, increasing sustainability awareness among EPO staff was an objective in 2023. In the context of the 50 Years EPC celebrations, staff from Munich, The Hague and Vienna participated in city clean-up initiatives in co-operation with the local municipalities. Further, international events such as Earth Hour 2023, European Mobility Week, Digital Clean-Up Day and International E-Waste Day were promoted, including through staff participation and targeted social media campaigns.
The EPO aims to have a positive impact on society through all its high-quality activities, products and services. Every day, by tackling global challenges, innovators contribute to a safer, smarter, more sustainable world. The EPO works with inventors, investors, policymakers, scientists and other stakeholders to share patent knowledge worldwide, making it easier for innovators everywhere to develop solutions to these global challenges.

The launch of the Observatory on Patents and Technology on 6 October 2023 has provided a platform for anyone interested in the future of innovation. The Observatory quantifies and explores trends and challenges throughout the innovation ecosystem, offering reliable evidence for informed decision-making by industry, innovators, investors, policymakers and many other stakeholders. Serving as a globally accessible digital platform, which facilitates transparent and open discussions on innovation, it provides valuable insights into technology trends that will shape the lives of current and future generations.
From the launch of new digital tools and continuous analysis of the latest technology trends to in-depth studies and online seminars, all activities of the Observatory contribute to the UN SDGs. The activities of the Observatory are structured around three streams. The first stream, **Technology intelligence**, comprises activities mapping the latest technology trends and innovative solutions. The second stream, **Legal and innovation policy**, uses economic tools to analyse patent law and patent intelligence, and addresses current hot topics in the patenting landscape. The third stream, **Diversity and transformation**, aims to open up the patent world for non-specialists, as well as to achieve greater inclusion of underrepresented actors in the innovation ecosystem.

**Collaboration with the EPO’s member states** played a central role in 2023. For example, 10 NPOs (Austria, Bulgaria, Denmark, France, Greece, Italy, Norway, Poland, Sweden, Switzerland and Türkiye) contributed actively to the development of the study and platform on cancer-combatting technologies. In addition, a call for interest was launched in December, offering new collaboration opportunities for 2024.

![Figure 52 – The Observatory’s project – biennial workplan 2023-2025](source: EPO)
As part of the EPO’s endeavour to make patent information more accessible to all, two studies, three case studies, and three patent insight reports were published in 2023.

Figure 53 – Accessible patent information

KPI:

10 000+ views of the Deep Tech Finder

The Observatory’s first online event, Boosting startups with intellectual property, took place on 17 October 2023 and was well attended, with participants from 80 countries. There were 5,400 views on the day of the event and in the following weeks. The presentation of the newly published EUIPO-EPO joint study entitled “Patents, trade marks and startup finance: Funding and exit performance of European startup” provided an opportunity for experts to explore innovation, IP, funding and growth from diverse perspectives.

Another milestone for 2023 was the launch of the Deep Tech Finder, a free new digital tool for the public to explore investment-ready deep tech startups in Europe. By combining business information with patent information, the Deep Tech Finder lists innovative European startups with patent applications and presents each startup’s business and investment profile. This helps potential investors detect and assess those startups bringing disruptive inventions to market in critical technology areas. By the end of 2023, the tool had featured 7,500 startups with granted European patents or European patent applications, with all startups being searchable by country, growth stage, industry, and technical field or, alternatively, by startup or investor name. In the first six months since the launch, and following targeted promotional activities at WebSummit 2023, the Deep Tech Finder has received over 10,000 views.

As part of the EPO’s endeavour to make patent information more accessible to all, two studies, three case studies, and three patent insight reports were published in 2023.

KPI:

10 000+ views of the Deep Tech Finder

3 case studies on how businesses can leverage patents to develop technologies for the detection, diagnosis and treatment of cancer released in May

Patent insight report on mRNA technologies published in November

Joint study on hydrogen patents for a clean energy future published in January by EPO and International Energy Agency reached 119 million readers

Patent insight report on offshore wind energy published in November achieved 2,950 downloads

Study on innovation trends in additive manufacturing published in September by the EPO Chief Economist Unit reached 181 million readers

Patent insight report on quantum computing published in June achieved 900 downloads

Source: United Nations, EPO
In 2023, a new technology platform was launched in Espacenet, making patent data more easily accessible to the public through smart searches. These combine keywords and classifications to help innovators and decision-makers identify the most significant inventions described in the 150 million patent documents in our free public patent database. The Espacenet platform on firefighting technologies was launched in May and comprises around 30 search concepts. The platform was jointly created together with experts from NPOs in Spain, Portugal, France, Greece and Italy. By the end of 2023, the platform had received more than 2 700 visits. Further, the Espacenet platform on clean energy was launched in December to cover carbon capture and storage (CCS) technologies. This coincided with an expert online seminar on CCS technologies that took place on 7 December 2023, and the scope of the Deep Tech Finder tool was extended to include startups in CCS technologies too.

As the demand for patents and the volume of patent information grows, our efforts to make patent intelligence more accessible become even more crucial. The EPO’s Patent Index 2023 indicated a record demand for patents at the EPO, with growth driven by the rise of innovation in digital and clean energy technologies. This reflects the level of trust that inventors around the world place in the EPO’s high-quality products and services. The positive public impact of a sustainable patent system is further shown by communications around the Patent Index 2023 receiving record media coverage, with an Advertising Value Equivalent (AVE) of EUR 24.7 million, and the social media campaign reaching over 2.5 million users.

While the Observatory has a focus on encouraging startups, SMEs and universities to innovate, the European Inventor Network focuses on interacting with school students to open to them the world of innovation. Both initiatives therefore go hand in hand, one supporting and one inspiring the next generation of inventors. The European Inventor Network, launched in July 2023, aims to promote innovation and creativity among children and young people. At the end of 2023, the Network comprised over 200 former finalists of the European Inventor Award and Young Inventors Prize. In 2023, the EPO initiated the first "call for activities" within the network, enabling these inventors to seek financial support to visit schools and engage with students on innovation. Implementation of the activities given a grant has started and will continue until the end of 2024. Feedback from schools has so far been excellent, with students particularly appreciating the way in which inventors directly share their innovation insights.

In 2023, the EPO initiated the first “call for activities” within the network, enabling these inventors to seek financial support to visit schools and engage with students on innovation.
Finally, the EPO’s flagship European Inventor Award and Young Inventors Prize once again promoted the benefits of innovation for society. The 2023 award ceremony was streamed live from Valencia, Spain and reached a record audience and a record coverage across print and online media outlets, social media, TV and radio.

KPIs:

- **25 000+** views of the 2023 award ceremony,
- **28+ million users** reached on social media,
- **4 500+** media reports generated

Figure 55 – Winners of the Young Inventors Prize 2023

Source: EPO
GOVERNANCE AND TRANSPARENCY

The EPO strives to enhance its governance and transparency by engaging with its stakeholders, reporting on its performance and modernising its external governance, in line with global best practices and standards.

In 2023, the EPO aligned its corporate reporting to the Global Reporting Initiative (GRI) standards, the most widely used framework for sustainability reporting. A new user-friendly transparency portal was launched on the EPO’s website in September to provide easy access to various information and documents, such as the EPO’s strategy, annual reports, financial statements, policies, audits and statistics.

Moreover, the EPO adopted and prepared for the implementation of our Document Retention Policy, which governs paper and electronic files and defines their retention periods and disposal procedures. After gradual implementation during the transitional period in 2023, all measures were in place at the end of the year for full application as of 1 January 2024.

The EPO’s certifications in ISO 9001, ISO 45001 and ISO 27001 were renewed in 2023, confirming once more the Office’s commitment to delivering high-quality products and services (ISO 9001), safeguarding health and safety (ISO 45001), and protecting the information and data entrusted to us (ISO 27001). Aligning with these internationally recognised standards helps the EPO to continuously improve and strive towards operational excellence.

Applying the “plan-do-check-act” cycle for improvement, the EPO gathered feedback from around 1,400 colleagues on seven internal services: IT, finance, procurement, general administration, language service, internal audit and communication. The feedback was used to identify strengths and areas for improvement and to design action plans for each service.

Additionally, the Handbook for Workplace Ethics, launched in November 2022, serves as a cornerstone to foster a culture of integrity and accountability among all staff at the EPO. Awareness activities in 2023 have focused on bringing the handbook to life in hybrid sessions with staff (close to 600 attendees), training programmes (for newcomers and first-time managers), workshops on demand (on the prevention of conflict of interest) and the dissemination of learning materials. The handbook supports value-driven behaviours that protect EPO people, assets and reputation and promotes workplace ethics as an integral part of daily operations. It not only reinforces EPO values at work but also helps mitigate compliance and liability risks related to integrity.

Finally, 2023 saw a series of milestones being delivered as part of the modernisation of the EPO’s external governance, rendering the working arrangements, organisational setup and procedural rules of the Administrative Council and its subsidiary bodies more robust, effective, modern and transparent. Of the three baskets of measures identified, two were fully delivered in 2023. The first included various amendments to the Council’s Rules of Procedure; improvements to the preparation, organisation and conduct of Council meetings to give delegations more time to prepare for and engage in discussions of a strategic nature; and the adoption of policies for the publication of, and access to, Council documents. The second introduced a range of technical improvements such as upgraded infrastructure of the Council’s conference room, a modernised MICADO and new templates for Council documents.
The Office also began preparations on a third basket, such as conceptualising the way forward for codifying the appointment and reappointment procedures for the President and the Vice-Presidents; scoping a potential Code of Conduct for the Council and its subsidiary bodies; and exploratory work with the TOSC Chairperson on future proposals for updating and consolidating the TOSC’s mandate and working arrangements.

### Financial Sustainability

Financial sustainability is a prerequisite for the EPO’s ability to have a positive impact on society. In 2023, the EPO continued to monitor its financial situation, in particular with a new Financial Study.

To improve the EPO’s budget oversight, the EPO implemented the International Financial Reporting Standards (IFRS) standardised view in its budget documents. This provides a comprehensive and consistent picture of the EPO’s financial position and performance, while increasing transparency and the comparability of the EPO’s financial performance with other organisations.

The EPO continued to monitor the **coverage ratio** in 2023, which measures the ratio between the financial assets of the EPO Reserve Funds for Pensions and Social Security (RFPSS), EPO Treasury Investment Fund (EPOTIF), cash and its long-term liabilities (pension and social security debt). Despite the negative effects of the financial markets and high inflation, the coverage ratio reached 76.6% in December 2023, thanks to the bundle of measures adopted in 2020 to reduce the EPO’s financial risks.

Finally, the first phase of the **Financial Study 2023** was completed, and the outcomes were presented to the EPO’s governing bodies in the last quarter of 2023. The Financial Study aims to provide insights and recommendations for the EPO’s strategic decision-making and budget planning. Phase I of the study analysed the EPO’s financial situation. Its main findings were first that the measures implemented since 2020 have yielded positive impacts within the expected margins. Second, the EPO’s finances are expected to further perform favourably, with a significant coverage surplus of EUR 4.2 billion by the end of 2042 under the assumptions in the base case scenario. However, analysis of the sensitivities shows high vulnerability to market volatility, especially inflation. The Office should therefore further drive operational excellence to the cash surplus. Phase II, focusing on risk monitoring and mitigation measures reducing the identified vulnerabilities, will continue in 2024.

**The Financial Study aims to provide insights and recommendations for the EPO’s strategic decision-making and budget planning.**
Annex 1 – List of annexes

Quality Report 2023 (CA/40/24 Add. 1)
Social Report 2023 (CA/40/24 Add. 2)
Environmental Report 2023 (CA/40/24 Add. 3)
IT Report 2023 (CA/40/24 Add. 4)
Data Protection Report 2023 (CA/40/24 Add. 5)
Co-operation Report 2023 (CA/40/24 Add. 6)
European Patent Academy Report 2023 (CA/40/24 Add. 7)