

### Europäische Patentorganisation

European Patent Organisation Organisation européenne des brevets

CA/105/21

Orig.: en

Munich, 26.11.2021

Verwaltungsrat

Administrative Council

Conseil d'administration

SUBJECT: Annual Work Plan 2022

SUBMITTED BY: President of the European Patent Office

ADDRESSEES: Administrative Council (for opinion)

\_\_\_\_

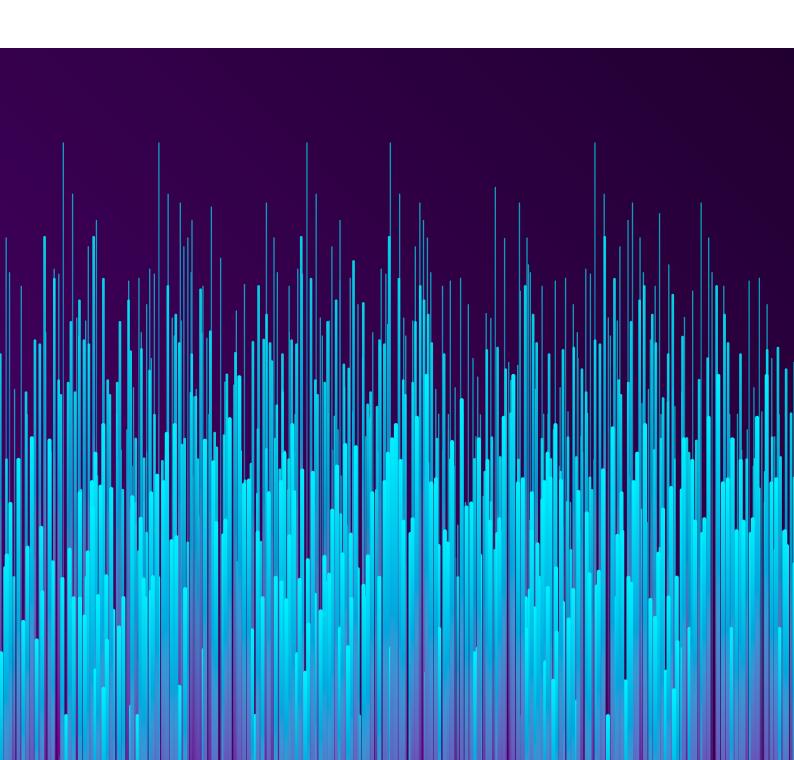
#### **SUMMARY**

This annual work plan (AWP2022) gives direction and focus to the work that the EPO intends to undertake in 2022 to advance on the strategic goals. It outlines the main initiatives and activities under the five SP2023 goals and builds on the work done in 2021 to meet the challenges set.

Recommendation for publicatio	n: Yes	
- This document has been issued	in electronic form only.	



## **Annual Work Plan 2022**



### **Table of contents**

Introduction	
Execution of SP2023 in 2022	7
Goal 1 – Build an engaged, knowledgeable and collaborative organisation	7
Goal 2 – Simplify and modernise EPO IT systems	16
Goal 3 – Deliver high-quality products and services efficiently	23
Goal 4 – Build a European patent system and network with global impact	
Goal 5 – Secure long-term sustainability	42
Annex	49
Balanced Scorecard	49

#### Introduction

2022 is set to be an exciting and productive year for the EPO. Over the next twelve months, the results of our projects and programmes become even more visible, as they build on the momentum gained since the start of SP2023. Our users and other stakeholders will all see a multitude of high-impact changes as we intensify our focus on delivering high-quality and sustainable products and services. 2022 will also be significant for another reason. In the last two years the EPO has become a more agile organisation, capable of adapting quickly to a rapidly changing environment. Thanks to the lessons learnt during the pandemic, the Office is equipped with a set of orientations that will help the EPO to capitalise on new opportunities in the new normal.

At the heart of those efforts will be our people. The EPO is an Office driven by skill, experience and professionalism. So in 2022 we will make sure that all EPO staff have the opportunity to continue to excel in the new normal. Using innovative new technologies, the Office will invest in recruitment, training and career development. This will ensure we have skilled, diverse and enthusiastic teams, engaged with the EPO's mission. We will also enhance efforts to promote internal job mobility. This will give our people new opportunities to fulfil their potential, whether by working in different technical areas within our core business, or by offering opportunities to explore entirely different departments and start a new career journey. In this way our Office will be able to discover previously untapped and rich reserves of talent. All colleagues, whether embarking on new opportunities or not, will be supported by an enhanced programme of continual learning. We will step this up using digital tools – including Artificial Intelligence (AI) – customised programmes and new mentoring and coaching services, to ensure that professional development remains a priority.

The Office will also seek to offer more flexibility than ever before in how and where we work. The experience of the new normal has shown that the EPO's dedicated staff can continue to offer high quality products and services regardless of a staff member's location. After consulting with its stakeholders, the Office intends to implement a new teleworking policy. Initially offered as a pilot, on a voluntary basis to all EPO colleagues where possible, the new policy will provide a clear framework for new ways of working. It will respond to the changes wrought by the pandemic, break age-old conceptions that the Office is the only place for constructive work, help our people to achieve a better work-life balance, and position the EPO as a large-scale pioneer of the hybrid working environment.

At the same time, we recognise the importance of our buildings to our people, as a focal point for the EPO community, and as a valuable asset for the Office. So we will continue to invest significantly in improvements in both our Munich and Vienna locations. These investments will deliver revitalised facilities and flexible working environments, as well as a new building with cutting-edge sustainability features in Vienna.

Aside from the commitment of our people, it is the EPO's digital transformation, that has made new ways of working possible. That transformation has accelerated substantially over the last two years. In 2022 our journey will continue with further investments and digital transformation efforts that reach beyond the patent grant process to new and exciting areas of our operations.

Staff will benefit from more advanced, upgraded IT tools, which will boost efficiency and quality in areas such as human resources. Meanwhile, we will make improvements to further consolidate the process of digital transformation that is already advanced in our core business. They will encompass digital exchanges with WIPO, digital publication, and investment in ANSERA to make it the search tool of choice. Many of these initiatives will make use of advanced AI techniques, and we will also further explore the development of blockchain technology for appropriate use cases. The decommissioning of the mainframe will be finalised to ensure that our underlying IT landscape is efficient, reliable, cost-effective and robust. Completing the decommissioning will also underline our ability to rise to major challenges successfully by focusing on collaboration and teamwork, areas where the mainframe technology did not have the right answers. For applicants, digital transformation will offer enhanced user experiences, with the full release of the new user area for better communication. This will provide a simple, comprehensive and flexible service.

Digital transformation and other initiatives in our core business will also result in other significant benefits for our users in the Patent Grant Process (PGP). These include higher quality and more interactions in 2022. Timeliness is an essential component of quality. Thanks to collaboration and digital tools, we will be able to set more demanding targets for searches. Thanks to the integration of AI tools and comprehensive staff feedback, the laser focus on quality will deliver results by building on the five-pillar approach set out in 2021. The EPO will also finalise a quality charter, which will clearly set out the expectations of users and the standards to be met.

The role of quality audit in both search and formalities will continue to be reinforced, in line with the direction taken during 2021. This will help to ensure that the EPO continues to be a world leader in quality, and continually explores how to improve quality further, in partnership with its users. Because the EPO does not exist in a vacuum and we will continue to be guided by user feedback through User Satisfaction Surveys, enhanced participation in SACEPO, and further co-operation with our member states and partner offices around the world. One result of this enhanced dialogue will be greater convergence of practices, which is something that all major users value highly.

The type of patent products on offer at the EPO also looks set to change dramatically in 2022. For the first time in its 43-year history, it is likely that the EPO will offer two distinct types of patent: the classical European Patent, and the long-awaited Unitary Patent. The EPO has a key role to play in the success of the system, and we will be ready whenever the green light is given. In particular, we will provide testing of the new IT systems and address

user-friendly transitional arrangements. This is set to be the biggest change to the patent system in Europe in a generation and it offers significant potential for innovation, investment and technology transfer. We will therefore communicate comprehensively and effectively, across a multitude of channels and to different stakeholders on the new possibilities for applicants. The hybrid environment of the new normal also gives us an exciting opportunity to increase transparency and accessibility in the patent system. We will promote hybrid learning through the European Patent Academy. Building on the success of the first online European Qualifying Examination (EQE), the Office also plans to present a proposal for a new e-EQE, and for the very first edition of the European Patent Administration Certificate (EPAC), which will break new ground in professional training.

By promoting knowledge through diverse channels, we can also support well-informed decision-making by all stakeholders, especially by developing our plans for a patent Observatory. This will not only provide a platform for the rich exchange of ideas between stakeholders in the patent system, but will also act as a powerhouse for the production of analyses on topical trends and developments in the patent system.

This ability to provide insight and analysis will be reinforced by new studies on trends including 4IR, the grace period, hydrogen-related technology and patent inventions in pharmaceuticals and biotechnology, as well as patent insight reports on off-shore wind energy generation, space, quantum computing and quantum communication. Our celebration of achievements in innovation will also be reflected in a new Young Inventor category in the European Inventor Award. This will ensure that the EPO is supporting the next generation of inventors, who will address the challenges of the future.

And we will assure the EPO's own bright future. In 2022 the EPO will continue to put the measures in place that will give our stakeholders confidence that we can also meet the considerable challenges to come, as well as securing the long-term sustainability of our products, our finances and our environment. The six measures adopted by the Administrative Council will contribute to our efforts to close the financial gap identified in the 2019 Financial Study, empowering us to continue our mission to deliver high quality IP as a financially independent institution.

However, while looking to the future, the EPO will also focus on how to celebrate the past in 2022. A taskforce bringing together staff from across the Office will start planning and preparations to mark the EPC's 50th anniversary on 5 October 2023.

Meanwhile, we will also redouble our efforts to become a leader among public institutions in the pursuit of environmental sustainability. While 2021 saw the Office introduce a new environmental policy, 2022 will see a greater focus on measures to deliver on our goals of becoming carbon neutral by 2030. We will advocate the gains that can be achieved by actors within the patent system by using the occasion of hosting the IP5 meetings next year, for example, to explore the role of IP in supporting sustainable development goals.

Over the following pages, the Annual Work Plan 2022 provides a blueprint for how we will achieve all these goals – by working together, embracing change and focusing on our key priorities within the framework of SP2023, and by capitalising concretely on the opportunities created by the new normal.

#### Execution of SP2023 in 2022

# Goal 1 – Build an engaged, knowledgeable and collaborative organisation

Investing in our people remains one of our highest priorities. Our efforts will continue to focus on attracting, developing and retaining top talents. The Annual Work Plan 2022 covers the measures in place to transform the approach to learning and mobility and adapt the working environment to post-pandemic conditions.

### Our people

Engage | Connect | Grow

Attract talent

Develop talent

Foster professional mobility and work-life balance

Foster diversity and inclusion

Pan-European Seal network

Increase transparency and efficiency in the EPO's financial processes

Further develop a modern, sustainable and healthy working environment

Strengthen corporate culture

Foster social dialogue

#### Attract talent

With industry demand increasing for highly skilled profiles in engineering and science, competition for talent remains high, so we need to continue our efforts to ensure talent is available when needed.

External recruitment, especially for examiners, is closely aligned to business needs planning. A special focus in 2022 will be on our core business. The last couple of years have demonstrated that we need to become more agile and flexible in reacting to external changes, and that the times of once-a-year recruitment forecasts are over. The EPO therefore plans to implement a more fluid recruitment plan based on ranges for recruitment. In 2022 the range for external recruitment is currently forecasted to be between 68 and 77 examiners, based on different workload scenarios, which will be revisited again next year if needed.

The recruitment process has already profited from the strategic pipelining approach, which significantly shortened the time needed to recruit the first wave of examiners. Based on a comprehensive portfolio of training material produced jointly by the EPO Talent Academy and the European Patent Academy, we plan to offer candidates already in the pipeline enhanced learning opportunities to develop their existing IP and patent skills in 2022. A new onboarding tool will facilitate contact between new recruits and their future managers and colleagues. For new examiners, we also plan to provide specific technical training during this period. Even candidates who do not initially receive a job offer will be given opportunities to keep updated on the EPO and IP in general. With over one hundred thousand followers on LinkedIn, we will continue to use social media to reach potential candidates outside specific recruitment procedures to share information on patent and IP-related training.

Meanwhile, we will continue to focus on internal job mobility and the reallocation of talent in line with business needs. Since 2019, over 200 examiners have started working in a new technical field. In 2021, another 145 staff members have moved to a full-time position in a different area and 43 people have taken advantage of partial mobility opportunities, plus another 17 have taken up positions as SP2023 programme or project managers. Looking ahead, internal job mobility will be further strengthened in 2022 by developing a skills-based approach, supporting internal talent searches and through the guidelines on new ways of working, which will offer greater cross-site flexibility.

The digitalisation of the sourcing and recruitment process will continue into next year, with a view to creating a fully digitalised candidate journey and improving the tools to support market intelligence, e.g. LinkedIn Talent Insights. Introducing augmented reality into our employer branding gives a more engaging experience and motivates candidates to apply. As a further improvement, a pilot project will be launched to test technology for semi-automating the pre-selection process for examiner recruitment and thereby saving the internal resources needed for the interview process. Aside from increasing the attractiveness of the EPO as an employer, digitalisation also makes the recruitment process more agile in meeting the staffing needs of the organisation.

Virtual onboarding is the new standard for newcomers. We plan to develop the tools further to help newcomers integrate into the EPO community and current staff to transition to new teams within the organisation. Looking ahead, more flexible language requirements and greater language learning support for new staff will be implemented to facilitate recruitment from all member states.

The childcare and education support available to staff was reviewed in 2021 to create greater equality of opportunity for children of all staff regardless of nationality, and a fairer, simpler benefits system was introduced that is easier to both understand and administer. Following the reform's adoption by the Administrative Council in June 2021, implementation started on 1 September 2021 with the new rules for the young child allowance and the education allowance for children starting a new educational path in the school year 2021/22.

The implementation of the legal framework and IT and operational adjustments will be complemented in 2022 by a fully digitalised process for payments and indicators to monitor its financial impact.

#### **Develop talent**

In preparation for the introduction of a skills framework across the EPO, formalities officers were invited as part of a pilot scheme to self-assess their own skills. The results provide data-driven support for decisions, particularly when it comes to identifying the skills the EPO has, where they are and what training is needed. The process also makes it easier to find hidden talent and assess how internal job mobility can enable the EPO to get the most out of this talent. The skills framework is now being expanded to examiners and the pilot scheme will be completed by the end of 2021. It will then be gradually scaled up to include other job profiles, including facility management, financial and IT professionals.

An important milestone in the digitalisation of the internal learning ecosystem in 2021 was the launch of iLearn, a single gateway to the learning portfolio with access to online learning platforms, such as LinkedIn Learning and Udemy for Business. During 2022, the usability of iLearn will be improved further and new and existing learning capabilities featuring artificial intelligence (AI) will be integrated to enhance e-learning modules. Our aim is to have a system where an AI "tutor" assesses the learner's work and provides customised feedback.

We support individual development via customised development programmes for different roles. So far, we have launched development programmes for procurement professionals, management assistants, BIT professionals, quality auditors and project managers. During 2022, specific programmes will be launched for professionals in the areas of communication, talent management, legal services, HR and co-operation. A special focus will be on developing cross-functional skills that will be most relevant in a hybrid working environment.

Meanwhile, the leadership development programme for team managers and directors will continue to focus on specific skills, such as business writing and finance. In October 2021, the new Team Manager Platform (TM Platform) was established to bring together all DG1 team managers to harmonise best practices while networking with each other. The TM Platform aims to promote better communication, personal development, harmonisation of leadership practices and collaboration. The platform will help team managers to be even more involved in the decision-making process and to reinforce strategic messages. It is a constructive and solution-oriented platform proposing improvements where possible and communicating pain-points when needed. In 2022, we aim to build a community of practice for leaders as a forum for knowledge-sharing.

Mentoring and coaching – two different techniques that support individual development – will be deployed progressively in specific areas where they deliver value. During 2022, new services focusing on individual coaching and mentoring will be designed and progressively

launched. These services will complement the existing frameworks for examiner and formalities-officer coaching, as well as the LEAD mentoring programme<sup>1</sup>.

#### Foster professional mobility and work-life balance

In the radically changed circumstances witnessed over the last two years, staff mobility has been paramount in our ability to adapt to the COVID-19 pandemic. In 2021, teleworking continued to be a daily reality for most staff. Together with measures to increase flexibility in terms of working hours and leave, it has been instrumental in maintaining high performance while safeguarding the work-life balance and health of our people.

Building on the experience gained in the interim, we have launched a review of our regulations, tools and procedures. In preparation for the future, we presented a strategy document, entitled "Towards a New Normal", providing general orientations for adjusting our course for a post-pandemic new normal. Building on a wealth of input gathered from consultation with internal and external stakeholders, new guidelines on new ways of working are being designed to create a flexible, voluntary scheme for all staff, whilst nurturing collaboration and a strong sense of the EPO community. We intend to implement the guidelines on new ways of working initially as a pilot scheme after the expiry of the pandemic rules now foreseen for 31 May 2022.

The introduction of the new guidelines will be accompanied by a range of support measures for staff and managers to make the best of the new ways of working, providing practical toolkits for hybrid working and acquiring key skills through communities of practice.

An important priority for 2022 will be the new mobility package, which aims to enrich the opportunities available to EPO staff, to open up possibilities for experts from other organisations and national offices to contribute to and learn at the EPO; and to help the next generation of IP professionals take their first career steps.

In particular, this package will introduce a comprehensive framework for external mobility covering the secondment of national experts from the EPO's member states to the Office, as well as the secondment of our staff to other organisations, and the conditions for unpaid leave for staff who want to pursue a temporary professional opportunity at their own initiative. The package will also include a new policy on the existing Pan-European Seal programme, introducing a new Young Professionals scheme that will offer our interns the possibility of a first employment contract in the world of IP.

<sup>&</sup>lt;sup>1</sup> LEAD is a mentoring programme aimed at connecting individual staff members willing to start or progress into a managerial career with more senior staff in a mentor/mentee relationship. The programme is designed to give mentees career development insights and new perspectives on their work.

#### Foster diversity and inclusion

Diversity and inclusion are values central to the EPO. The ultimate aim is to make the EPO a more inclusive place to work and ensure that every single staff member feels that they belong to the organisation. In 2021, we focused on raising awareness of issues related to diversity and inclusion through the D&I Promoters network and a number of internal and external events. These included Girls' Day, International Women's Day, Christopher Street Day (LGBTQ+ Pride events) and a Shadowing Day for young people with disabilities.

Looking ahead to 2022, we will focus on concrete actions to improve conditions for staff from all backgrounds. We plan to thoroughly review our rules, procedures and practices to ensure that they live up to the principles of full inclusion and truly equal treatment. We will be supported in this endeavour, and other activities, through ongoing dialogue with informal networks of staff members – ensuring that staff have a voice on the issues that matter most to them. Finally, we will entrust the co-ordination of diversity and inclusion activities to the most senior level of management, reflecting the importance of this issue to the EPO.

#### Pan-European Seal network

Over 350 applications were received for the 2021/2022 traineeship programme, and in mid-September we welcomed a record number of talented young Europeans (117) from 50 Pan-European Seal member universities. We continue to broaden the programme's geographical coverage, and this year's new cohort reflects these efforts with 27 nationalities represented. The ongoing effort to attract more technical universities resulted in 83% more trainees being recruited for our core business area in 2021.

Plans are already underway to expand the network in the coming years to include different types of universities from across Europe. Through the European Patent Academy, we will intensify our co-operation with universities belonging to the programme to foster more effective IP teaching and to strengthen the promotion of IP in academia. The Pan-European Seal Programme 2.0 also aims to improve the legal and administrative programme framework, increasing the programme's attractiveness as a first employment opportunity, particularly for candidates with a science or engineering background. To this end, we will develop a comprehensive on-the-job training and development plan for both trainees and tutors for future editions of the programme. An alumni network will also be launched to boost the promotion of career opportunities in IP.

#### Increase transparency and efficiency in the EPO's financial processes

The focus in finance is on increasing awareness, transparency and digitalisation to secure the long-term financial sustainability of the EPO. In 2021, the Finance 360 programme embarked on the second phase of its implementation, starting with the improvement of the reporting process based on SAP Analytic Cloud and implementing a new supplier portal based on the Ivalua<sup>2</sup> tool.

To increase efficiency and user experience, the refund of double payments was automated, and all payment methods offered by the EPO are now centralised in a central fee payment portal for the benefit of our users. A network of finance partners across the EPO, a finance community of practice<sup>3</sup> and a new financial training course are helping to improve the quality of budgeting and financial decision-making throughout the EPO, as well as fostering collaboration, which is key to a well-rounded approach to financial sustainability.

In 2022, the programme will continue to digitalise the financial processes. On the sourcing side, a new e-signature tool will be implemented and the contract management process digitalised. On the procurement side, it is planned to implement the e-invoicing functionality and continue the development of Ivalua, introducing the purchasing functionality. These new digital tools will increase transparency and value for money for the EPO in procurement activities.

For more transparent, consistent and simplified budget preparation, a new authorisation budget concept will be implemented, integrating workforce planning, finance forecasting functionalities and the new fee payment portal. Additional activities planned include deploying SAP S/4HANA<sup>4</sup> and starting work on the future travel management tool.

Finally, a unique reporting standard and a new set of financial key performance indicators (KPIs) will be deployed to monitor our financial performance.

#### Further develop a modern, sustainable and healthy working environment

"Bringing the New Normal to our Buildings" (CA/38/21 Add.1) presents a revised plan for the building investment programme, offering a new step-by-step approach in response to the pandemic and the changes we expect to see in the new normal. The fundamental principles are to create flexible buildings which can be easily and quickly adapted to meet changing needs, and to ensure that our buildings can act as social hubs for staff to collaborate and connect with each other. Building investments are currently focused on two priority projects involving the Isar building in Munich and the building in Vienna; and on a number of priority building maintenance works scheduled over the next three years.

The Isar building has been in use for over 40 years and needs an upgrade of the working environment to create a more energising and engaging workplace. The "Isar Daylight

<sup>&</sup>lt;sup>2</sup> Platform developed by Ivalua, Inc. for managing supplier relationships and spending optimisation.

<sup>&</sup>lt;sup>3</sup> Communities of practice are co-ordinated groups of people who have a common interest in developing expert knowledge in certain technical or business areas and sharing it with interested peers.

<sup>&</sup>lt;sup>4</sup>New enterprise resource planning system developed by SAP featuring advanced analytics and technologies, including artificial intelligence and machine learning, for resource orchestration, the adoption of new business models and business change management.

Project" will bring more daylight into the building with glass partitions between offices and corridors and improved spaces for collaboration and social interaction. The project started in mid-2021 and is already well underway and on schedule, with the removal of the old walls in progress and the first glass partitions due to be installed by the end of the year. The project is expected to be completed in August 2022.

The Vienna building has reached the end of its life cycle and a complete renovation of the building will be undertaken to create a modern and flexible working environment in a carbon-neutral building by the end of 2023. Planning started in 2021 with the contracting of a general planner, and design work is already underway. A comprehensive document on the Vienna project will be submitted to the 2022 March session of the Administrative Council in order to obtain the views of Member States on the project and outline next steps. Thereafter dismantling works will be able to start. Later in 2022, a tender will be run for the renovation of the building, subject to approval by the BFC via written procedure.

Priority building works related to safety and sustainability need to be carried out in the PschorrHöfe complex in Munich, as we continue to prioritise health and safety. Specifically, the work will improve fire safety in the underground car park, technical rooms and offices and switch the lighting system to LEDs to improve energy efficiency. Other works related to sustainability are needed in The Hague to achieve energy rating C<sup>5</sup> in line with the local regulation for public buildings. This includes installing solar panels for warm water in the Hinge building to achieve the C rating in 2022. In the Shell building, measures are being planned to achieve the C rating by 2023.

#### Strengthen corporate culture

The focus of the projects in this area is on fostering staff engagement and reinforcing their sense of belonging. We aim to build a stronger corporate culture at the EPO through clear and consistent management communication inside the organisation and using social media outside, by sharing experiences and patent stories via the Communication Intelligence Network, as well as using engaging language and innovative, state-of-the-art tools and channels to promote our message. Throughout the pandemic, staff have shown tremendous resilience and pride in their work. The activities within this area aim to build on this and support staff well-being and work-life balance. The "Strengthening Corporate Culture" programme will be in full flow in 2022 and visible in many areas of EPO life. What is crystal clear is that we need to take everyone on the journey with us, valuing their diversity and including their opinions. The title of the engagement project "Your Voice Matters" has never been more meaningful.

We aim to streamline the collection of user feedback from different business areas and use it to further promote corporate identity. In 2021, we performed an analysis of our business needs to ensure that they aligned with the continuous improvement cycle provided for by

\_

<sup>&</sup>lt;sup>5</sup> A building with an energy label C uses no more than 225 kWh per m2 per year in fossil fuels.

the quality management system. The first survey week will look at management communication in more detail and is planned for Q4 2021. Other, more agile ways to measure staff engagement and collect input are being developed. The engagement network was set up in 2021 to support the SP2023 projects touching on staff engagement by providing access to a team of contacts. The network will be used to gain a holistic view of engagement activities across projects and expand them into business areas. In 2022, the network will continue to provide this support, particularly by focusing on engagement in the new ways of working; and will specifically link up with the hybrid working and teleworking teams. The next EPO-wide engagement survey is planned for 2022 (probably Q1) and its results will feed into top level Balanced Scorecard (BSC) KPIs related to staff engagement, training and development and collaboration (see annex). These BSC KPIs were not measured in 2021 and their targets set for 2021 will be maintained also for next year, pending the outcome of the staff engagement survey envisaged in early 2022.

A new augmented reality platform and virtual meeting technology to support remote meetings are among the deliverables expected in 2022. They will foster collaboration and provide a state-of-the-art user experience. These platforms will also be used to target the new generation of EPO staff in recruitment and training activities. Efforts will also focus on expanding best practices in communication and on creating innovative elements, such as the manager platforms and leadership communities of practice mentioned above, coupled with feedback surgeries and reverse mentoring. They will ensure clear and consistent communication flows connecting the matrix of management layers. To leverage the power of social media in a safe way and support staff in its usage, numerous activities and workshops will be run and guidelines on the topic will be prepared.

#### Foster social dialogue

Social dialogue in its various forms is a high priority for the Office. Building an engaged, knowledgeable and co-operative organisation is only possible if there is discussion about the challenges facing the organisation and its staff, coupled with a shared determination to find the best solutions to tackle them.

Around 800 staff members had the opportunity to express their views in team meetings with the President in 2021, bringing the total number of staff involved to over 3 900 since the meetings started at the end of 2018. These events offer a unique opportunity to exchange information and openly discuss important topics and will continue in 2022.

Around 80 online meetings (statutory and non-statutory consultations) took place with staff representatives and unions in 2021. A wide range of topics were tabled as part of the Social Agenda 2021 and the discussions were concluded with tangible results on subject-matter such as the education and childcare reform (CA/7/21). Monitoring of the reform's implementation will continue in 2022.

Following the 132nd session of the Administrative Tribunal of the ILO in July 2021, the clarifications on the strike regulations at the Office were swiftly and fully implemented.

The Office expects to conclude discussions of two other topics from the Social Agenda by the end of 2021: the policy on new ways of working that will ensure a seamless transition from the emergency pandemic rules to the new normal, and the new policy on the extension and conversion of fixed-term contracts. Both of these news policies will be implemented and monitored in 2022. Solid progress was made on other topics in 2021, including communication and resources for staff representatives and the new Code of Ethics, and work will continue in 2022.

A reviewed Social Agenda will be proposed for next year. The 2022 agenda will include, inter alia, the evaluation of the new pension scheme and salary savings plan after ten years of application, the Office's diversity and inclusion policy to align its legal framework with its philosophy, and a new mobility package, reforming secondment, unpaid leave and defining national experts. The staff representation also has the opportunity to propose topics for the Social Agenda, which will be duly considered by the Office.

In 2022 our mission to move from a culture of litigation to a culture of dialogue will be pursued. There were 667 cases proposed for settlement over the last three years and a positive outcome was achieved in 51% of the cases involving individual appellants with one to three pending cases. Alongside reducing the backlog of cases pending before the Appeals Committee, we will also continue to strive to reduce the backlog of cases before the Tribunal. As in previous years, the invitation to reconsider litigation and start a discussion on an amicable solution will remain a priority and will be strongly pursued in 2022.

#### Goal 2 – Simplify and modernise EPO IT systems

### Our IT systems

Smart | Responsive | Fast

Implement a patent tool to support an end-to-end electronic patent granting process through a modular and scalable approach

Search

Artificial intelligence and blockchain

New online user engagement

Digital administration

Strengthen information security

Infrastructure

The EPO's digital transformation gathered pace in the unprecedented circumstances of 2020 and 2021 thanks to a proactive and focused approach to the plans laid out in SP2023, as well as technological advances. The sudden outset of the COVID-19 crisis put a number of basic ICT infrastructures under stress in a global context where whole countries went into lock-down and relied heavily on them. Users, staff, service providers, software vendors and hardware manufacturers all had to adjust overnight. These were extraordinary conditions. Over time, and as the initial measures taken proved successful, the Office evolved towards proactively managing the situation, accelerating certain initiatives, and leveraging the opportunities offered by technology to support a remote workforce. Steps taken included increasing the capacity of our networks to manage higher volumes of data traffic, engaging with users online, and innovating in the way our core activities are carried out. The focus shifted from meeting the most urgent needs, to transforming our IT services into a more sustainable landscape, decommissioning the mainframe, developing the patent grant process, and even undertaking the development of IT tools with and for Member States.

Over 100 projects are progressing at full speed under SP2023. To ensure that the entire process remains a shared journey, "pipelines" have been introduced to communicate the key deliverables. The goal in 2022 will be to make this accelerated pace our cruising speed, keeping the focus on continuous delivery. Our progress so far is built on a robust foundation made up of cross-functional teams, extensive user involvement in projects, use of minimum

viable products (MVPs<sup>6</sup>) and strong support in terms of business change management. This approach will remain in place so that it becomes permanently engrained in the culture of the organisation. A "Processes digitalised" BSC top-level KPI is also monitoring the impact and progress of our activities. Thanks to the rapid acceleration of digital transformation and swift large-scale shift to teleworking, this KPI has developed very positively, reaching a value of 76.3%. Further improvements are planned while the focus of digitalisation will shift to the areas of opposition, finance and HR in 2022. A higher target of 81% is more in line with the EPO's ambitions for next year.

Staff will benefit from more advanced and upgraded tools – including AI – to boost their efficiency and the quality of their work. The re-platforming and decommissioning of the mainframe are major steps in the modernisation of our IT landscape and will open the door to scaling up our infrastructure, as needed, without incurring enormous costs. With a reinforced web presence, we will continue to ensure a high level of responsiveness to user needs. The satisfaction of users, both internal and external, is continuously monitored through a specific indicator on our top-level BSC. The results of the EPO's user satisfaction survey for 2020-2021 pushed up the KPI "Internal and external user satisfaction with tools" bringing it closer to target. Factors contributing to the increased satisfaction of external users notably include the SP2023 investments in fee payment services, the growing popularity of online register services, as well as administrative services such as the Mailbox. As the EPO aims to further improve user satisfaction with its tools, a higher target has been set for 2022 (see annex).

## Implement a patent tool to support an end-to-end electronic patent granting process through a modular and scalable approach

In 2021, we completed the digitalisation and streamlining of almost all PGP workflows and replaced 99% of paper/email triggers for dispatching actions to applicants by digital processes. Patent Workbench was enriched with new functionalities and its integration with other PGP tools progressed towards a single interface for examiners and formalities officers. A new digital file repository was launched and integrated with internal and external tools, including new dossier viewer capabilities. The decommissioning of old viewers will continue into 2022.

Support processes for oral proceedings in examination were also digitalised, including the handling of submissions received from applicants. Over 3 500 examiners, formalities officers and Boards of Appeal (BoA) members received iPads equipped with secure and integrated access to EPO documentation and to the legal archive. Improved digital annotation capabilities were integrated into examiner tools, such as ANSERA.<sup>7</sup>

<sup>&</sup>lt;sup>6</sup>A minimum viable product is defined by <u>Eric Ries</u> in 2009 as the version of a new product which allows a team to collect the maximum amount of validated learning about customers with the least effort.

<sup>&</sup>lt;sup>7</sup>Search tool that combines various search techniques (searching with plain text, figures or markers) into a single cooperating interface.

In 2022, efforts will be devoted to gradually digitalising PCT receiving Office interactions and other existing and new exchanges with WIPO. All EP and PCT (Chapter I and Chapter II) search and examination work will then be covered by a digitalised workflow, building on the work done for EPC procedures in the last couple of years.

In 2022, we will reassess the publication processes and ancillary services, including bulk data distribution, the European Publication Server, and the legacy tool eDrex,<sup>8</sup> which will progressively be replaced by a digital publication platform.

#### Search

In 2021, ANSERA was enhanced to provide users with additional functionalities and data. The integration of the new pre-search functionality enables examiners to perform complete searches solely in ANSERA. Improvements were made to the user interface, giving users a better overview of their search activity. It was enhanced with rich annotation capabilities and classification tools, and we introduced the concept manager which allows collaborative knowledge-sharing among examiners by creating shared content of search concept libraries.

In 2022, the new search platform featuring technology-specific databases and a connection to the future extensibility platform will ideally become the search tool of choice for the vast majority of our examiners. Some of the existing functionalities will be further enhanced with advanced AI. Elements of business reporting and analysis of search activity will be introduced, along with an integrated overview of the application, its features and the search activity. Finally, the platform will be enriched with a high-quality non-patent literature (NPL) search and viewing tool based on the new generation of NPL data management systems.

Making ANSERA the search tool of choice will enable the EPO to enter a transitional sunset period for EPOQUE prior to its final decommissioning.

#### Artificial intelligence and blockchain

Al-enabled services developed under SP2023 delivered concrete results in 2021. Firstly, an Al pre-classification engine built in-house was launched in Q2. Running in parallel to the legacy service it demonstrated an ability to allocate files with greater accuracy, making the commercial product redundant and reducing our dependency on an individual external provider. Secondly, Espacenet's first-page clippings are now done by Al instead of an external service provider. Lastly, the new Al machine-translation engine built in-house started delivering high-quality translations into English of unpublished documents in German, French, Dutch and Italian, making our translation capability more flexible and robust in a highly secure environment. This Al machine-translation tool also contributes to

<sup>8</sup> Tool that allows examiners to assemble and edit the future published patent in an electronic manner.

the improvement of pre-search in ANSERA as the automatic translation from French and German enables a full pre-search for those files.

Looking ahead to 2022, we will deliver refined models for pre-classification and automatic classification, reclassification, Co-operative Patent Classification (CPC) full-symbol services and Al-based search. We will also improve the digital file allocation routine with a solution to match the contents of a file directly to the competence of the examiner using Al and start building an "Examiner assistant" to guide the examiner through search and examination.

Finally, we will continue to develop a priority-document blockchain prototype that includes a distributed system of computers and participants. While blockchain remains an emerging technology at the EPO, its potential future benefits range from more secure and consistent data sharing between IP offices, users and other IP organisations to efficiency gains via lower operational costs, reduced processing time and lower paper consumption.

#### New online user engagement

The launch of the user area pilot project in November 2021 marked an important milestone in the renewal of our online services for applicants and representatives. The new user area brings several services together in one place, offering more flexible EPO Mailbox access, a fresh way for users to work with their patent application portfolio and a simplified approach to submitting procedural requests relating to existing patent applications. 2021 also saw the implementation of a new state-of-the-art CRM customer service solution to handle an initial set of customer enquiries from users contacting EPO user services. In addition, the new statistics and trends centre on our website was launched and the new-style EPO legal texts area on the EPO website provided an early indication of what the revamped EPO web presence will look like.

The full release of the user area is planned for 2022 and will offer users a range of new key features. For example, attorneys will be able to delegate portfolio viewing and acting rights to paralegal and support staff, and non-European agents and applicants acting under the PCT will be able to access their EPO Mailbox and portfolio online.

In 2022, the CRM will be fully rolled out to cover all customer enquiries, improving support for EPO key account managers and affording us a better understanding of our interactions with users. In addition, the new epo.org website will continue to be enhanced with mobile device-friendly features to better fulfil its purpose as the central entry point for different user communities and stakeholders. The new internet will feature a state-of-the-art, responsive design that provides users with efficient access to a range of information and services.

#### Digital administration

Many staff opted almost exclusively for teleworking in 2021 and we continued to support communication and collaboration in the virtual working environment. The adoption of cloud-based tools gathered momentum, with Microsoft Teams replacing Skype for Business for

videoconferencing and the introduction of Zoom for oral proceedings in examination, opposition and appeal (with and without simultaneous interpretation). Wi-Fi coverage was expanded to cover all EPO buildings in anticipation of staff returning to the premises and user support during online meetings was upgraded.

Improvements were also made in e-learning, talent management, performance management and HR administration tools, paving the way for the introduction of new tools and digital solutions in HR. In parallel, new platforms were delivered for business intelligence analytics, document management and the future intranet.

In 2022, in line with HR pipeline deliveries, core HR processes will be simplified and digitalised, building on the foundations set in 2021 and supporting the objectives set in Goal 1 of SP2023.

The full roll-out of a new intranet is planned in 2022 and aims to make the intranet a digital home for all staff. Its new design will facilitate more frequent publication of richer content and will play a key role in connecting staff working remotely. Its features will encourage collaboration, interaction and a sense of belonging. This will provide an online focal point for the EPO's community in an era when the Office is developing new ways of working, including more remote working for those colleagues that opt for it. The legacy intranet will ultimately be decommissioned.

The roll-out of the new document-management platform will start in 2022. Designed to manage administrative document repositories, the platform will be extended to cover various areas of the organisation, and users will be assisted in adopting the new tools and migrating their document repositories.

#### Strengthen information security

In 2021, we continued preparations to meet ISO 27001 information security management system requirements. This involved integrating the ISO 27001 core activities into the integrated management framework and delivering an information security policies framework. We aim to achieve readiness for the certification process in 2022.

Both efficiency and efficacy of security operation handling was improved significantly in 2021 by consolidating existing network cyber defences and deploying critical elements. This marked the first stage in delivering a comprehensive intrusion detection and prevention system, a state-of-the-art security information and event management system and threat intelligence capabilities. Centralised authentication solutions for user access to EPO applications were implemented, allowing users to better manage their access tokens and related security information. An extensive campaign was designed and run to highlight the importance of user awareness of cybercrime.

In 2022, communication and education campaigns on this key topic will continue and be ramped up. Our authentication solution will be refined and enhanced with automated management of identity life cycle and role-based access. Self-service features are also

expected to be made available to external users in the future, going beyond the current use of smartcards and offering new means to authenticate online.

Our cyber defences will be expanded and enhanced in 2022 to cover online breach detection, an intrusion detection and prevention system, an improved security incident reporting and management system and, finally, an integrated information security dashboard.

#### Infrastructure

As part of the work to ensure the long-term viability of the IT landscape, a major objective is expected to be achieved before the end of 2021 with the decommissioning of the mainframe and CMS filing<sup>9</sup>. The legacy mainframe, based on technology from the 1970s, was outdated, overly complex and expensive to run. Replacing it with modern technology will be beneficial financially. But even more importantly, it is necessary for the continuous development of the new patent grant process toolset, which is the cornerstone of a modern and sustainable EPO.

The EPO's new modern and energy-efficient data centre in Luxembourg was set up in 2020 to replace the old EPO data centre in the Shell building in the Hague, which is now obsolete and requires decommissioning. A major achievement in 2021 was the migration of EPO applications, including all user-facing ones, to this new data centre. In 2022, the long-term project to deliver comprehensive disaster recovery capability will reach completion. In other words, we will be able to reliably support production services and switch between the primary data centre in Luxembourg and the secondary one in Munich with minimal disruption to services or data loss.

A key priority that will continue into next year is increasing the availability and stability of our IT systems. The KPI for "Availability of existing and new tools" remained stable in the first half of 2021 and almost unchanged compared to 2020. The effect of the major efforts to replace outdated and legacy technologies in the IT infrastructure is not expected to become visible until the results for the second half of 2021 are available. We know that when our systems fail, this has a direct impact on the activities of the EPO's examiners and formalities officers. With the fundamental modernisation of our systems ongoing through the decommissioning of the mainframe, and the migration of applications to the new data centre in Luxembourg, some disruptions are inevitable, despite the very best planning.

We are therefore committed to improving stability and reacting fast to issues. The service management, monitoring and observability toolset will be expanded in 2022 to improve our IT operations teams' responsiveness when failures occur, thereby helping to increase the availability of our systems. Ultimately, this modernisation of our systems to run on state-of-the-art infrastructure is vital for our future sustainability and needs to be done. In the medium

-

<sup>&</sup>lt;sup>9</sup> An EPO filing service allowing electronic filing of documents.

term, we expect to start seeing the benefits in the availability and stability of these upgraded technologies next year.

Goal 3 - Deliver high-quality products and services efficiently



The exceptional circumstances triggered by the pandemic in 2020 presented substantial challenges to the way we work for our staff, our applicants and for society at large. Many of the initial measures taken by the EPO at the outbreak of COVID-19 also extended into 2021, posing an additional long-term challenge to the successful delivery of our products and services. However, thanks to the ambitious goals of the Strategic Plan, we had already laid the foundations to become a more adaptable and responsive organisation. This enabled us to convert these challenges into opportunities and accelerate the transformation that started in 2019 with the adoption of SP2023.

Goal 3 lies at the heart of our mission, focusing on the delivery of high-quality patents and efficient services. It also makes a central contribution to our vision of being an effective and transparent Office, capable of responding to the evolving needs of users.

As noted under Goal 2, 2020 and 2021 saw a seismic shift, not just in the tools and processes used by our formalities and examiners to do their work, but also in their place of work. The unprecedented speed of digitisation and change were clearly challenging. But our staff's ability to absorb new information and adapt to new tools – supported by strong change management – enabled the EPO to provide a good continuity of service to our users and wider society in 2021. This was reflected in strong production, improved timeliness, stable quality indicators and positive user satisfaction. 2021 also saw solid progress towards the delivery of all projects in Goal 3, with some projects completed and transitioning to business as usual.

In 2022, we will take the experience gained in using the new tools, processes and procedures, to focus on optimising our performance in this new way of working. 2022 will be a year in which we start to see the benefits of our investments in digitisation reflected in improved quality, consistency, and effectiveness. In 2022 we have set ourselves challenging and aspirational objectives to improve quality and consistency in our practices and to consolidate the significant progress made on improving the timeliness of our products and services. These objectives and our performance against them will be subject to a revised, more open and transparent reporting process. Our ambitions for 2022 demonstrate our commitment to excellence and to delivering high quality products and services efficiently.

#### **Demand for our services**

Like many organisations, the EPO looked to the past when assessing how demand for our services would evolve. Based on our knowledge of previous economic shocks, we developed four possible scenarios for our workload in 2021 and took a prudent planning approach. This cautious approach proved justified, with fluctuations in incoming application seen in the first few months of the year. Overall, however, the patenting environment remained robust in 2021, with brisk interest in European Patents. In the first ten months of 2021, applications and workload was 12% higher than planned. There was also a significant reduction in the number of withdrawals of applications, demonstrating a continuing, healthy interest from applicants in protecting their innovation.

In 2022, we will continue to take a prudent approach to planning. Based on our current plans we expect to receive around 179 200 applications in 2022 and an overall search workload of around 245 600. We will continue to monitor the situation closely, so that the EPO can react quickly. Specifically, we will use and update our four scenarios and track applicant behaviour and demand against these at regular intervals throughout the year. However, the EPO will also ensure that is capable of making changes in its core business, so that it can respond to demand quickly and manage workloads across its different technical areas efficiently.

Major assets in managing this demand in 2022 will be the Digital Talent Marketplace (DTM) and the Digital File Marketplace (DFM). The DTM encourages greater mobility, while the DFM promotes collaboration between teams to facilitate more effective short-term workload fluctuations, by encouraging teams to work together on files. Both platforms will remain powerful tools in helping us to manage our resources and workload to achieve our targets to improve quality and the consistency of our timeliness. Furthermore, thanks to the new pipeline approach to recruiting new talent under Goal 1 and virtual onboarding, the Office is well placed to recruit and train staff quickly if it needs to, and if there is a sound business case for doing so.

#### Timeliness, performance and effectiveness

The EPO's performance in 2021 has been bolstered by a "one Office" approach, which has increasingly focused on greater collaboration. The Office's digital transformation outlined in Goal 2 has also played a major role in delivering a range of digital tools for the patent grant process, such as AI pre-classification, the patent workbench and improvements to ANSERA, as well as a re-platforming of the mainframe to offer a more reliable IT landscape.

As a result, the timeliness of all our products continued to improve in 2021, as did overall timeliness from filing of the application to notification of intention to grant. Over 91% of searches are now sent to applicants on time – with an average of 4.7 months – compared to 89%, one year ago. 79% of our standard grants take place within 36 months from filing, with an average of 22.9 months. As a result, the end-to-end time for a European Patent first filing fell from 45.4 months to 43.3 and an E-PCT (where the EPO was not the International Search Authority) from 38.5 months to 36.3 months from when formalities are completed. There was also a continued improvement in the time for treating divisional applications, which fell from 32.8 to 31.9 months.

Our focus in 2021 was also on reducing the backlog in opposition. This backlog accumulated in 2020 as a result of the pandemic, before the transition to video conference for opposition proceedings. When the Office implemented videoconferences for oral proceedings in opposition, significant progress was subsequently made with over 400 more oppositions completed than originally planned.

In 2021 we also focused on the consistency of timeliness. Targeted action was taken to deal with the right file at the right time and for teams to work together to reduce examination backlogs. This had a significant impact. At the start of the year, our backlogs included just over 5 000 products pending an office action for more than 30 months. This number has been reduced to just over 1 000 and continues to fall. Our responses to user enquiries remained swift in 2021, with over 94% of user enquiries resolved in less than 24 hours, up from an already impressive 93% in 2020.

The BSC KPI "Timeliness of examination" progressed slowly upwards over the year and the 2021 target of 80% of standard examination products delivered on time is within reach. In 2022 we will consolidate the improvements made in timeliness in recent years and focus on improving the consistency of timeliness across all products and fields of technology. Our compliance target for search and examination products delivered on time will remain at 90% and 80% respectively. We will also take a more granular approach to targets, by focusing on individual products. Specifically, we will reduce the target timeliness for PCT ISA searches and the national searches carried out for fourteen of our member states. They are currently to be completed within 9 months. In 2022 we will start to lower the target duration of these searches, as we recognise the vital importance of early certainty to all applicants, particularly SMEs. In 2022 specifically, we will aim to issue 90% of ISAs and national

searches within 8 months of receipt. Overall, the Office will reduce its target from 9 months to 6 (our current target for EP applications) over the next three years, given that this is a significant undertaking.

In 2022, the EPO will continue to report transparently on the progress being made towards production targets. However, we will increase transparency further by reporting on our progress on each of our product types. Furthermore, our overall production targets will be based on lessons learnt during the previous two years of the pandemic. They will also take into account new ways of working, which include a more extensive teleworking policy and greater flexibility for staff. For example, traditional calculations assume that there are different levels of leave taken at certain points in the year, and monthly fluctuations in production. With the new ways of working, we see that those assumptions no longer hold true. There is a more uniform production from our examiners and formalities teams throughout each week, month and the year.

In 2022 we will therefore aim to deliver some 371 000 search, examination and opposition products overall, which is closer to the level reached in 2021. This overall target is expected to consist of around 236 200 searches and 131 200 examination final actions (leading to 102 800 patent publications). Around 3 900 oppositions are expected to be completed.

Our ability to effectively manage this workload, and provide a quality, timely and consistent service, relies on our ability to monitor production and productivity effectively. We will therefore also continue to develop a more accurate productivity indicator. The productivity indicator is based on the average number of days taken for each product, as some products can take longer than others. For example, searches can take several days longer than examinations and oppositions, our premium product, considerably longer.

Experience from 2021 shows us that a number of factors need to be taken into account to ensure the accuracy of the indicator. For example, in the course of the last year, our traditional productivity indicator showed that our productivity was deteriorating, yet our production was good and our timeliness improving. Following a close analysis it was discovered that we were processing more searches than planned – to date over 7 600 more – as well as more oppositions. In addition, Team Managers were allocated more time to support their team at the start of the pandemic. This time had not been taken into account in our productivity indicator. When we apply such factors to our indicators, we see that productivity for examiners and our team mangers was, in fact, better than indicated previously. For 2022 we will factor such elements at the start of the year and we have set ourselves an overall productivity target of 1.77 days-per-product – compared to 1.78 in 2021. Achieving this will enable us to deliver our objectives on timeliness and production based on more accurate indicators.

Productivity as measured in days per product is just one indicator of our effectiveness. In 2021 we looked at a number of indicators to help improve how we measure effectiveness.

These have been brought together in a new internal dashboard – accessible to all staff – which shows our performance against a range of indicators. The dashboard covers our operations, users' experiences, finance coverage and our people. During 2022, we will use this dashboard to develop a more accurate and comprehensive picture of our Office's performance, as well as to spot trends and take action where necessary.

In terms of individual performance, production targets will remain a consideration for performance development and evaluation. However, the Office will deploy a more holistic approach to performance evaluation in its core business in 2022. Developed with team managers, the approach will focus not merely on the quality and timeliness of products, but also collaboration. This change is being made to recognise the fact that the Office's recent progress in timeliness and production has been built not just on individual performance, but also on teamwork both within and across departments.

Furthermore, examiners will be set a production range for the number of products rather than a specific production target. This range will take several factors into account, such as the experience of an examiner, technological field, anticipated project work, any training to be undertaken, and specific roles to be fulfilled, such as team mangers. The range can be discussed regularly and adapted if necessary to take account of changing circumstances. To ensure continuing professional development, the performance evaluation exercise will also include the completion of an individual development profile.

#### Quality and how we measure it

The EPO is a leader in quality. In 2022 the EPO will apply itself to maintaining and improving quality levels to ensure that our users have access to legal robust patents. However, to ensure continual advances in quality, the EPO must also continue to develop its quality metrics.

There are various external measures of quality, such as the annual IAM Survey, and the Office's own User Satisfaction Surveys. The EPO also involves its users by continually monitoring complaints and involving our SACEPO Quality Committee, which expanded in 2021 to encompass a global user base from all continents.

Internally, the EPO has a quality audit team, separate from our rights granting area. It monitors and reports on our search, classification and grant quality. The quality audit plays a vital role in measuring where we stand, and in helping to identify where we need to improve. In 2021 we maintained a high conformity in search audit, with the proportion of compliant files reaching 96.6%. For classification 93% of files were in conformity. We also managed to stabilise our grant audit at 76.5% of audited files in conformity.

To ensure even more rigorous monitoring, the number of auditors was doubled in 2021. This this allowed us to conduct almost 14% more grant audits, and to run a pilot that extended the scope of our search audit to include the search opinion. As a result of this successful

pilot, we have now extended our search audit to check the whole search product, including the examiner's reasoning on patentability, alongside the search report. In Q4 2022 we will report on the first results of this extended search audit. The more in-depth audit is expected to bring our results for search more closely into line with those for our grant audit.

Our quality targets for 2022 are ambitious and reflect our commitment to quality, which is set at 85% compliance for both search and grant. The "Quality of search and grant" KPI fluctuated slightly in 2021 as its components, derived from the quality audit on search and grant, moved within the boundaries of their confidence intervals to reflect the quality achievements and initiatives put forward over the year. New search audit criteria will apply throughout 2022, with the audit being extended to written opinions and more stringent principles used to evaluate search quality. As a result, the target set in 2021 is still considered appropriate.

However, we will not wait to see the results from the enhanced search audit before taking action to improve the quality of our search and opinion. We will invest in further improvements in our search tools and databases. We will also enhance collaboration at the search stage. In 2022 specific actions will also be taken to bring about an immediate improvement in grant audit results. This investment in the quality of our search products is expected to pave the way for a long-term improvement in the quality of our grants, as those cases progress through the patent process in two- or three-years' time.

In 2022, we will also continue to create a stronger dialogue and encourage learning opportunities, between DQA and the examining division. For the first time, this will include providing positive feedback to divisions to reinforce their understanding of good practice. Furthermore, the quality audit in the formalities area will be reinforced. A new quality dashboard at DG 1, directorate and team level will also be developed and deployed. This should help to inform team discussions on issues of quality and consistency and identification of areas of good practice and improvement.

#### Simplifying our services – building in quality by design

While transparent audit metrics are an intrinsic part of our quality policy, we must also ensure that our processes and working methodologies support our commitment to excellence in quality.

In 2021, the EPO took a fresh strategic approach to quality based on five pillars: to improve quality by designing in quality and making our systems and processes simpler, clear and easier to use for our staff and for our applicants; exploring how we can support each other better and find the right source of expertise; agreeing shared values on quality; looking at how we set and measure objectives – so we learn and continuously improve; and how we learn from and improve the interaction with all our external stakeholders. In 2022 we will

take the results of the pilots and the research undertaken in these projects, and implement the lessons learnt in our operations.

In 2021, we saw the great strength the Office drew from internal consultation on quality, through the Quality and Operability Studies (QOpS). This initiative brings together staff recommendations on all of our key work processes. It identifies improvements that can be made in the patent grant processing by considering topics such as: search workflow, the way we issue positive decisions, the (informal) communication with applicants, specific aspects of opposition, classification and administrative tasks in sessions involving staff from across the relevant teams.

In 2022 we will begin implementing the findings and outcomes of QOpS. Together with our established consultation partners, including the SACEPO Working Parties, we will look to implement changes in our legal framework, procedures, practices and tools. Many of the recommendations will facilitate an improved digital dialogue with users. This includes a proposal for legal changes, relating to the physical requirements of application documents, the transmittal of search reports and grant certificates, and the availability of priority documents. We will also look at the rules on notification and calculation of time limits.

Another recommendation from the QOpS was to improve the consistency of communications to applicants. As a result, a set of templates and best practice procedures developed in 2021 will be piloted in 2022. Communications related to formalities procedures will continue to be reviewed, simplified and embedded where possible in the new online tools.

#### Supporting collaboration and knowledge sharing

Enhancing collaboration throughout the EPO has been a powerful element in our drive to improve quality and consistency, increase teamwork and staff engagement and in enabling us to manage our workload more effectively.

In 2021, the Enhancing Collaboration (ECo) project concluded its work. The improvements implemented in the course of the project are now being included in our day-to-day operations. The examples of tools and best practice will be maintained and updated by a Community of Practice in our internal ECo Store, our online collection of examples of tools and best collaborative team practices. Our Fo-Ex project will support further collaboration on each file between formalities officers and examiners, with particular emphasis on enhanced collaboration in the search phase. The technique of search jams has proven the value of collaborative development of targeted search strategies within the division. As of 2022, a pilot will be run that forms the division at the search phase for every file.

Sharing knowledge is vital for ensuring quality. In 2021 we have designed flexible structures to bring people together to work collaboratively and share knowledge around technical themes. One such initiative, the communities of practice, is already evolving the EPO's

expert knowledge groups into coherent and lean networks. During 2022, these networks, such as the computer implemented inventions, Asian patents, knowledge transfer, and additive manufacturing groups, will be supported through an enhanced framework within which these specialist groups can operate, co-ordinate, and grow. Their visibility will also be increased through a central intranet platform.

During 2022, we will continue the lectures on decisions by the Boards of Appeal, which were piloted in 2021. They have proven successful – with between 520 to 1 200 participants in each session – and have contributed to a better understanding of case law in the examiner and formalities officers' community. We will continue to develop ELIS, the one-stop hub for task-related knowledge, which is accessed through a simple single-entry point in the Patent Workbench. We will also make the Single Legal Source entries easier to access, providing access to the most relevant and up to date legal and procedural guidance and advice. These initiatives will enhance direct and simple access to relevant legal and procedural documentation and expertise and are expected to improve both quality and efficiency of the daily patent granting process tasks.

#### Dialogue with our users

Feedback from our users is central to quality improvement. The User Satisfaction Survey (USS) in 2021 and the survey on oral proceedings via videoconference gave us direct and valuable feedback on how we can improve and shape our products and services to reflect user needs. For the User Satisfaction Survey, over 6 000 interviews were conducted covering the entire end-to-end user journey, from filing through to final actions, opposition and support services. The results revealed high satisfaction scores for each phase of the journey, confirming the EPO's high quality and providing a new benchmark for user satisfaction. For the BSC KPI "User satisfaction with patent grant products and services", a new calculation method will be adopted that builds on the satisfaction results of the new user satisfaction survey approach. The KPI value will be based on two quality elements in the patent grant process in equal measure – quality of services and quality of products. It will consequently capture elements of both procedural and substantive law. In addition, since it will also cover user satisfaction with online filing tools, it will provide a complete overview of the end-to-end user experience with the EPO's products and services. A new target that reflects the revised scope of the KPI has been set for the years ahead.

In 2021 we also significantly increased the scope of our SACEPO working party on quality, involving representatives from six continents in a series of meetings throughout the year. As in 2021 the 2022 programme of the SACEPO Working Party on Quality will again feature an external assessment exercise to create quality assurance panels with key stakeholders and continue the dialogue on user expectations in relation to quality. In 2022 we will also take action to address the areas identified for improvement from the SACEPO meeting, the USS and the survey on the use of video conferencing to make further improvements in our services. With the launch of the new Customer Service Management (CSM) tool, we will not

only replace another legacy system but also add new functionalities and increase efficiency. A major new feature will be the separation between complaints – which trigger a reply from the Office – and feedback – which does not trigger a reply. Given that some users may be reluctant to write a complaint, it's anticipated that this new option will encourage users to provide more feedback.

In 2022, the EPO will also continue to focus on one of our key customer-focussed processes: filing a patent application. Through key account management and in close co-operation with the initiative "Improving the Quality of Incoming Applications", the EPO will develop a strategy to improve the quality of incoming submissions and to explore potential improvements in filing procedures. For example, work has already started to assess formal issues in patent applications from an applicant with a view to entering into a dialogue on possible remedies.

Finally, following the success of the online public consultation on the EPC and PCT-EPO Guidelines during 2021, and the follow-up dialogue with user representatives at the meetings of the SACEPO Working Party on Guidelines, a full and open public consultation will remain an important part of the Guidelines revision cycle planned for 2022.

#### A new structure to reflect the external industrial eco-system

Our Strategic Plan 2023 has embedded new ways of working, reinforced collaborative approaches and simplified practices and procedures into our working culture. By digitalising workflows, we can connect skills across the organisation and reach the best talents, wherever they are, promoting collaboration and improving our quality, consistency and timeliness.

In October 2019 we started our journey to adopt an operational structure that would correspond better to the goals of SP2023 and to the changing needs of users. During 2022, we will see the third iteration of this change – as we move gradually towards the target operational model. The planned changes in 2022 will change the focus from a structure based primarily around patent classification to one which corresponds better to the current industrial ecosystem in which our applicants operate.

From April 2022 we will group our in-house expertise into communities of technology that reflect the broader industrial ecosystem. These will not only be centres of excellence in terms of expert knowledge but will also help us to deliver the improvements in quality and consistency that our applicants require. They will also bring greater clarity both internally and externally to the important role that innovation plays – not just in the industrial ecosystems we see around us, but also in seeking solutions to today's and tomorrow problems and how our role can contribute to the United Nation's sustainability goals.

These communities of technology will be supported by our enhanced ways of working and transversal communities of practice mentioned above. This, in turn, will ensure that our

quality and consistency of approach apply across all our areas of expertise. From April 2022 we will also create five transversal areas of responsibility focusing on quality and harmonisation, business change, our opposition services, customer journey, and business planning and reporting.

# Goal 4 – Build a European patent system and network with global impact

Ensuring that our partners benefit from a strong and accessible European patent system remains one of our highest priorities. The year to come will focus on enhancing the co-operation portfolio through new and updated initiatives that foster innovation, particularly with regard to user experiences with tooling and services, patent knowledge and the Unitary Patent Package.



#### Maximise the impact of co-operation

Developing co-operation with our contracting states is a priority that lies at the core of our activities. The EPO has dedicated itself to the development of a new framework boosting our co-operation policy in 2020 (CA/27/20), including the development of numerous projects across different sectors that are being implemented and already delivering results.

Within the new framework for co-operation approved by the Administrative Council, we have already signed – or are in the final stages of signing – new bilateral co-operation agreements (BCAs) with a considerable number of member states. Of the remaining agreements not yet signed, most are in the final negotiation phase and are expected to be concluded in early 2022. We will review the bilateral agreements annually and adjust them in line with the progress made in the implementation of the various projects, thereby contributing to even closer and more effective co-operation. We also plan to maintain a schedule of regular exchanges with the national offices in 2022 to identify their further needs and improve co-ordination, timeliness and effectiveness in implementing co-operation projects.

The new policy on the working agreements on search co-operation was approved by the Administrative Council in December 2020 (CA/51/20) and has been implemented throughout 2021. Sweden has joined the utilisation implementation scheme and applicants claiming a Swedish priority are now exempted from filing a copy of the search results under Rule 141(1) EPC. We are currently working with other national offices that have expressed interest in the utilisation project and expect that some of these offices will join the scheme in the course of 2022. We will further support the implementation of awareness-raising activities to promote the European patent system in and with the member states. In addition, to exchanging information on the latest developments in patenting practices and procedures in specific technical fields, we will continue to develop discussion platforms between examiners at the national offices and the EPO. Following the latest developments and the member states' participation in working groups on IT co-operation, convergence of practice and IP outreach, the BSC KPI "Member states' participation in co-operation projects" progressed swiftly to reach a value of 77%, surpassing the target set for 2021. A higher target has been set for 2022 to better reflect the aim of the new co-operation framework.

#### **Convergence of practices**

In 2021, two new working groups successfully took up their work on the possible establishment of common practices in the areas of accordance of a priority date and re-establishment of rights. The revised working arrangements see users fully involved in the discussions. Solid progress was made and both working groups established draft common practices, which will be presented to the Committee on Patent Law for opinion and to the Administrative Council for adoption in spring 2022. Subsequently, a third work cycle will be launched. Possible common practices to be discussed are in the areas of claim drafting and structure and examination practice of computer-implemented inventions and artificial intelligence.

#### IT co-operation

The European patent network (EPN) made very significant progress on IT co-operation projects in 2021, moving beyond discussions and into concrete implementation. Thanks to regular technical consultations, a number of pilot projects were successfully launched together with interested national patent offices (NPOs). The main focus remained the front office and co-operative search projects, where minimum viable products have been designed, developed and implemented for dedicated end users at national offices. Towards the end of 2021, the first national patents were filed using the new front office system as a result of the first successful pilot project in Lithuania.

Following the conclusion of the co-operation framework in 2021, member states actively participating in major software development have the possibility to request support in the form of deployed technical experts. These experts will be contractors from the EPO's providers, available in the countries concerned to support specific technical work under the

IT co-operation programme. By the end of 2021, Lithuania and Spain had received such experts, with further profiles under selection for Greece, as the pilot countries for the front office project. It is expected that more requests for these experts will come as the implementation of the front office takes off in 2022.

We successfully launched the new single access portal, delivering a new platform for collaboration and communication dedicated to the PATLIB community, as well as a tool for managing and authoring bi-lateral co-operation agreements. Work on expanding the portal to include and update MICADO with new functionalities and other modules is making good progress. The modular back office project provided the EPN with a blueprint methodology aimed at supporting the launch of new national-office initiatives in this area.

The process mapping and quality management project delivered a report to all participating offices covering process maps of all major patent granting procedures. This will be the basis for further detailed mapping, supporting straightforward implementation and quality co-operation – a powerful tool towards convergence of practice.

Looking ahead to 2022, we will turn our focus to implementing major projects with the NPOs of the member states, supported by the recruitment and deployment of technical experts. The front office project should conclude most of its development work with the pilot countries of Lithuania, Spain and Greece during 2022, and may begin implementation in further countries. The search project will complete its pilot stage and start to examine other aspects essential to the eventual combination and replacement of other search solutions used by EPN stakeholders, with a focus on clarifying the data policy, data protection and data security. Meanwhile, the CPC project will deliver substantial new functionalities and services and support broader use of the scheme across NPOs.

Widespread improvements in data uptake and delivery are also expected next year, in terms of both search data and prior-art data. These enhancements will deliver significant improvements in ease of use and qualitative enhancements to data exchanged in both contexts. The single access portal project will conclude with full implementation of document search services and add a variety of new modules covering different activities run by the national offices. Based on the mapping carried out in the process mapping project, it is expected that further conversations on broader quality co-operation will be initiated and advanced with national offices, even as further processes are mapped in greater detail; eventually supporting the convergence programme in identifying further topics.

The year 2022 should also see further work on IT security as new working groups start. At the same time, further exchanges on the practical aspects will be organised as implementation accelerates.

Building on the success of the EPN cloud event, which included participants from member states, extension states, WIPO, the EUIPO and selected user associations, several workshops are planned to take place next year, starting with an event on machine learning

and AI in the first quarter of 2022. The EPO will also create a security network to shape future projects and initiatives to the benefit of the EPN community. Our aim at the EPO remains to build an even more responsive EPN that focuses on topical subjects of interest to the national offices, users and society at large.

## Unitary patent package

The unitary patent and Unified Patent Court are projects that represent a collective effort to improve access to the European patent system and increase legal certainty. This long-awaited project, which will benefit users throughout the patent system, made significant progress in 2021. This follows the positive developments in the ratification process for the entry into force of the Protocol on the Agreement on a Unified Patent Court on provisional application in Germany, Slovenia and Austria. It is now expected that the last steps will be taken at the beginning of 2022 at the latest, triggering the start of the Provisional Application Period .

The select committee resumed its work in October 2021 with a clear work plan for the remaining open tasks to be concluded by June 2022. These tasks include updating the unitary patent legal instruments, revising the communication plan in close co-operation with the member states and finalising the remaining open IT functionalities, not least to ensure proper data exchange between the EPO and national offices.

Accordingly, we will ensure that in early 2022, national offices will be able to test the unitary patent-related data exchange and allow users to test the new IT systems developed for the unitary patent. Finally, we will examine the requests for user-friendly transitional arrangements allowing for an early filing of requests for unitary effect and allowing applicants having reached the final grant stage to obtain a unitary patent by delaying grant until the entry into operation of the new system.

### Define and prioritise co-operation activities

Developing external partnerships will help to ensure that projects and initiatives have a greater impact. For that reason, the EPO is taking its longstanding relationships, such as that with WIPO, to another level. This was made possible recently due to a new memorandum of understanding (MoU) signed in November 2021, which revamps our cooperation framework. The PCT and the digitalisation of its services, digital transformation, training for IP offices and outreach to users around the world are at the heart of the EPO-WIPO co-operation.

The EPO also successfully implemented its annual work plan with the EUIPO through numerous activities on training, convergence methodologies, support for SMEs and IT tools. A two-year work plan for 2022-2023 was agreed at the end of 2021 and will be signed in early 2022.

As part of our efforts to expand co-operation with other European and international organisations, we will pursue the signature of a co-operation arrangement with the European Space Agency. We also signed a new MoU with the International Renewable Energy Agency providing a framework for new studies on patents and renewable energies to support innovator and policymaker communities.

A letter of intent has also been signed with the European Investment Bank as a first step to establishing co-operation on studies relating to SMEs innovating in the field of disruptive technologies. In 2022, we are planning to complete the formalisation of co-operation with the European Investment Bank to expand the scope of joint studies and help policymakers identify key innovative players in Europe.

Teams from the EPO and the European Innovation Council will be working together to define a work plan of activities to support disruptive innovators in Europe.

Finally, an MoU between the EPO and the European Commission will provide the overarching framework for enhanced co-operation in strategic fields such as green and digital technologies, as well as the unitary patent.

### Broaden the European patent system and network impact

To expand our geographical outreach, we continued to sign new co-operation agreements and increase the reuse of EPO work products. In particular, we signed our tenth MoU on reinforced partnership (RP) with the Saudi Authority for Intellectual Property (SAIP) in November 2021. With INPI Brazil, we launched a dedicated project to promote the reuse of EPO work products in technical fields where INPI faces capacity constraints. In total, around 105 000 work products have already been issued by partner offices on the basis of EPO search and examination results reused within the framework of the RP scheme.

We renewed and proceeded with the virtual implementation of work plans with our four validation offices and launched technical co-operation activities with the African Intellectual Property Organization (OAPI), paving the way for a future validation agreement. In 2022, we will continue to train OAPI patent examiners on how to issue search reports and written opinions and assist in the drafting of patent examination guidelines with a focus on domestic first filings.

In 2022, our main objective will be to conclude negotiations with candidate countries on validation or RP that have been hampered by the effects of the pandemic. The ten existing RPs will be supported and enhanced in their implementation through the launch of a reuse tool, which will allow our partner offices to access EPO work products in a seamless manner. Finally, whilst continuing to provide specialised training courses for the staff of validation and RP offices, next year we will intensify our efforts to support these partners in developing capacities at the national and regional level, with a view to improving access to the patent system for local innovators, research and development centres, universities, SMEs, etc.

With the recent signature of the RP agreement with SAIP, the KPI "Expanding the geographical outreach" reached 2.022 billion inhabitants. In light of the growing interest of many partner offices in the RP and advanced negotiations on validation with several candidate offices, this figure is likely to increase further next year.

Since December 2020 when we embarked on a two-year pilot project, nationals or residents of the People's Republic of China can select the EPO as their PCT authority. By mid-November, 850 international application have been accepted under the framework of the pilot and to date the EPO issued around 450 international search reports. Starting in early 2022, applicants will be able to pay fees in Chinese currency to China National Intellectual Property Administration acting as receiving Office. Before the end of 2022, the two offices will decide on future work on the basis of the outcome of the project.

While intelligent search and classification tools are being developed, the Cooperative Patent Classification (CPC) system remains the cornerstone of efficient and targeted searches. The geographical coverage of patent documents classified in the CPC continued to expand with the Moroccan Office of Industrial and Commercial Property starting to officially classify its publications in the CPC in September 2021. Canada, which joined the CPC in 2018, started to classify in the CPC in November 2021. Several other patent offices are expected to join the scheme in 2022. There are also plans to launch an external classification portal developed by the CPC working group and extend the CPC collaborative environment to all offices classifying in the CPC to enable early input on the CPC revision proposals launched by EPO and USPTO experts.

Recognising the evolving needs of users during the pandemic and moving towards the post-pandemic new normal, the EPO and its IP5 partner offices confirmed their commitment to co-operation in their strategic responses and to exploring ways to mitigate the burden on users working in the virtual environment. The EPO will host next year's high-level IP5 meetings where the focus will be on the positive contributions of IP and the role of IP in supporting sustainable development goals and addressing social challenges. The 2022 work plan includes a number of other objectives, namely to improve the IP5 project management approach, to optimise consultations with IP5 users and to elaborate on the IP5 NET/AI roadmap to formulate concrete proposals for project implementation.

#### Strengthening the PCT

The PCT scheme is by far the main avenue for users looking for the obtention of a European patent. It is therefore in the Office's best interests to continuously improve all services provided via the PCT. By the end of 2021, we intend to conclude the roll-out of WIPO's PCT transfer service, which already covers 98% of the international search fees transferred to the EPO by other receiving offices. This will mark an important milestone in streamlining PCT workflows, with cost savings and efficiency gains for the EPO, WIPO and the receiving offices concerned.

In 2022, we will continue to work on further improving the quality of our PCT products and services. Streamlining PCT data flows with WIPO will not only benefit the EPO from an operational perspective, it will also allow us to send digital communications to users via the new user area and WIPO's ePCT platform and ensure the seamless implementation of rule changes related to the filing and processing of sequence listings by July 2022.

### **Modernisation of the European Patent Academy**

The implementation of the blueprint for the European Patent Academy in 2021 led to a transformation of content, methodologies and structures in the learning domain. The first edition of the online European qualifying examination (EQE) took place as a joint effort between the EPO and the epi with a record number of participants. The European patent administration certification (EPAC) also began to take shape. In addition, feedback and user behaviour analyses were completed and the IP catalogue once again featured events from the EPO and the EUIPO.

Guided by the principles of co-operation, digitalisation, certification and modularity, the European Patent Academy will continue to revamp its portfolio and formats in 2022, and will provide training content for SP2023 programmes, including the Pan-European Seal programme and PATLIB. Further digitalisation and expansion of the learning portfolio is planned in 2022, and events such as the High-Growth Technology Business conference and IP Executive Week will feature alongside more traditional ones (e.g. Search Matters, Examination Matters, Opposition Matters, the Venice Forum and the Boards of Appeal conference).

The second edition of the online EQE will take place in March 2022 and a proposal for a new e-EQE, built around competence analysis, will be presented. In the second half of 2022, the first edition of EPAC, in digital format, will be run, together with a corresponding training course for formalities officers. New elements to be launched next year include learning itineraries, a series of learning modules to be implemented in university programmes and the first programmes co-labelled with universities. The Academic Research Programme will double its budget in 2022 and expand to include artificial intelligence and patent education. Finally, the new structures of the European Patent Academy will help to further strengthen collaboration with national patent offices.

### Improve access to patent knowledge

The purpose of the orientation paper "From patent information to patent knowledge" that is currently underway is to ensure that the vast amount of information on the EPO's various tools serves as a basis for creating knowledge about IP. The ultimate goal is to provide tools and knowledge to support well-informed decision-making by our diverse stakeholders. This, in turn, will help them to steer their R&D agendas and business strategies; and ultimately

respond in a faster, more agile way to unforeseen situations. It will also help to build greater awareness of IP in society as a whole.

Among the activities envisaged for 2022 is an online user engagement gateway for patent knowledge, which would provide access to the EPO's various patent information tools and services. This will include enhanced user experience and competent user support based on open data. User expectations will be monitored regularly through open feedback and dialogue. Patent information services will be developed to expand the data available to users. Data will also be enriched, so users can obtain a complete and coherent picture of the most up-to-date status of protection for an invention. Patent data will be interlinked with the legal status of the related application, including relevant court decisions and IP case law resources, and information will be provided on the possibility of licensing granted patents. The usage of patent information online services is also tracked via a KPI on our corporate BSC. Continuing the favourable trend that began last year, the "Usage of patent information" KPI shows excellent results. To smooth out variations observed over the year and make the trend more predictable, a new measurement method using a 12-month rolling average will be applied in 2022. Based on this new approach, new, challenging targets have been set for 2022, .

The PATLIB conference in May 2021, which was organised in collaboration with the European Commission and welcomed over 900 attendees, represented a key stage in the implementation of the recommendations of the Porto paper. So far, the technology transfer study has been finalised, over 100 PATLIB experts identified, and the collaboration platform launched. In addition, communication is ongoing with the network, level categorisations have been assigned to the centres and training was launched in Q3 2021 with the support of experts from the network.

The feedback and user behaviour analysis completed in 2021 will help to refine the objectives of the training portfolio in 2022 and beyond. Training within the PATLIB network will focus in particular on learning modules for centres at higher levels, e.g. technology transfer training, the formalisation of collaboration with the Association of European Science and Technology Transfer Professionals (ASTP) and WIPO, involvement in the European certification scheme for technology transfer professionals and the pilot extension of the PATLIB network to other geographical areas starting with Africa.

Further elements planned for delivery from next year include a totally rebuilt IP catalogue aligned with the EPO's IT architecture, an integrated repository of training material with defined access for EPN members and the minimum viable product of the new e-knowledge portal.

### Review of EPO data policy

The EPO has launched a comprehensive review of its data policy and, as first deliverable, a report was presented to the TOSC in November 2021. It provided up-to-date information on the legal framework underpinning the EPO's data policy, data coverage, data dissemination activities, data fee policy and data value. It concluded by proposing several orientations with concrete actions to drive progress with the review. Following positive feedback from the delegations, concrete proposals will be developed and presented to the TOSC in April 2022; and potentially to the BFC in May and the Administrative Council in June 2022.

# Goal 5 - Secure long-term sustainability

The initiatives covered by the first four strategic goals are designed to have a positive impact on the sustainability of the Office and the wider patent system.



### Governance and transparency

Although the EPO has always focused on issues related to good governance, the subject has gained added importance in light of the pandemic. There is now additional scrutiny of IP institutions to ensure that the patent system continues to deliver benefits for society. This includes the need to be transparent in both strategic and operational activities and at all levels; and to ensure robust governance structures and practices.

At the strategic level, the EPO's Annual Work Plan and the publication of the Annual Review will continue to provide transparency for the EPO stakeholder community. Furthermore, the scope of corporate reports will be expanded, where appropriate, to cover all key development areas. This will help to ensure that the European Patent Organisation continues to have access to the extensive information needed to fulfil its oversight role.

In view of the progress and experience gained in improving the Office's internal governance, the time seems ripe to address the modernisation of EPO's external governance, another crucial element in ensuring its long-term sustainability. While a number of achievements have been reached in recent years, such as the MoU between the Administrative Council and the Office on the reinforced support to the Council signed in February 2020, further improvements can always be considered. This is why, in close co-operation with the Chair

of the Administrative Council, a broad consultation with the contracting states will start in 2022 with a view to coming up with proposals for improving the EPO's external governance. Specifically, these proposals will focus on enhancing the transparency and efficiency of the European Patent Organisation's institutional set-up, and by better supporting the delegations in fulfilling their tasks thanks notably to an improved technological environment (e.g. new MICADO, business data centre, upgraded conference room for the Administrative Council's meetings).

Governance will also be strengthened within the Office at the managerial level, by building on risk management practices and business continuity – both subjects which have been the centre of attention in many organisations recently. In 2021 risk management was fully integrated at the senior management level, but 2022 will see the corporate risk management framework further embedded to cover key operational areas. A revised and complete business continuity framework will also be implemented next year. It will be aligned with international best practice and build on the extensive business impact analysis performed in 2021 and the redesigned crisis management structures.

At the operational level, external surveillance will continue to be welcomed and we will make further progress on our journey towards achieving excellence by expanding our ISO certification in 2022. The certification process provides an essential independent verification of the quality of the EPO's practices and procedures. Furthermore, the findings will help the Office to continually improve its processes.

Occupational health and safety practices (ISO 45001) were successfully concluded in September, with the health and safety of the EPO's staff clearly recognised as a priority for the organisation in all its activities. The audit of the EPO's patent process (ISO 9001) was also successfully concluded in September. The extension of the ISO 9001 quality management system to other areas of the Office is currently ongoing. The focus in 2022 will also be on refining these management systems by looking at continual improvement in terms of quality and meeting user expectations. This will prepare the EPO for recertification in the second half of 2022. Preparation work for ISO 27001 certification for information security management system will also be ongoing in 2022 and a specific KPI on the corporate BSC is measuring progress with all activities. This KPI is consistently on track and its value is expected to increase steadily as the EPO moves towards its objective of full certification in 2022.

While ISO certification is one of the EPO's many projects, more broadly the Office will continue to consolidate its maturity in project management through additional training and knowledge-sharing initiatives. Best practices will also be applied to the projects run jointly with its IP5 partners. In 2022 we will focus on realising the benefits derived from projects and capturing, documenting and disseminating the lessons learnt from them.

### Financial sustainability

Linked to good governance is the pivotal issue of financial sustainability. It is a key component of the EPO's overall sustainability and a precondition for the existence of a self-funded organisation like the EPO. As a self-financed entity, the EPO can develop its activities, and invest continuously in improving its tools and services offered to users. Long-term financial sustainability is therefore a prerequisite for the EPO to exercise a lasting positive impact on the patent system and society.

The EPO is currently in the process of making a concerted effort to address the findings of a Financial Study conducted in 2019. The study identified a potential gap in the EPO's finances of EUR 5.8bn in total, which needed to be closed over 20 years. Accordingly, the EPO proposed a bundle of measures aimed at closing the gap, which were approved by the Administrative Council in June 2020.

The six measures identified are expected to generate a total financial impact of EUR 6.3bn and also allow for a margin in the event that one or more measures do not deliver the expected results. The first of these measures – relating to the pension contribution rates – was implemented in 2020. This was followed in 2021 by full implementation of a second measure – the new method of salary adjustment – and significant progress with the other four measures.

The EPO plans to move even further forward on these other measures in 2022:

- The new salary adjustment method has been in place since 1 January 2021 and has already delivered a significant benefit of close to EUR 1bn in the financial statements (the overall impact up to 2038 is expected to amount to EUR 2bn).
- The 3.3% increase in pension contributions to the RFPSS (overall impact EUR 0.3bn) took effect as of 1 January 2020. The Actuarial Advisory Group recommended implementing a further increase as of 1 January 2022. However, after a favourable opinion from the Budget and Finance Committee, a proposal has been submitted to the Administrative Council to delay this until 1 January 2023 in order to avoid any potential net decrease in staff salaries.
- For the biennial inflation-based fee adjustment of procedural fees (overall impact EUR 1bn), an adjustment proposal has been included in the 2022 budget and submitted to the Administrative Council for approval, following a positive opinion of the Budget and Finance Committee. It is proposed to exclude two PCT fees the international search fee and the international preliminary examination fee from this adjustment and keep them at their current levels to reduce the difference between the European search fee and the international search fee.

- Digitalisation of the end-to-end Patent Granting Process is well underway and significant benefits are expected for users (overall impact EUR 1.2bn). In December 2021, the EPO will report to the Administrative Council on the first calculations for these digitalisation benefits, with a view to building on those benefits further in 2022.
- As regards investment of part of the annual cash surplus in EPOTIF (overall impact EUR 1bn), a total of EUR 250m was transferred to EPOTIF in 2021.
- Finally, as regards investment of part of the annual cash surplus one-off in the RFPSS (overall impact EUR 0.8bn), a proposal to transfer EUR 150m to the RFPSS in 2021 has been submitted to the Administrative Council. This amounts to an investment of 50% of the surplus in the RFPSS, instead of the usual 40%, as an exceptional measure in an exceptional year, which takes account of the special circumstances arising from the pandemic.

In 2022, the EPO will focus on monitoring the impact of these measures to create a clear, transparent view of progress towards long-term financial sustainability, also supported by a "Coverage gap" BSC KPI. Analysis of the KPI shows that the six-year salary adjustment method and the current performance of EPOTIF and the RFPSS in the financial markets are the main drivers of the KPI's present positive behaviour. As a result, the target has been revised upwards, while respecting the assumption of linear growth until 2038. To reflect this KPI's longer-term perspective, performance continues to be reported against the 2023 objective.

# **Environmental sustainability**

While financial sustainability may be a strategic goal of the Office, the EPO also has a wider commitment to the sustainability of the natural environment. As a public institution, we aim to play a leading role by promoting sustainability and reducing our environmental footprint.

The EPO already has a solid track record in its environmental practices. In 2021, it adopted a new environmental policy with the overarching goal of becoming carbon neutral by 2030. Its certification under the Eco-Management and Audit Scheme (EMAS) – a framework adopted for minimising environmental impact and fostering a sustainable work environment for staff – was also confirmed in 2021.

However, 2022 will be a significant year in which we take our sustainability efforts to the next level, by building upon opportunities presented by the new normal and responding to the renewed call for international action to mitigate climate change.

As of 2022 securing our long-term sustainability will be very much in focus thanks to the introduction of reporting according to selected standards of the Global Reporting Initiative (GRI). The EMAS certification cycle will be repeated in 2022, but will also implement measures to align the measurement and management of our emissions with the

Greenhouse Gas (GHG). These Protocol standards will be presented in the next environmental report.

Reflecting the EPO's deep commitment to sustainability, a Chief Sustainability Officer will also commence their new role next year to drive forward a holistic approach to sustainability right across the Office. This function will act as a hub, bringing together all aspects of how the EPO contributes towards achieving the UN's sustainable developments goals. This encompasses both how our core business of examining and granting patents and supporting innovation contributes towards global societal efforts in sustainability; and how the EPO acts as a sustainable organisation itself through managing its own environmental and social impact.

The Office will also explore how to capitalise on the environmental opportunities presented by the new normal. The further development of paperless workflows and digital PGP tools will help to further decrease paper consumption and capitalise on past progress. In 2020 and 2021, we saved an estimated 100 million sheets of paper, which is equivalent to 500 000 kg of CO<sub>2</sub> emissions, an amount that would take 24 000 trees one year to offset. Using less paper <sup>10</sup> also helped us to save 74 000 kWh of electricity for the printers – or the equivalent of energy needed to run 9 250 iPads for a full year. The positive trend in falling paper and energy consumption is expected to continue in 2022, albeit at lower pace, as the benefits of various activities, such as the distribution of iPads to all examiners to facilitate digital annotations, are gradually realised.

The EPO will also focus on indirect emissions, such as those from procured goods and services, business travel and commuting. In 2022, the EPO will place a greater emphasis on "green" procurement, for example by incorporating environmental criteria when assessing bids for tenders, and "green IT", looking at the environmental impact of our IT activities. The EPO will also implement a corporate mobility management policy covering business travel and commuting.

In 2019, before the pandemic, the average employee consumed 252 kg of CO<sub>2</sub> by commuting to and from the office, while EPO duty travel resulted in 1 300 000 kg of CO<sub>2</sub> emissions. This means that for travel alone, two trees are needed to offset the emissions of each employee, or 62 000 trees for the whole Office. As a direct result of the pandemic, reported emissions from business travel and employee commuting were low in 2021. The figures for the first three quarters of 2021 are down by 98% and 75% respectively on those for the same period in 2019. As the EPO transitions to a new normal, the lessons learned in recent years, for example in relation to holding meetings online, will be leveraged to continue the journey towards carbon neutrality.

\_

<sup>&</sup>lt;sup>10</sup> In view of the excellent results achieved for the "Paper consumption" BSC KPI in 2021, new and more challenging targets have been fixed for next year that build on current achievements and on the activities and initiatives planned to further improve environmental sustainability.

The Office will look to compensate our carbon emissions through other environmental initiatives, such as the planting of trees and the installation of solar panels on our buildings.

Efforts will also continue to ensure that our buildings are more energy efficient. EPO premises will profit from a more sustainable mix of heat energy sources. In Munich, for example, emissions for heating have already decreased significantly in 2021 as a result of a more sustainable energy source being used by the provider. In addition, weather-dependent regulation of heating and cooling will be extended to further sites. Meanwhile, further energy savings will be targeting at every opportunity, such as the switch to LED lighting in the PschorrHöfe complex in Munich, which will be vital for saving energy as building occupancy potentially increases again next year.

It is understood that the success of the EPO's sustainability policy depends on the involvement of staff, and also the opportunity to monitor environmental gains. Four environmental dashboards were launched in 2021: paper consumption, employee commuting, business travel and ICT energy consumption. In 2022, these will be improved to better reflect the contribution to carbon neutrality goal. For example, by translating the planned switch to recycled white paper into saved CO<sub>2</sub> emissions, and calculating the ICT carbon footprint of the end-user workplace.

## Societal impact

The EPO undertakes extensive outreach and communications initiatives, to create transparency in the patent system and to highlight the benefits it produces for society. Its many activities aim to inform the general public, inspire younger generations, engage with local communities and continually foster staff engagement.

In 2022 the EPO will capitalise on opportunities presented by the online and hybrid environments, to create greater transparency and accessibility. For example, the 2022 edition of the European Inventor Award (EIA) ceremony will make better use of the online environment and encourage wider participation. This process started with the 2021 edition of the EIA, which attracted over 20 000 viewers (compared with the 600 guests invited in the past). In 2022 the event will aim at maximising the outreach to a broad audience, with a focus on the younger generation. For the first time ever, it will feature a Young Inventors prize. An integrated campaign across all communication channels and making use of various multipliers and influencers will promote the event and the nominees, emphasising the importance of innovation and IP for developing solutions for a safer, smarter and more sustainable world.

The visual expression of the EPO brand will be revitalised in 2022. A logo variant fully compatible with our digital channels and aligned with the existing logo will be developed to ensure brand consistency across all formats. Style changes will be implemented gradually.

The EPO will continue strengthening its relationships with the local communities in Munich and The Hague and start building ties with the community in Vienna. It will explore the

possibility of supporting the local House of Europe initiative in Munich and place a strong focus on liaising closely with the local economic stakeholders on the introduction of the unitary patent system. Its participation in various successful initiatives, for example the Just Peace week in The Hague and art-related events such as The Hague Art Weekend and the Long Night of Munich Museums, will be assessed and optimised.

Another highlight will be the preparations for celebrating the EPC's 50th anniversary. 5 October 2023 will mark the 50th anniversary of the signing of the European Patent Convention. A taskforce comprised of members from across the Office will intensify its planning and preparations for celebrating this "Golden Jubilee" in 2022. These celebrations will include events and initiatives over the course of a year involving multiple stakeholders, from EPC Member states and staff of the EPO to international partners, users and the wider public. With a whole year of celebrations leading up to the anniversary date.

To disseminate patent knowledge on topical issues and IP, new studies in 2022 will cover European and US SMEs involved in 4IR innovation (to be conducted in collaboration with the European Investment Bank), the potential use and impact of a "grace period system", an update on the economic impact of IPR-intensive industries in Europe (in collaboration with the EUIPO), hydrogen-related technology trends (in collaboration with the International Energy Agency) and patented inventions in pharmaceuticals and biotechnology.

EPO patent insight reports are designed to provide valuable information about emerging and potentially disruptive technologies, based on publicly available patent data. The EPO aims to make considerable progress in 2022 by extending its series of patent insight reports to cover off-shore wind energy generation (to be drawn up in collaboration with the International Renewable Energy Agency – IRENA), space-related topics (in collaboration with the European Space Policy Institute and the European Space Agency), and two reports on quantum computing and quantum communication, which it will co-author with the European Union's Quantum Flagship. Another joint activity with Quantum Flagship will be to develop a concept for regular patent insight updates on specific technical topics in support of informed decision-making in the flagship.

In addition, considerable efforts will be made in 2022 to expand the tools for analysing patent and other data to boost the efficiency of the workflow for EPO patent insight reports and increase the number of reports published and their level of detail.

Lastly, to stimulate greater dialogue, debate and the wider involvement of stakeholders, the EPO will continue to develop its plans for the creation of a patent observatory. The Observatory will be a hub connecting stakeholders from the public and private sectors, policymakers and civil society, and a place to monitor developments in emerging technologies and how they affect the IP landscape. Early in 2022, the EPO will therefore consult the member states on the main features of such an Observatory. The consultation will help the Office to finetune the proposal that it plans to submit to the Administrative Council in June 2022.

### Annex

# **Balanced Scorecard**

The EPO continues to use the Balanced Scorecard (BSC) to monitor the benefits achieved thanks to SP2023 implementation. The key performance indicators (KPIs) at the top level provide an overview of its achievements on the path to achieving the five SP2023 goals (see Table 1). Realistic but challenging targets have been set for the KPIs, based on achievements to date and anticipated developments in 2022.

As the result of a cascading-down exercise, balanced scorecards are now also in place for each directorate-general and each principal directorate. This aims to ensure closer alignment of actions with EPO strategy across the entire organisation.

Table 1 - Top-level KPIs

KPI		Performance 18.11.2021		Target 2021	Target 2022
	Staff engagement	63% (2019)*	-	69%	69%
	Training and development	55% (2019)*	-	61%	61%
	Collaboration	52% (2019)*	-	58%	58%
	Availability of existing and new tools	94.4%	1	96.5%	96.5%
	Processes digitalised	76.3%	$\ominus$	78%	81%
	Internal and external user satisfaction with tools	85.1%	1	86.5%	88.5%
	User satisfaction with patent grant products and	84.1%	-	85%	-
	services	79.2%**	-	-	81%
	Quality of search and grant	89%	$\bigcirc$	90.5%	90.5%
	Timeliness of examination	79.1%	1	80%	80%
	Geographical outreach	2.022 billion	1	2.15 billion	2.28 billion
		inhabitants		inhabitants	inhabitants
	Member states' participation in co-operation projects	77%	1	76%	80%
	Usage of patent information	4.39 million	1	3.2 million	-
		visits		visits	
		3.91 million		-	4.2 million
		visits**			visits
	Paper consumption	24 sheets	<b>(</b>	45 sheets	20 sheets
	ISO certifications achieved	61%	1	60%	85%
	Coverage ratio	83.5%***	1	71.4%	79.5%
				(2023)	(2023)

<sup>\*</sup> Staff engagement survey initially planned for 2021 now scheduled for early 2022.

<sup>\*\*</sup> New calculation method. Further details on the following pages.

<sup>\*\*\*</sup> Provisional figure.