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Foreword

After the recent, turbulent events of the Covid-19 crisis, 2019 now seems like a world away. But it was an eventful year for the EPO that marked the beginning of a new chapter in our Office's history. In January we started to develop an ambitious vision, which is set out in our Strategic Plan 2023 (SP2023) and will ultimately lead to a safer, smarter and more sustainable future.

Our staff and users were all asked to contribute to developing the plan, which reflects their ideas, aspirations and needs. After a period of extensive consultation in the first half of 2019, the exciting new vision that we defined together with our stakeholders was given the green light by our Administrative Council.



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The report forms an essential pillar of our transparency and openness as we progress towards achieving our goals.

SP2023 features five goals spanning all key areas of our activities. The first goal involves building an engaged, collaborative workforce, which is the cornerstone of our future success. With Goal 2 we will harness the power of digital transformation to find even more efficient ways of working. The next two goals renew the EPO's commitment to quality in the Patent Grant Process and to building a stronger European patent system, both of which will benefit our global user community and boost innovation worldwide. Finally, goal 5 focuses on how these objectives can be supported by progress in other areas such as more effective governance to achieve our ultimate aim: a sustainable EPO that is forward-looking, agile and future-ready.

However, last year not only saw the launch of SP2023, it also marked our first steps towards turning the vision into a reality. After a period of rapid and far-reaching reorganisation, projects to promote internal job mobility, meaningful dialogue with our users, paperless workflows and a host of other improvements started to deliver their first tangible results.

This Annual Review reports on those initial achievements, driven by the surge of energy, creativity and engagement nurtured by SP2023. The report forms an essential pillar of our transparency and openness as we progress towards achieving our goals. But it also helps to ensure that you – our stakeholders – are part of that journey to achieve the shared vision we developed together over a year ago. And I hope that after reading this report, you'll agree that we're on track to fulfilling our commitment to excellence.

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Executive summary

2019 was another strong year for the EPO and a defining moment in terms of shaping a future vision for our Office. Our performance remained high, which helped us to manage a larger volume of incoming applications compared to 2018. Clear improvements in opposition timeliness were accompanied by significant reductions in our classification backlogs for published documents, marking a major milestone in our efforts to master prior art. But 2019 wasn't just a year of business as usual. It was a year that saw the launch of the EPO's new Strategic Plan (SP2023) and our first steps towards turning that vision into a reality. The plan's five goals will be implemented as project portfolios co-ordinated by a project management office in our new Corporate Governance Service (CGS).

In 2019 our goal 1 projects to build an engaged knowledgeable and collaborative organisation included creating talent pipelines and launching a new employer branding campaign to attract the brightest minds. To nurture young talent, we also welcomed 51 new Pan European Seal trainees to the EPO last September, taking the total number of participants to over 400 to date. Learning journeys for our IT staff and other critical roles marked our first steps towards promoting greater internal mobility and upskilling Office-wide. These training initiatives were complemented by the launch of a cutting-edge online learning platform for all staff. In February we also launched an office-wide staff engagement survey. With an 85% participation rate, this survey was the starting point for a new project that will help us respond more effectively to staff feedback.

Last year the EPO also launched a broad range of goal 2 projects aimed at simplifying and modernising IT systems. They included a project to equip all staff with laptops to create a more flexible workforce. On top of multiple upgrades to existing tools and strengthening our IT security, we also started work on an ambitious programme to digitalise the back-office for our

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patent granting process. This programme will deliver huge benefits in terms of improving quality and timeliness, cutting costs, reducing paper usage and enhancing services for our users. By the end of 2019 we also successfully completed a paperless search pilot, marking the first milestone in a momentous journey.

Goal 3 of SP2023 focuses on delivering highquality products and services, but with a new, user-centric focus. Forging closer ties with users and adopting a more consultative approach in 2019 helped us to target our improvement efforts towards meeting their needs. To promote meaningful dialogue, we ramped up the role played by the SACEPO Working Party on Quality and extended our Praktika Extern scheme to formalities officers. As closer collaboration is clearly another way of enhancing quality, the EPO launched a "collaborative quality improvements" (CQI)

in 2019. The pilot, involving 450 examiners who performed around 7 700 consultations, increased our quality levels in 28% of files and led to the subsequent launch of a fully-fledged SP2023 project.

2019 was also a momentous year for the EPO in terms of its goal 4 efforts to build a European patent network with a global impact. The organisation expanded its geographical coverage significantly last year, mainly due to a validation agreement with Georgia and seven reinforced partnership agreements with Ethiopia, Argentina, Malaysia, Mexico, Indonesia, Brazil and ARIPO. This brings the potential coverage of our products and services up to 1.9 billion inhabitants across 38 member states, two extension states, four validation states and eight reinforced partnerships. Another highlight of 2019 was the EPO's The study revealed a substantial funding gap agreement with CNIPA to launch a two-year over 20 years, which the EPO is now taking steps

pilot to allow Chinese applicants filing their international applications with the CNIPA as receiving office to select the EPO as their international searching authority (ISA). This was a landmark agreement in the history of the organisation and in the co-operation between Europe and China on patent protection.

Finally, goal 5 of SP2023 focuses on securing the EPO's long-term sustainability. Our environmental footprint improved in 2019, largely thanks to a 25% decrease in our carbon dioxide emissions. Our paper consumption, however, emerged as an area with scope for improvement and an SP2023 project will focus on delivering reductions in 2020. In 2019 the EPO also commissioned external consultants to assess its long-term financial sustainability, leading to a Financial Study published in May. to address. To strengthen governance, we also signed Memoranda of Understanding with both the Boards of Appeal and the Council to support them in their activities; and adopted an integrated approach to managing areas such as risk, business continuity and health and safety.

Going forward, we will monitor our progress towards realising SP2023 in a Balance Scorecard and share our achievements with stakeholders in this Annual Review.

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The EPO at a glance

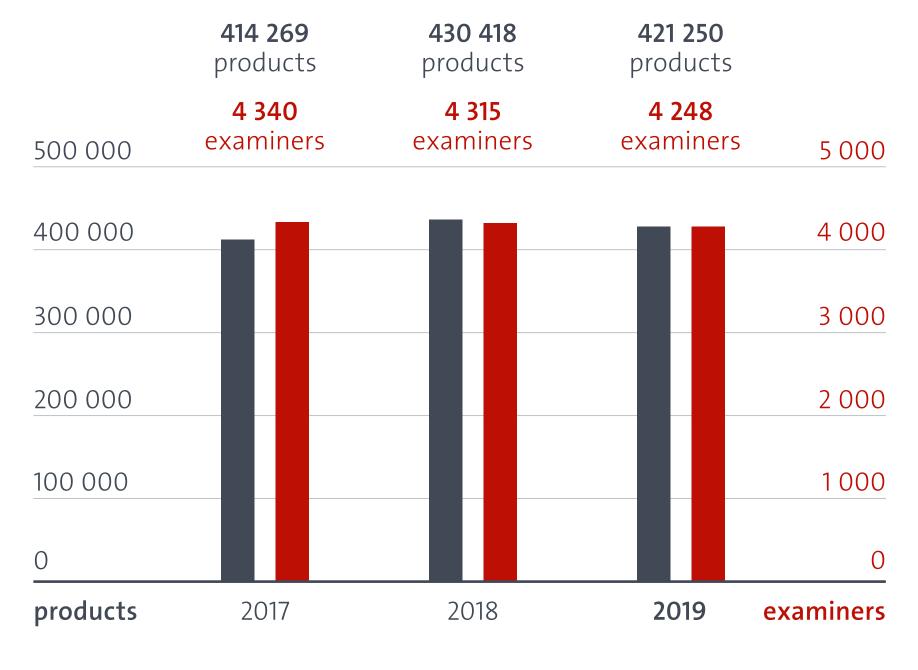
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Workload and production

The EPO's workload continued to increase steadily in 2019. We received 181 406 European patent applications, up 4.0% from 2018, with +3.3% growth in PCT applications and +4.9% growth in direct EP applications. In terms of our total incoming search, examination and opposition workload, these figures represent an overall increase of +2.1% versus 2018. The EPO received 243 338 search requests (+2.4%) in 2019, as well as 166 282 requests for European examination (+1.6%).

Examiner output reached 421 250 search, examination and opposition products, or +4 250 products higher than forecast. Total output nevertheless dipped slightly compared to 2018 (-2.1%), due to our smaller workforce (-67 examiners) in 2019.

Figure 1: Number of products delivered by examiners from 2017 to 2019



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Source: EPO

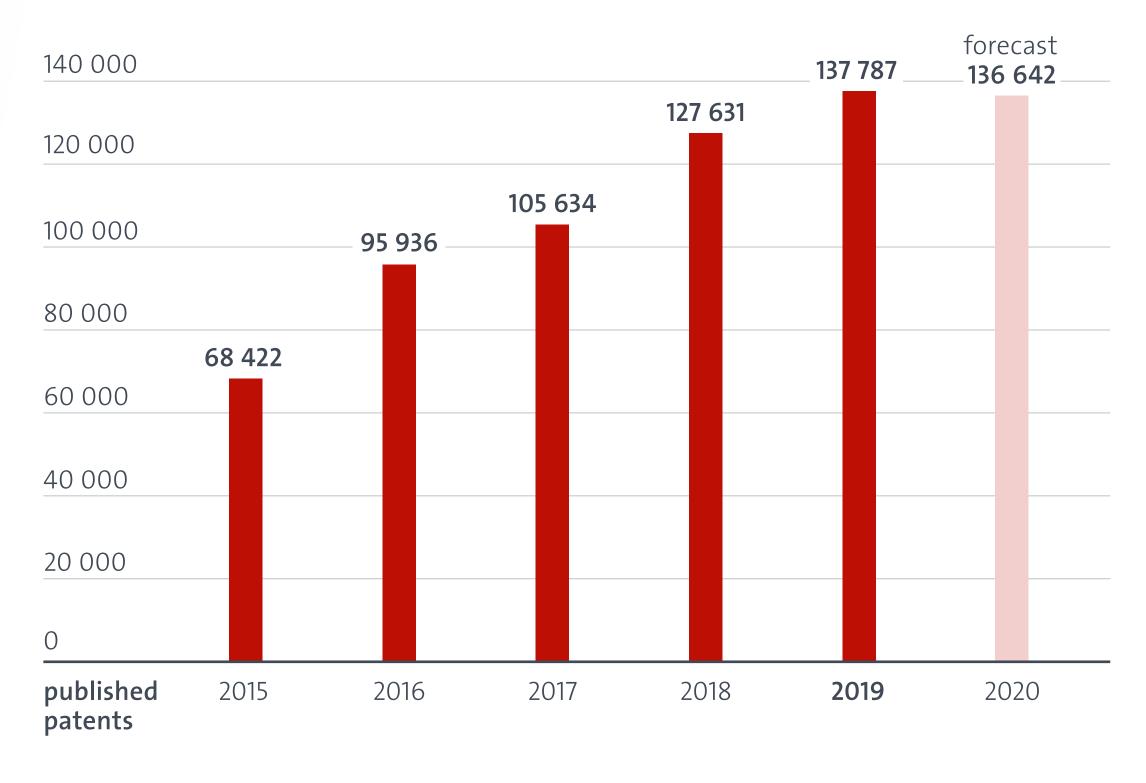
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Our pending workload at the end of 2019 represented 11.4 months of work (2018: 12.0 months) and overall stock levels continued to fall, ending the year -7% lower than in 2018. Our examination stock (82% of total stock) ended the year -10% lower than in 2018.

Our opposition workload, representing 15.4 months of work, is very close to our target stock level of 15 months. This suggests that we are on track to achieve our opposition timeliness objective in the near future.

In 2019 the EPO published 137 787 European patents, +8% compared to the same period in 2018 and well above our 125 000 target. Based on an expected decline in the number of patent publications in the mid-term, we continue to reduce our examination backlog and balance examiner capacity to match incoming workload forecasts.

Figure 2: Number of patents published in 2015 – 2019



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Source: EPO

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Timeliness

Opposition timeliness improved clearly in 2019. The mean time for an opposition division to issue its decision was 18.7 months from the expiry of the opposition period. Longer-term improvements can be also expected in examination as we further reduce our backlog. In 2019 the mean time for issuing notification of the intention to grant was 28.1 months from the valid examination request.

As for search timeliness, our efforts since launching Early Certainty from Search in 2014 have led to steady improvements and this is now well under control.

In 2019, the mean time for a search completion at the EPO was 5.5 months from the date of receipt of the file the timeliness¹ of our different search products can be broken down as:

- EP direct: 5.4 months
- PCT searches (where the EPO is the international search authority (ISA)): 2.9 months
- Euro-PCT bis searches (where the EPO was not the ISA): 10.8 months²
- National searches: 4.2 months.

With the advent of the various timeliness improvements, a review was conducted in 2019 to look at how the EPO could best define its targets and report on timeliness performance from the perspective of the user as of 2020. Mean measurements will thus be complemented by percentage on time measurements in the future.

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These are mean values from the date of receipt to the final search report, as opposed to the median values quoted in our 2018 Annual Report. For more detailed information on this change in our reporting method, please see the "timeliness" section of the Quality Report 2019.

Such searches cannot be started until (i) the applicants submits an amended set of documents, (ii) waives the right to do so, or (iii) the 6-month period as stipulated by Rule 161(2) EPC expires.

Key achievements in 2019

Goal 1

Build an engaged, knowledgeable and collaborative organisation

Goal 2

Simplify and modernise IT systems

Goal 3

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Goal 4

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Goal 1 Build an engaged, knowledgeable and collaborative organisation

The EPO is fully committed to creating a stimulating, sustainable and healthy environment in which our staff can develop and enrich their skills and knowledge.

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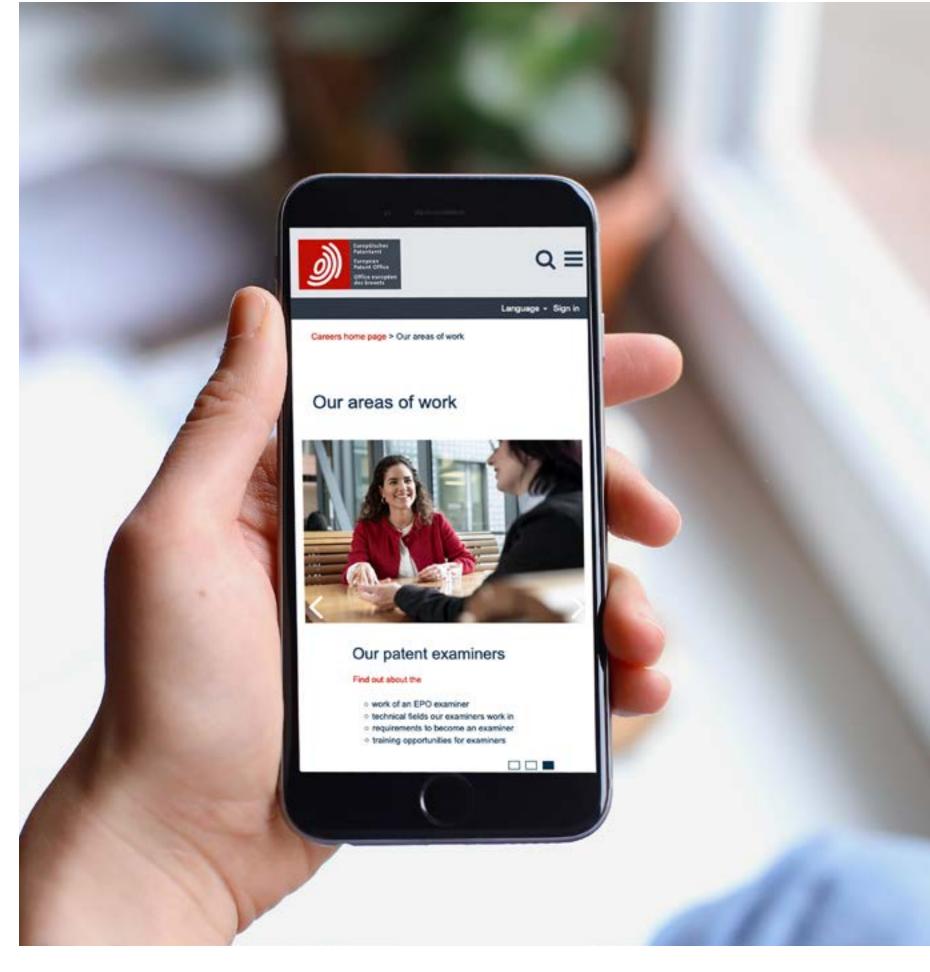
Attract talent

Having the right people in the right place at the right time is crucial to the EPO's economic success and long-term sustainability. But this is a tough challenge. Competition for Europe's top talent is fierce, especially in engineering and science.

To attract the brightest minds from all our member states, we launched a new employer branding campaign in 2019. The campaign spotlights our key asset, namely our workforce of brilliant experts, and how high-quality patents granted by the EPO make a meaningful difference to the economy and society.

To show our staff's engagement and passion for their jobs in an authentic and inspiring way, we created video profiles of various key roles at the EPO. These video profiles are used on all of our communication channels with candidates, including social media.

Last year also saw the relaunch of our new jobs and career website, showcasing the EPO as an international employer of choice. By giving the website a responsive design, we also optimised the browsing experience for mobile device users.



New responsive design of the career website

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Figure 3: Video profiles of an examiner's role at the EPO



Source: EPO

To create a more agile recruitment process with shorter lead times, we also built up sustainable candidate pipelines in the examiner area. In 2019 around 140 suitable candidates were identified, who can be contacted as business needs arise. There are plans to create similar pipelines for other areas in 2020.

To expand our talent pool, the EPO is also moving towards a more flexible language policy. By offering new recruits more time and support to enhance their language skills, we aim to appeal to a broader range of candidates, especially from under-represented member states.

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Promote inclusion and diversity

Diversity is not only a key innovation driver, it also boosts organisational performance and staff engagement. The "diversity and inclusion" programme aims to enshrine diversity as an EPO value that is not only welcomed, but also actively encouraged and celebrated. In 2019, 475 managers completed diversity and inclusion training at the EPO, as well as eight staff representatives and 12 confidential counsellors.

To mark International Women's Day, we also launched a Women in the Lead mentoring programme pilot to support women aspiring to a leadership position. Its outcome was highly encouraging: 40% of participants applied for managerial posts or a new role within the organisation in 2019. It is even more encouraging to see that half of those candidates were successful (six were recruited as managers and five were appointed project managers). Building on this success story, we plan to upscale the programme by selecting 100 talented staff and 50 EPO leaders to act as their mentors in 2020.

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In 2019 we also embarked on broadening the scope of our inclusion activities. In December a first draft of our disability policy was shared with the COHSEC. To increase the share of our employees from under-represented member states, we also sent our talent acquisition team to job fairs in those countries. To foster a more inclusive approach to recruitment, we also specifically targeted events for female engineers, LGBT and people living with a disability.

With an eye on tomorrow's talent, the EPO also organised Girls' days in The Hague and Munich for a total of 85 participants. The events gave these 12-15 year-old girls insights into the work of a patent examiner.



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Girls' day in The Hague in April 2019

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Pan-European Seals

The Pan European Seal programme 2.0 builds on the achievements of recent years and aims to further increase the programme's attractiveness by moving to a first-job approach. It will support IP awareness, search, and technology transfer activities with NPOs, PATLIBs and TTOs across Europe.



Pan-European Seal 2019 trainees

The programme takes a holistic approach to securing sound, fair employment conditions for young graduates and extending partnerships with universities and other relevant external partners. Key improvements include proposals to expand and scale up the programme to increase our annual intake of trainees. The programme's geographical outreach will also be extended to include a larger number of universities with a track record for excellence in technical, science and engineering fields.

The Pan European Seal traineeship programme, which entered its fifth year at the EPO in 2019, now covers 77 partner universities from 33 member states and 2 extension states. Last year six countries were represented in the programme for the first time: Bulgaria, Cyprus, Greece, Luxembourg, Romania and Slovakia.

A total of 51 seals (including 13 who are working with examiners) arrived at the EPO in September 2019 taking the total number of Pan-European Seal admitted to the programme to date to over 400.

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Develop talent

The EPO's talent development strategy takes a holistic and coherent approach to the professional and personal development of all our staff. Aligning individual professional development with the EPO's strategy is the guiding principle of our talent development operations.

Figure 4: EPO strategy and staff development

Strategic Development Plan
(EPO/DG-wide)

Development Programmes
(for functions/job profiles)

Individual Development Plans
(staff members)

Source: EPO

We continued to transform and modernise our talent development operations in 2019. Thanks to new, state-of-the-art online learning platforms like LinkedIn Learning, our staff can now access a wide variety of training courses on topics ranging from coding and artificial intelligence to leadership and well-being.

A new business IT (BIT) programme was also deployed in 2019 featuring learning journeys for multiple critical roles. These journeys maximise participants' acquisition of technical, soft and leadership skills via blended activities delivered via a mix of channels, with a strong emphasis on online learning. Existing programmes for examiners and formalities officers continued to offer staff initial and advanced learning opportunities.

In terms of leadership development, the focus in 2019 was on topics like diversity and inclusion, self-management skills and the EPO leadership model.

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Foster professional mobility and work-life balance

Internal mobility

Professional mobility creates opportunities for staff to develop and boosts their engagement levels. In 2019, a total of 69 internal vacancies and 67 internal/external job mobility opportunities were published, resulting in 1 467 applications. To foster internal job mobility, a total of 10 job fairs were organised in 2019 to recruit formalities officers, examiners and team managers at the EPO's various sites.

Additional job fairs were organised to hire administrative employees for human resources (HR), the Boards of Appeal (BoA) and quality audit staff. These events gave interested staff an opportunity to familiarise themselves with roles and learn more about development support via direct discussions with senior managers and our HR specialists. Special information sessions were also organised to recruit project managers and the 'speed interview' concept was successfully tested.

Work-life balance

To increase the EPO's attractiveness as an employer and offer staff greater flexibility in striking a healthy work-life balance, we launched a pilot scheme on ad hoc teleworking in 2019. This complemented our existing part-time homeworking (PTHW) scheme for staff. Ad hoc teleworking enables staff to request to work away from the EPO's premises for short periods of time, either occasionally or on an ad hoc basis. The pilot was run for around 400 managers and staff. A survey of participants highlighted the positive impact of ad hoc teleworking on staff and their work-life balance.

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Building investment programme

SP2023 set out a vision for the future of the EPO's buildings with three clear objectives: to provide a modern, sustainable and healthy working environment, to realise long-term financial gains and to provide environmentally sustainable, energy-efficient buildings. A building investment programme ensures coherence, alignment and synergies between these objectives at the EPO's sites across Europe.

While the programme covers almost all of the buildings owned or rented by the EPO, the extent of the works spans from constructing a completely new building (as in The Hague), to performing extensive renovations (in the PschorrHöfe, Isar building and PschorrHöfe garage in Munich, as well as in the Hinge canteen in The Hague and in Berlin). The programme was approved in principle by the Administrative Council in December 2019.



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New Main building in The Hague

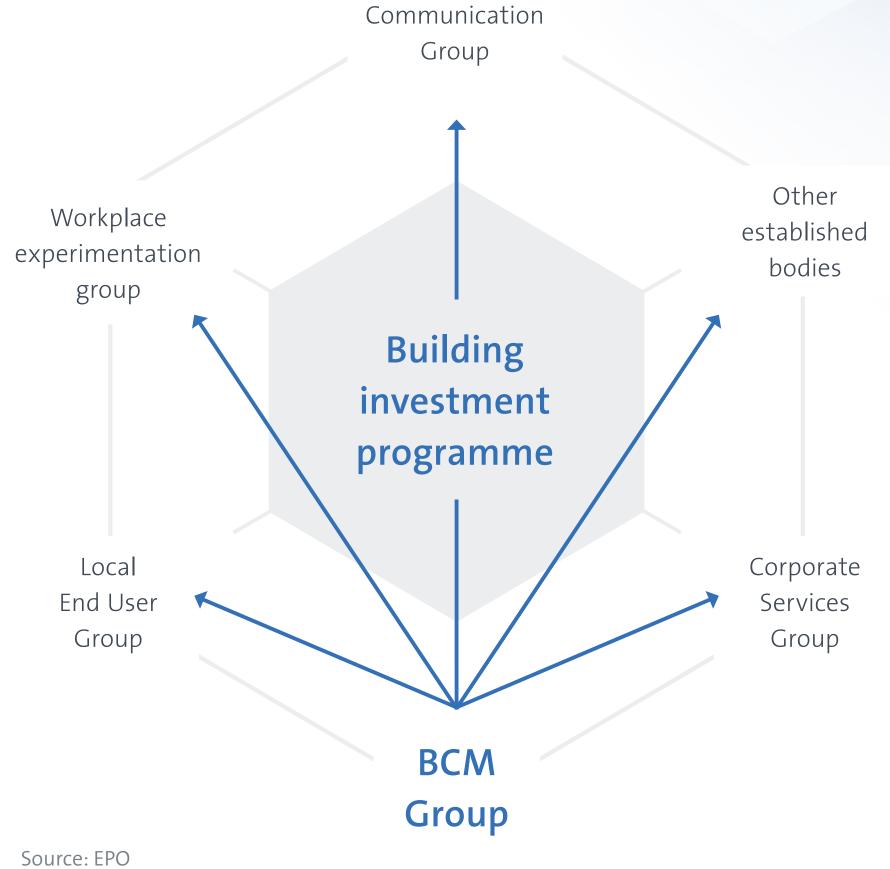
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By the end of 2019 project managers were appointed for all projects scheduled to start in 2020 and an external consultancy was contracted to prepare the projects related to the Isar building and the PschorrHöfe garage.

The general philosophy of the programme is to define common EPO-wide technical specifications or functional requirements, which will subsequently be rolled out to all projects. An EPO multi-disciplinary project group began to develop a future workplace concept for the EPO with the support of a specialised consultant. By the end of 2019 the project group had already completed an "as is" analysis.

Co-operation and collaboration will be key success factors, ensuring that the programme delivers state-of-the-art workplaces that satisfy all of their users' needs. To this end, a change management strategy was formulated that involves all relevant stakeholders.

Figure 5: Change management stakeholders



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New bike park in the Isar building

While the focus in 2019 was largely on the SP2023 building investment programme, other important, albeit smaller scale, projects were completed, including:

- The installation of a new multimedia room in the Isar building
- The construction of a new bike park in the Isar building to promote a healthy form of transport and reduce our CO2 emissions.

In response to users' requests, a growing number of areas were remodelled in 2019 to create a more open and collaborative set-up. This paves the way for the modern working environment that will be delivered by the building investment programme in the future.

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Strengthen corporate culture

Corporate communication plays a key role in strengthening corporate culture. The "Strengthen corporate culture" programme aims to:

- Provide adequate information to our employees to contribute to higher levels of identification with the organisation
- Provide timely and reliable information to managers that employees trust in and which help our colleagues accomplish their tasks
- Foster staff engagement through credible work around the Office's purpose, vision and mission.

In 2019, work commenced on the foundations of the programme, and some milestones were reached towards the end of the year. In December, a new principal directorate (PD) Communication was created, reporting directly to the President. The new organisational unit brings together external, internal communication and graphic design staff. Uniting these communication experts in one principal directorate will help us to tap synergies and increase the quality and timeliness of our information delivery.

The new structure features two directorates, "channel management" and "content creation". In 2020 we will focus on further developing our communication channels and contents and aligning them with industry best practice. More specifically, we will focus on empowering staff to act as multipliers for the EPO's internal and external communication activities. At the end of 2019 we launched daily team exchanges in a new newsroom format to help identify and act on topics of pertinence and importance.

Lastly, a mandate for PD Communication was established, charging it with all of the EPO's corporate communication, including strategic events. The new unit is now formally responsible for developing the EPO's corporate culture, protecting its external reputation and creating an inspiring corporate brand. Within this mandate, PD Communication acts as strategic communication advisor to senior management and ensures consistent, accurate and timely communication across all channels and target audiences.

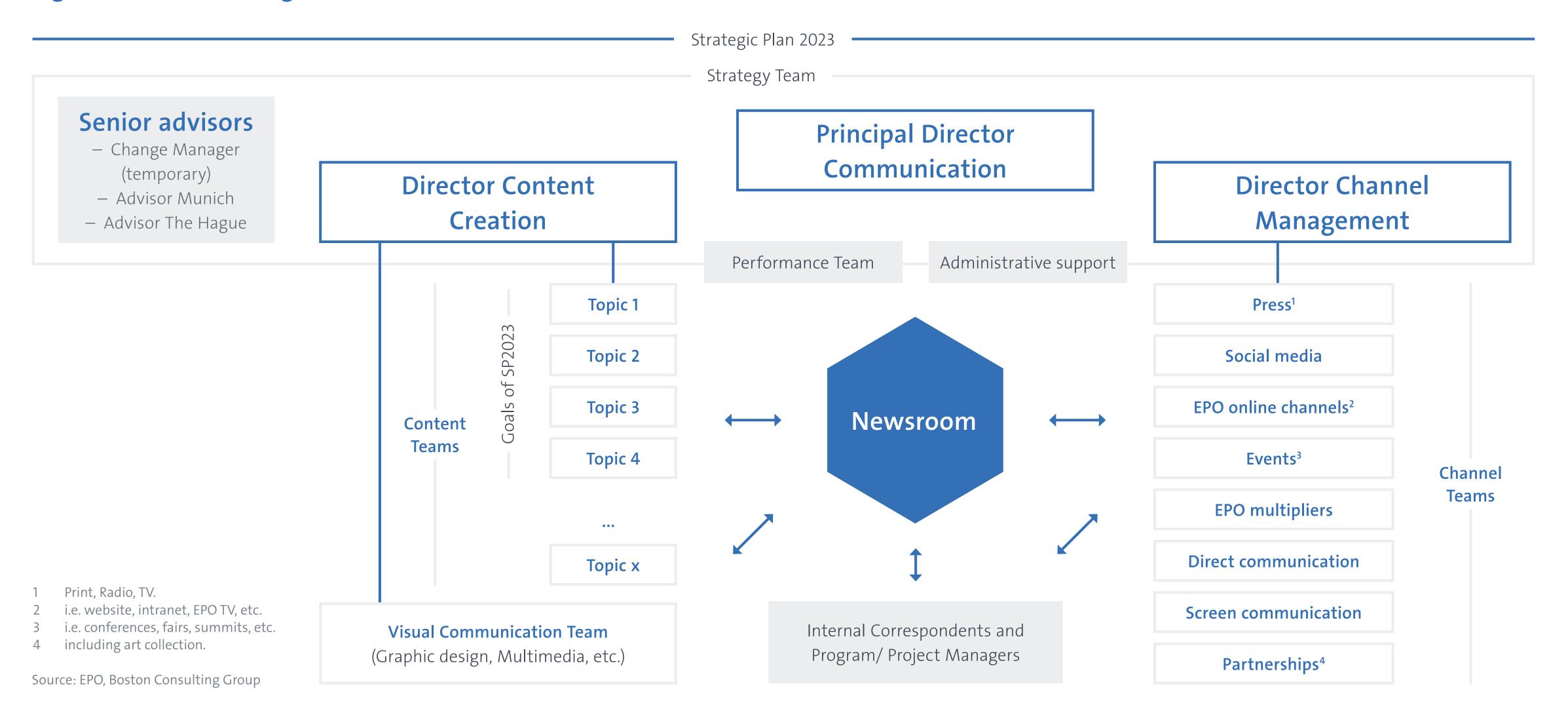
In December, a new principal directorate (PD)
Communication was created, reporting directly to the President.

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Figure 6: Restructuring of PD Communication



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Figure 7: Embedding communication in SP2023



Source: EPO, Boston Consulting Group

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Foster social dialogue

The EPO's Strategic Plan clearly states its commitment to forging constructive social relations with all internal stakeholders by engaging in meaningful dialogue based on trust and respect. In 2019 we developed several channels for social dialogue with staff across the office and their representatives.

At an individual level, the one-to-one meetings between staff members and the President, initiated at the beginning of his mandate continued until early 2019. The 1000th meeting took place in February 2019. These meetings were complemented by focus group meetings with staff and targeted discovery sessions with managers on specific topics of high interest.

The results of the office-wide staff engagement survey, conducted in February, were also evaluated and cascaded-down to each directorate in the first half of 2019. Action plans were drawn up featuring specific measures to improve staff engagement across the board (for more detailed information, see the "Engagement Report").

Over 100 meetings were held at various levels of the office between all social partners and senior managers last year. In addition to meetings of statutory bodies like the General Consultative Committee, the President attended three meetings with the Central Staff Committee in 2019. Discussions on a possible revision of the rules pertaining to strike were initiated with our two unions, SUEPO and the FFPE-EPO. The key channels for social dialogue were undoubtedly the various joint working groups, which were

convened to discuss and improve our rules and regulations.

These in-depth discussions resulted in the adoption of three circulars at the end of 2019. These new circulars on resources and facilities for staff representatives, guidelines on performance development, and professional incompetence were reviewed by the General Consultative Committee, and subsequently adopted in December 2019. In response to staff feedback on the transition to the new career system, the President agreed to grant an exceptional one-off pensionable reward to around 460 staff members who have not received a step or promotion since the introduction of the new career system.

Another key topic on the social agenda in 2019 was the first phase of a Financial Study performed by external consultants, which was finalised at the beginning of May. The study's findings revealed that the EPO is facing a significant funding gap. Several proposals on how to bridge this gap were put forward by both the Office and its staff representatives. All of the proposals were discussed in detail by a special finance working group composed of senior management and staff representatives.

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The working group held highly constructive meetings in November and December 2019. Discussions were completed in the first quarter of 2020.

Lastly, the EPO's efforts to address past grievances through discussion and amicable settlements continued to bear fruits. Of the 665 cases opened to amicable settlement in 2019, 541 cases have now been closed and 39% were concluded with individual settlements. These figures include the settlements agreed with staff representatives and/or SUEPO officials: out of the 10 pending cases, 6 were resolved successfully in 2019, and discussions are ongoing for the other cases. These outcomes clearly show that the EPO is successfully moving steadily towards a culture of dialogue and amicable settlement.



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A "lunch and learn" session on inclusion in The Hague

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Goal 2 Simplify and modernise IT systems

After an audit in 2018, our IT activities were swiftly reorganised in 2019, enabling us to achieve a number of early wins over the course of the year. These achievements included the progressive rollout of new laptops to make our workforce more flexible and the launch of a new technical platform for continuous, streamlined delivery.

To deliver short-term benefits for examiners, formalities officers and users, we also continued to upgrade our existing tools. Decommissioning obsolete hardware and software, and replacing it with state-of-the art alternatives marked another step towards higher information security. In parallel, we also prepared multiple programmes under SP2023 to give the EPO secure, cutting-edge tools, as well as the infrastructure required for their deployment and operation.

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Patent Grant Process

This programme will progressively digitalise our back-office for the patent grant process (PGP). Essentially, it will drive the transition to fully electronic workflows for filing, file distribution, stock management, search, examination, opposition and appeal, as well as post-grant procedures. Building on the work done under Goal 3 to radically simplify our procedures, we will create a modern digital environment for the end-to end PGP.

This programme will deliver huge benefits in terms of improving quality and timeliness; cutting costs and paper usage; and enhancing services for both internal and external users. In 2019 design-thinking workshops were organised to gain a user centric view of the needs to be addressed. We also launched a series of activities, including a paperless search workflow pilot, to simplify formalities processes and harness the power of examiner innovations.

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Search

This programme prepares search for the future. Prior art management will provide higher quality data, search tools will converge into one main search platform and data enrichment will move us closer to a semi-automatic search.

Data captured by the new search platform will also give us deeper insights into the search process and form the basis for future artificial intelligence (AI)-based assistance to help examiners find the most relevant documents quickly and easily. The EPO will continue to increase examiner access to non-patent literature (NPL) and non-native (i.e. Asian) prior art.

This new search platform will enable a more harmonised approach to searching, while still offering the flexibility to support examiner-led innovation. It will strongly promote collaborative working, while encouraging examiners to share knowledge, concepts and search strategies.

In 2019, progress was made in three key areas:

- Citations retrieval from national files: examiners can now obtain citations from national files (from France, Italy, Netherlands, Belgium, Luxembourg, United Kingdom), as well as extracting them from EP and PCT files. This enhances the value of citations and provides a rich source for other tools. All third party observations and filings in opposition are now directly available to examiners too.
- Centralising data: In terms of data enrichment, we improved our management of citation and full-text (published and un-published) data by centralising storage in a unique database to improve its overall value. For patent literature, we also developed an automated enrichment solution, using natural language processing and based on adding annotations. In the future this solution will be used to promote the more widespread and extensive use of annotations (e.g. for chemical entity and physical quantity).
- Improving ANSERA: a growing number of examiners are now using this tool, which was enhanced with non-patent literature in mid-2019. By leveraging a network of ANSERA experts across all directorates, BIT developed and refined several new features (e.g. highlighters, improvements to the viewer) via a series of pilots. Ramping up training initiatives immediately led to a 20% increase in citations from ANSERA.

Data captured by the new search platform will also give us deeper insights into the search process.

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Artificial intelligence and blockchain

With this programme the EPO will apply artificial intelligence (AI) and blockchain technologies to increase the efficiency and quality of its products and services. The programme marks a major step towards tomorrow's data-driven and fully digitalised EPO.

In 2019 we produced a programme roadmap targeting multiple areas within the EPO where AI can help to deliver significant efficiency and quality gains via natural language processing, computer vision, machine translation, examiner and applicant assistant functions and blockchain.

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New online user engagement

This programme will enhance the EPO's online interaction with users to increase their satisfaction with our products and services. It features a set of eight projects ranging from enhanced customer relationship management to a relaunch of the EPO's website (epo.org) with high-impact web analytics to facilitate continuous improvement. The programme will also provide users with an upgraded range of online services related to the patent grant process, including a new electronic filing process, an expanded user area, electronic communications and portfolio management. The key elements of this programme were presented and discussed at the 5th meeting of the SACEPO Working Party on the e-Patent-Process (SACEPO/ePP) on 5 February 2020.



SACEPO Working Party on Quality meeting in February 2019

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Digital administration

The digital administration programme will modernise corporate services across the office using standard market solutions delivered through and with off-the-shelf functionality. By harnessing synergies between solutions, we will simplify and support digital workflows between organisational entities, while avoiding obsolescence and harmonising our IT landscape.

In 2019 the programme delivered several improvements in terms of software upgrades (migration to Windows 10, Office 365, Chrome), extending WiFi to all EPO buildings (to be completed in 2020), upgrading the technology of several EPO websites (pensioners website, IP5, national offices centre, etc.) and increasing the automatic recognition of vendor invoices. In terms of vendor management, a new software acquisition channel was set up to consolidate key IT contracts.

Figure 8: Digital administration focus areas



Source: EPO

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Strengthening IT security

To ramp up the EPO's response to growing cyber risks, the "Strengthen information security" programme will deliver improved protection from threats and attacks. In November 2019, we successfully headed off a cyberattack against one of our key IT subcontractors by ensuring business continuity and avoiding any spread to our infrastructure, as well as updating and upgrading protection mechanisms. As 2019 drew to a close, we focused on finalising our new IT security programme by clearly defining our objectives, key outputs and benefits, which resulted in a detailed roadmap and milestones.

Figure 9: Strengthen IT security programme roadmap



Source: EPO

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Infrastructure

The infrastructure programme is the key to improving the availability of our IT systems and delivering the infrastructure (data centres, hardware and architectures) needed to implement a fully digital, end-to-end grant process. It will enable the EPO to introduce enhancements to existing tools, develop common tools with national patent offices (NPOs), and continue to invest in corporate solutions and digital workplace capabilities.

By the end of 2019 the first network equipment and racks were installed in our new data centre in Luxembourg. We also completed our mainframe asset verification and cataloguing, giving us a comprehensive overview of our legacy, allowing us to successfully execute the first pilot processes on a new test platform.

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Goal 3

Deliver high-quality products and services efficiently

The EPO's reputation for delivering high-quality products and services is built on decades of pursuing excellence. But when it comes to quality, we believe that we can always do better. In 2019 we continued to invest in objective quality by enabling our examiners to perform the most complete searches, deliver consistent, predictable examination and grant patents that offer the legal certainty expected by applicants, users and

society. As the patent community's needs evolve, the EPO continues to expand our prior art collection, improve our tools, and revise our guidelines to cover patent procedures for new and emerging technologies. Most importantly, we are increasingly engaging our users in frequent, frank and meaningful exchanges to share knowledge and forge a common understanding of subjective quality.

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Classification and documentation

The EPO maintains the world's largest documentation with databases comprising some 1.5 billion records, 65 million records of Asian patent literature, 3.9 million standards documents and over 10 000 academic journal titles. In 2019, we invested a significant number of manhours in classification to make relevant prior art easier to retrieve. Thanks to that investment and our staff's efforts, we managed to significantly reduce our classification backlogs for published documents. This represented a first major milestone in the "Mastering the Prior Art" programme.

The EPO maintains the world's largest documentation with databases containing 1.5 billion records.

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Collaboration and knowledge sharing

Collaboration is inherent in the division of three examiners set out in the EPC. It makes the EPO unique and is the cornerstone of our high-quality of our products and services. To enhance collaboration in 2019, we launched a "collaborative quality improvements" (CQI) pilot involving 450 examiners who performed around 7 700 consultations. This highly successful pilot increased our quality levels in 28% of files. It also enhanced knowledge sharing, increased job satisfaction and forged a far stronger sense of shared responsibility within the participating divisions and teams. Other knowledge sharing network events organised in 2019 included 80 learning sessions initiated by the transformation of Conformity Assurance for Search and Examination (CASE). Our examiners and formalities officers also continued to receive training in new technologies and ensuring harmonised approaches and best practices to achieve predictable outcomes.

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Quality management system

To monitor the quality delivered by our formalities officers ("OQC-FO"), we applied the "quality circles" approach in 2019. This revealed that over 94% of files conform with search, examination and opposition processes. The introduction of operational quality control for opposition (Oppo-OQC) also indicated high levels of conformity, with a compliance rate of 96%. Going forward, we will develop an opposition quality indicator reflecting adherence to fairness, predictability and correctness based on the appeal outcome.

The quality of our grants as measured by the Quality Audit directorate remains our key benchmark for tracking improvements. By the end of 2019 we achieved a quality level of 78.1%, which is in line with a long-term upwards trend. We also took a fresh look at our approach to setting quality objectives with a view to highlighting excellence, confirming compliance and indicating areas in which action is needed. The effectiveness of our Quality Management System (QMS) last year was confirmed by external auditors during the regular ISO 9001 surveillance audit in October.

Partnership and dialogue with our users

In 2019 the EPO continued to forge closer ties with its users. To direct our improvement efforts towards better meeting their needs, we adopted a more consultative approach. This included outreach to and from users in Europe and IP5 countries through several technical missions and our Praktika Extern scheme.



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SACEPO meeting, October 2019

The "Partnership for Quality" meetings were another platform for meaningful exchanges with user representatives from the IP5 regions. Topics like quality management, guidelines, search and examination practices and opposition procedures and decisions were all discussed at these meetings. User associations also participated very actively in the Office's consultations, reflecting their commitment to enhanced dialogue.

The SACEPO working party on quality expanded to include more participants from both European and IP5 user associations last year and now takes place biannually. The format includes deep dive workshops on aspects relating to both procedure and substance. The meeting in October 2019 was the first to include active contributions from experts reporting on their impression of the quality of our files.

The extensive feedback from that meeting was analysed to derive quality factors, which will form the basis of a project to achieve a common definition of quality. This definition will enable us to ensure that our practices and procedures meet

the needs of all our stakeholders. We also gathered valuable user input at that meeting, which has informed a new, tailored and user centric approach to conducting our biennial User Satisfaction Surveys that will be adopted in 2020.

A number of programmes focusing on timeliness, quality oversight, prompt and accurate prior art classification, simplifying our procedures and reaching out to innovation were launched in 2019. These programmes will translate our commitment to excellence into real, substantive actions.

The format includes deep dive workshops on aspects relating to both procedure and substance.

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Future of EPO timeliness

The "Future of EPO timeliness" programme will offer EPO applicants a more flexible patent grant process. Our goal is to improve the predictability of EPO interactions for European patent system users by consistently delivering products in the expected timeframe.

In 2019 we revised our timeliness objectives for 2020 and adopted a more user-centric perspective. This will ensure that the new "percentage on time" indicators accurately reflect the service that we provide to our users. Our high-level objectives will be cascaded down to directorate, team and even individual level in 2020. Examiners will also be able to see their own contribution to their team timeliness objective in a personalised digital dashboard.

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Thanks to advances in technology, we are steadily abandoning written exchanges in favour of direct interactions using videoconferencing in many cases.

Streamlining procedures

In 2019 the focus of our examiner communications shifted away from lists of objections and towards providing more constructive support for applicants in the patent grant process (PGP). Thanks to advances in technology, we are steadily abandoning written exchanges in favour of direct interactions using videoconferencing in many cases. In 2019 we also launched several pilot projects on fully digitalising our examiner tools to go paperless in search and examination. Initial feedback from these pilots was very positive.

In a bid to simplify and streamline the EPO's fees, we introduced a revised schedule of administrative fees and expenses on 1 April 2019. Some of the administrative fees were grouped together under the same code, while others were abolished as they had become obsolete. Last year also saw further progress towards simpler, harmonised procedures for registering procedural data and updating information to be published in the European Patent Register. We introduced new forms and standardised procedures for recording the transfer of rights and name changes of the parties and their representatives.

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Master the prior art

By harnessing the power of artificial intelligence (AI), it will help examiners and other parties to master soaring volumes of prior art.

A new programme under SP2023 on mastering the prior art was launched towards the end of 2019. The programme will focus on further enhancing the quality of all classification-related tools and processes. By harnessing the power of artificial intelligence (AI), it will help examiners and other parties to master soaring volumes of prior art. Through closer co-operation with other national patent offices, we will also promote widespread use of the CPC, with a view to making it the global reference system for classification. In 2019 we continued to upgrade our classification tools in line with our strategic objective of reducing our classification backlogs to zero.

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Commitment to quality

Quality has always been a defining feature of the EPO's products and services. Achieving excellence, however, means constantly striving to do better. Towards the end of 2019, we started to evolve our approach to quality with the launch of an ambitious "Commitment to quality" programme (see Figure 10 below) under SP2023.

By adopting a user-centric approach to quality, this programme will forge a common understanding of what quality means and how we can improve it. Bringing a user perspective to bear on the quality of our products and working hand in hand with stakeholders will take quality to even higher levels. From an operational standpoint, this programme will also focus on fostering closer collaboration among our examiners, encouraging more effective communication, promoting continual learning, optimising oversight and enhancing our use of business intelligence.

Figure 10: Commitment to quality programme "quality pillars"



Source: EPO

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

The EPO is committed to upgrading and enriching our users' access to patent information and knowledge. In 2019 we launched a number of SP2023 programmes to enhance our co-operation activities via closer interaction with our partners and to extend the geographical coverage of our products.

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Access to patent information

Espacenet

After intensive user consultations and testing, an enriched version of our Espacenet patent search service was launched in November 2019. This marked a major step towards making our patent information more accessible to users. Espacenet features over 110 million patent documents from all over the world and access is free. The latest version offers some advanced functions, including:

- A dynamic query builder for easier searching;
- A richer, cleaner result list;
- An improved legal status overview covering the entire patent family;
- A responsive design to facilitate searching from different devices.

In 2019 we also launched our new SP2023 programme: "From patent information to IP knowledge." Our goal is to take users on a journey starting at patent information and ending with in-depth IP knowledge, so they can take informed IP-related decisions with confidence at every step of the way.

This programme will seek to reinforce the EPO's position as a major patent information provider by making our information easier to access (including simplified licencing conditions), expanding our supply of high-quality data for users, and enhancing links with legal status and other relevant information.

Building on our experience with the federated register and global dossier, this programme will expand our model of interoperable and decentralised services to other areas like court decisions in member states. It will also upgrade our patent information tools, make our data more relevant and enhance our data distribution policy.

Enhancing co-operation

All of our co-operation activities aim to maximise the impact of EPO actions. Effective co-ordination with other IP offices, international organisations and with EU institutions will enable us to avoid any duplication of efforts.

In May 2019 we renewed our memorandum of understanding (MoU) with the EUIPO and drafted our first detailed work plan. The EPO and EUIPO are working together to foster a holistic approach to IP education and awareness for the benefit of stakeholders.

The EPO also extended its administrative arrangement with the EU Community Plant Variety Office (CPVO) for another three years until 2022. Under this agreement, the EPO and the CPVO enhanced their bilateral cooperation and information exchanges with a view to supporting innovation in the plant sector. Co-operation was extended to include joint training initiatives for the public and offering our member states access to CPVO documentation on plant varieties through EPOQUE Net as of 1 July 2019.

The EPO also continued to co-operate closely with the European Commission in 2019 to inform and support the policy-making process. Our aim is to provide a framework for this co-operation to reap the benefits of synergies between SP2023 and the European Commission's work programme. Several high-level and operational meetings were also held with EU representatives to define the scope of our renewed, impact-driven collaboration.

At a global level, the EPO successfully implemented a new, extensive work plan with WIPO in 2019. The plan covers classification, PCT, data exchange, and training of patent examiners and aims to enhance the international patent system and promote European practices worldwide. Last year the EPO also set up a network with other international organisations based in The Hague to exchange operational experiences and best practices.

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Strengthening the EPN: knowledge

The event culminated in the finalisation of the "Porto Paper", which outlines clear recommendations to boost the EPO's support of the PATLIB network.

The 2019 PATLIB Summit bringing together experts in commercialising innovation, representatives from technology transfer centres, patent offices and PATLIB centres and academics took place in May in Porto, Portugal. The event culminated in the finalisation of the "Porto Paper", which outlines clear recommendations to boost the EPO's support of the PATLIB network. It defines the service portfolios that a PATLIB centre must offer to qualify at a specific level, as well as a learning and continuous development package for patent information centres and their staff.

At the end of October 2019 the EPO patent information conference (EPOPIC) also took place in Bucharest. Exchanges among expert patent searchers, patent office experts, commercial providers of patent information and patent database developers focused on emerging trends in technology and business.

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Last year our candidate support programme (CSP) once again sponsored candidates from member states with a low number of qualified patent professionals to prepare for the European qualifying examination (EQE). A total of 24 new students enrolled for the academic year 2019/20, bringing the total accepted on the CSP to 177 to date.

In 2019, the Office edited several studies on the patent landscape in several technology areas in the public eye today, namely: graphene, quantum technology, distributed ledger technology and cancer immunotherapy. These landscape studies were published online. Marking a first for the EPO, the study on cancer immunotherapy was also published in the peer-reviewed journal "Nature."

Lastly, we also launched a number of projects and activities under SP2023 in 2019, that will be conducted in co-operation with the national offices in our member states. They include the launch of PATLIB 2.0, a new e-learning centre, certification for paralegals, and technology transfer and capacity building at national offices.



Participants of the Candidate Support Programme at the EPO in Munich

Strengthening the EPN: convergence

Applicants seeking patent protection in Europe face a barrage of diverging practices before national patent offices and the EPO. This makes the European patent system complex, costly and creates a heavy administrative burden, particularly for SMEs. In 2019 we launched a new SP2023 programme focusing on the convergence of practices and aimed at minimising or eradicating differences where possible.

Greater convergence will generate cost savings for applicants and free up resources that can be invested in R&D and patent protection. Harmonised practices will also make it easier for SMEs to seek patent protection and upscale their national activities to a European level and facilitate the use of earlier searches. This, in turn, will enhance work sharing between the EPO and national offices and positively impact knowledge co-operation.

The programme will cover areas such as examination of unity of invention, designation of the inventor, accordance of priority date, re-establishment of rights, claim drafting and structure, and examination practices for computer-implemented inventions and artificial intelligence.

This will enhance work sharing between the EPO and national offices and positively impact knowledge co-operation.

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Strengthening the EPN: IT co-operation

At their Kilkenny Annual meeting in April 2019 the EPO and the national offices of its member states commenced discussions on potential IT co-operation projects. The EPO conducted its first round of technical visits to national offices between July and September 2019. These visits gave us a detailed picture of the local situations and the needs of our respective member states to be addressed via enhanced IT co-operation.

During roundtable sessions at the 86th meeting of the TOSC in November 2019, the following list of 7 initial projects was prioritised, discussed and recommended:

- 1. **Front office**: to deliver a system supporting national patent filings
- 2. **Data quality**: to revisit electronic channels for data exchanges with national offices
- 3. **Search**: to improve the service offered by existing EPO search tools
- 4. Quality management and process mapping: to contribute to the specification of new tools and propose quality indicators
- 5. **Modular back office**: to create a network to support the national development of back offices

- 6. **CPC classification**: to improve support to CPC offices for classification, reclassification and conversions from/to IPC
- 7. **Single access portal**: to offer a single point of access to all EPO/national office matters and deduplicating existing platforms.

These recommendations were welcomed by member states and fully endorsed at the Administrative Council meeting in December 2019. Going forward, the IT co-operation programme aims to deliver incremental improvements to the existing services used by national offices via a new, joint creation mechanism, as well as the modular provision of new tools and IT infrastructure.

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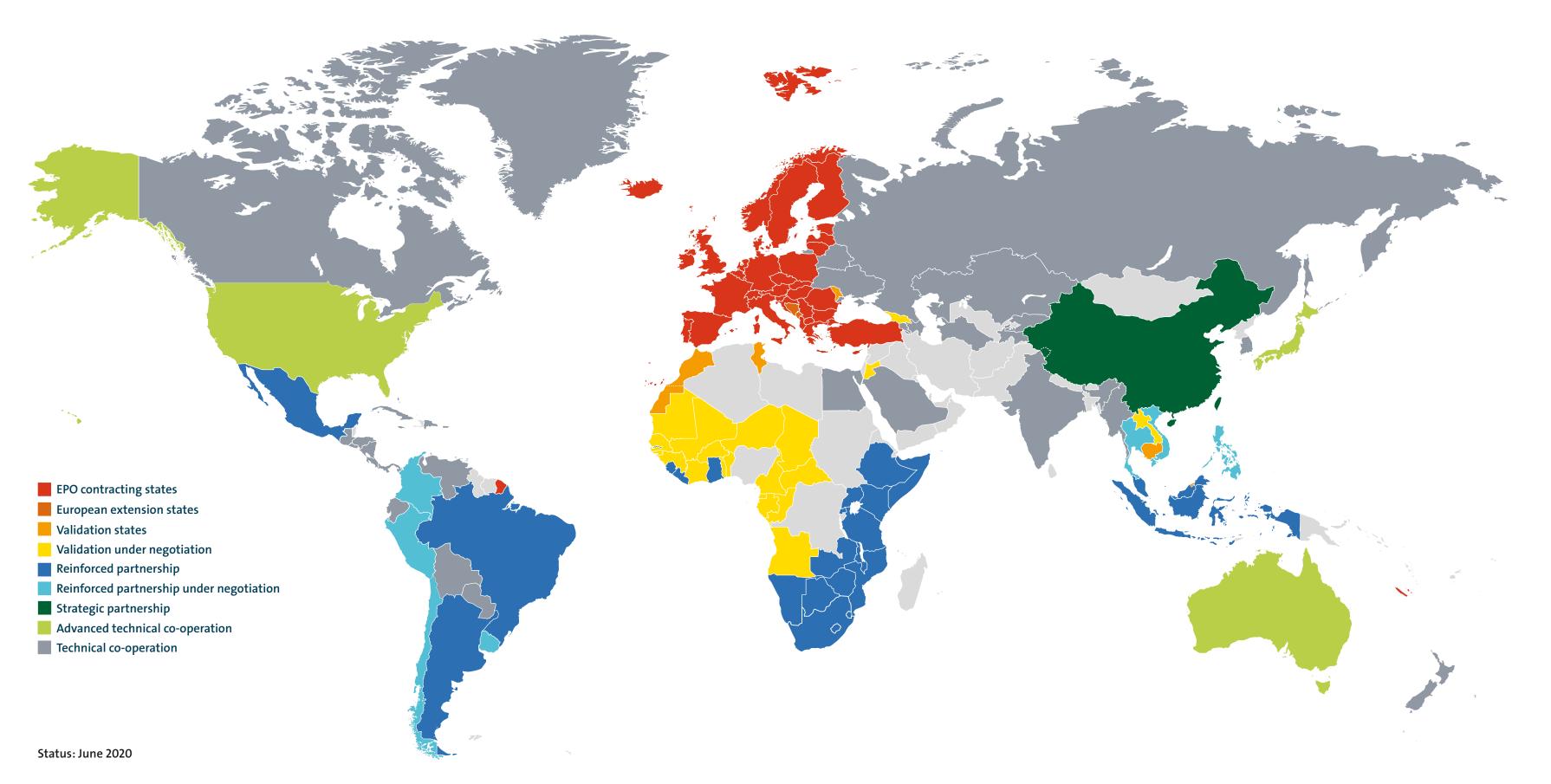
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Expanding our geographical outreach

The EPO is constantly expanding its geographical coverage and influence through validation agreements, reinforced partnerships and technical co-operation with IP offices worldwide. Since the adoption of SP2023 in June 2019, our geographical coverage has grown sharply. In 2019 the EPO signed a validation agreement with Georgia and seven reinforced partnership agreements with Ethiopia, Argentina, Malaysia, Mexico, Indonesia, Brazil and ARIPO, bringing the potential coverage of our products and services up to 1.9 billion inhabitants across 38 member states, two extension states, four validation states and eight reinforced partnerships.

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Figure 11: Map of international bilateral co-operation activities as of December 2019



Last year we also launched a SP2023 programme to further develop, reinforce and leverage our three-tier co-operation policy framework in a structured, effective manner. The programme's key objectives are to:

- Boost our effectiveness in implementing existing and future co-operation initiatives
- Secure new partnerships, with a special focus
 on validation agreements and reinforced
 partnerships
- Maximise our ability to expand the EPO's sphere of influence via the worldwide dissemination and adoption of EPO tools, quality standards and best practices
- Increase the EPO's attractiveness as a patentgranting authority.

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Source: EPO

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Fostering multilateral co-operation

The EPO's multilateral co-operation activities aim to improve the global patent system by promoting technical and procedural convergence between the world's major IP offices. We aim to seek joint responses to global challenges through trilateral (EPO, JPO, USPTO) and IP5 co-operation (CNIPA, EPO, JPO, KIPO, USPTO). Closer alignment with the ID5 (designs) and TM5 (trade marks) co-operation frameworks will help advocate a strong pro-IP agenda and improve outreach to stakeholders.

Convergence of practices between IP offices will bring significant gains in the quality and validity of patents, as well as in the predictability of the legal process. In 2019 we successfully concluded a first round of harmonisation efforts in the areas of unity of invention, citation of prior art and written description/sufficiency of disclosure. The project on unity of invention (led by the EPO and CNIPA) highlighted scope for significant improvements in the way offices raise non-unity objections to enhance transparency and predictability for users. The new approach to convergence will be built upon and be aligned with the results achieved in the convergence of practices programme with our member-states.

In June 2019, the IP5 offices agreed to advance their cooperation in the area of new emerging technologies and Al. Created at the initiative of the EPO, a new interdisciplinary IP5 task force is exploring the legal, technical and policy aspects of new emerging technologies and Al. The taskforce will pinpoint which areas can benefit most from joint IP5 responses and develop a roadmap for future initiatives.

As they enter a new phase of co-operation, the IP5 offices agreed to consider promoting a more comprehensive IP agenda in 2019 to better respond to the needs of users who handle large IP portfolios with bundles of global IP rights. In this context, the EPO started developing a concept to harness synergies and promote closer collaboration between the IP5, ID5 and TM5 co-operation frameworks.

In 2019 the EPO also continued to invest in the Patent Prosecution Highway (PPH). The PPH provides European applicants with simplified, cost-efficient access to accelerated prosecution elsewhere on the basis of high-quality EPO work products indicating patentable claims. Our PPH network currently comprises of 16 partner offices that promote the systematic, wider-scale re-use of EPO work products. PPH participation volumes continued to increase steadily in 2019. By the end of 2019 the total number of incoming PPH requests exceeded 12 700, while over 28 300 PPH requests were filed elsewhere on the basis of work products established by the EPO.

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Improving the quality of PCT services and products

The PCT is a key procedure at the EPO. Euro-PCT applications entering the European phase account for nearly 60% of all EPO filings and grants based on such applications represent 65% of the total.

Solid progress was made towards improving PCT minimum documentation in 2019, with a view to updating Rules 34 and 36 PCT by 2023. The taskforce set up by the Meeting of International Authorities (PCT MIA) convened for the first time in May 2019 and was hosted by the EPO. Many PCT authorities participated in the meeting, which focused on issues related to patent collections and non-patent literature into the PCT minimum documentation.

The user-driven IP5 pilot on PCT collaborative search and examination (CS&E) led by the EPO ran smoothly in 2019. The pilot foresees 500 files to be accepted (100 per office) and the EPO had almost completed its full pilot quota by the end of 2019.

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The long-term aim is to extend the netting system to all receiving offices by 2021 at the latest.

The PCT paperless service launched in 2016 ensures the electronic transmittal of search copies and other documents from receiving offices to the EPO as international search authority (ISA) via WIPO. In 2019, the national patent offices of Costa Rica, Croatia, Cuba, Egypt, Greece, Ireland, Jordan, Kenya, Malaysia, the Philippines, Serbia and the United States joined the service, bringing the total number of participants to 46 by end of the year.

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In addition to saving resources, this service also benefits PCT users by supporting the EPO's efforts to issue international search reports on time for the A1 publication at 18 months (97% in 2019). The service is being progressively extended with a view to including all receiving Offices in the PCT Paperless service by 2021 at the latest.

The pilot on netting PCT fees makes the financial operation of the PCT system more efficient for all offices concerned. By the end of 2019, 37 offices had joined the EPO-WIPO netting system, representing over 90% of all search fees transactions. The long-term aim is to extend the netting system to all receiving offices by 2021 at the latest. At its June 2019 session the PCT working group agreed to introduce a legal basis in the PCT covering this activity. This new provision will enter into force on 1 July 2020, making it easier for certain offices to join the new service. The programme also aims to ensure that the principle of equal service level between the EP and PCT procedures be applied in a consistent manner at the EPO.

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Goal 5 Secure long-term sustainability

The EPO enhanced its long-term sustainably in all areas in 2019 by reinforcing internal and external governance, reducing its environmental footprint, and reassessing its long-term financial sustainability.

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Strengthen governance

As part of its efforts to strengthen governance in 2019, the EPO set up a new Corporate Governance Service (CGS). This unit is responsible for ensuring an integrated approach to management of areas like risk, business continuity and health and safety across the office. It also includes a new project management office (PMO), which co-ordinates and oversees the implementation of SP2023.

In October 2019 CGS launched a corporate Balanced Scorecard (BSC) to align all activities in the different areas of the EPO with the goals set out in SP2023. Towards the end of the year we initiated the process of cascading the top-level BSC down to the DG and Principal Directorate levels.

During the second half of 2019 the goals and key initiatives of SP2023 were broken down and mapped into a portfolio of programmes and projects. By the end of the year we had appointed nearly all programme managers and nominated the first batch of project managers. An extensive internal communication campaign featuring roundtables, intranet communications, webinars, videos and meetings was also rolled out to support the implementation of SP2023. To increase transparency on our progress, we also presented the EPO's first annual work plan for 2020 to the Administrative Council in December.

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Another milestone related to governance was the signature of a Memorandum of Understanding (MoU) between the President of the Office and the President of the Boards of Appeal (BoA) on 28 June 2019. The MoU will facilitate the BoA Unit's access to its legal, financial and administrative services, and also covers the possibility of drawing up service level agreements to regulate the performance level of a task performed.

Towards the end of last year a MoU between the Chairman of the Council and the President of the EPO was also drafted on enhancing support for the Council. At the December 2019 session of the Council, the MoU (CA/106/19) received a unanimously positive opinion from the delegations.



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Signature of an MoU between the President of the Office and the President of the Boards of Appeal

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Integrated management

In 2019 we started to lay the foundations for an integrated management framework at the EPO. This will drive oversee the office-wide implementation of management systems for quality, occupational health and safety and risk and business continuity. In 2019 we started to implement requirements of the OHS Management System (ISO 45001) in preparation for certification in 2020.

In 2019 we started to implement requirements of the OHS Management System (ISO 45001) in preparation for certification in 2020.

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Outreach and awareness

As a responsible public institution, it is the EPO's duty to have a positive impact on people's everyday lives, society as a whole and the environment. In 2019 we launched a programme to raise awareness of the EPO's mission and the benefits of an effective European patent system for stakeholders outside the core IP community.

Overall, this programme will raise the profile of the innovation sector and foster a culture of innovation. It includes projects to increase the scope and profile of the European Inventor Award; develop an annual patent index and a new data centre; and raise our brand visibility. The EPO will also focus more on building a sustainable future at a local level by developing activities targeted at communities in our host cities.



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European Inventor Award 2019

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Financial sustainability

The EPO commissioned a Financial Study in Q1 2019 by external consultants Mercer Oliver Wyman. Conscious of its responsibility to its stakeholders, the report aimed to assess whether the EPO was on course for a sustainable financial future.

Phase I — Development of four scenarios

Phase I of the study focused on how the EPO's financial future could evolve over the next twenty years, according to four potential scenarios. In three out of four scenarios the EPO was predicted to encounter a coverage gap which the EPO currently does not have sufficient asset reserves to cover.

At the beginning of May the Financial Study's key findings were presented to all EPO staff, managers and staff representatives. A wideranging consultation process was launched, with over 320 staff members participating in focus groups and discovery sessions (for further details, see "Communications" section).

Following a careful analysis of the different parameters and the global economic developments, the Office considered that the 'Base 2 – Economic Cycle' scenario which assumed a global economic recession was the

most appropriate one. This scenario identified a funding gap of € 3.8 billion. On the basis of a sensitivity analysis evaluating the risk of a persistent low interest rate environment, the Office proposed to retain in addition a € 2.0 billion buffer. The total potential financial gap to be covered over 20 years was then identified at € 5.8 billion. This position of the Office (CA/84/19) was fully supported by the Council in December 2019.

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Phase II — Developing measures to address the funding gap

Phase II of the study identified 17 measures that could contribute to covering the € 5.8 billion gap. From these 17 measures the Office set about developing a package of financial measures for presentation to the Administrative Council for adoption and based upon the following principles:

- proportionality and fairness: the measures
 are analysed for different intensity scenarios
 to assess their impact and sensitivities;
- shared effort: the measures will have to be shared among all stakeholders;
- affordability: the measures need to substantially contribute to reducing the coverage gap
- reversibility: if economic developments and progresses are better than expected, the measures could be reversed if the Office's finances can afford it;
- gradual implementation: the measures, whereapplicable, are defined with transitional elements

These principles helped to guide discussions with social partners on the development of a package of measures.

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EPOTIF

In 2019 a
far-reaching
new Finance
360 programme
was launched.

The EPO Treasury Investment Fund (EPOTIF) reported positive results for the year 2019, when it generated a profit of € 325m, representing a 13% return on assets and bringing the total value of the fund to € 2 955m at the end of the year. The major EPOTIF risk measure (1-year Value at Risk with 95% confidence level) remained throughout 2019 in a range between 5.5% and 6.6%, which was at all times below the 20% limit defined in the EPO Investment Guidelines.

The Office continued its efforts to further improve the EPOTIF Governance. The Investment Committee was set up in August 2019 and its first annual meeting held in September 2019. The external audit of the EPOTIF was performed in Q3 2019 and its outcome reported to the BFC in October 2019 (CA/F 27/19). The auditors confirmed that the setup of EPOTIF is of high professional quality and adheres to the best governance principles. Finally, the Office established the function of the EPOTIF Risk and Compliance Officer reporting to the President. The first EPOTIF Risk and Compliance Report was issued in July 2019.

The preliminary results for January-April 2020 reveal the impact of the coronavirus pandemic, which triggered substantial declines in financial markets. In this period, EPOTIF incurred a loss of € 233m, corresponding to -7.9% of the net assets value. The total value of the fund as at 30 April 2020 was € 2 722m, a loss of € 5m since inception.

In 2019 a far-reaching new Finance 360 programme was launched covering areas ranging from core financial processes like planning, budgeting and reporting to essential procurement and sourcing. We also tested a prototype Enterprise Performance Management (EPM) tool that will provide relevant, accurate and timely information to support reporting and decision-making.

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Central Procurement

In September 2019 we commissioned an external consultant to assess our procurement processes with a view to increasing transparency and compliance, while retaining maximum flexibility. This health check included 26 initiatives which have been partly incorporated in the Finance 360 programme. Some others have been launched as mini-projects ranging from defining a procurement learning path to definition of standard procurement catalogues.

On the operational side, the total procurement spend on goods and services decreased by 14% in 2019 versus 2018. The decrease of about € 40m was mainly due to the completion of the New Main Project in The Hague in 2018. The percentage of spend awarded through published procurement procedures increased from 51 to 57% in 2019. The EPO also embarked on efforts to streamline our procurement by increasing automatic supplier invoicing management to 47% at the end of 2019 versus 20% in 2018.

The total procurement spend on goods and services decreased by 14% in 2019 versus 2018.

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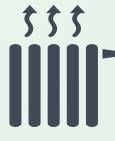
Improving the EPO's environmental sustainability

The EPO is committed to minimising its environmental impact and actively contributing to a more environmentally sustainable future. The graphic below summarises our achievements in 2019 versus 2018.

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Figure 12: Environmental sustainability achievements in 2019 versus 2018

Compared with 2018 the EPO ...



... reduced heat energy consumption by

19.2% = 7.5 million kWh



... reduced water consumption by

 $6.2\% = 7 432 \text{ m}^3$



... reduced CO₂ emissions by

24.2% = 2 124 tonnes CO₂ emissions



... reduced electricity consumption by

4.3% = 1.7 million kWh



... reduced residual waste generation by

29.2% = 163 tonnes



... increased paper consumption by

1.2% = 1.4 million sheets of paper

Source: EPO

We moved closer to a more environmentally sustainable future in 2019 with our completion of a new bike park and modernisation of some of our most energy-consuming technical installations at the Isar building. On top of these measures, the EPO also signed an agreement with the City of Munich and other major companies to join forces and co-ordinate its climate change activities.

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Deeper look at...

Quality & risk

Our people

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Quality & risk

Our commitment to quality defines the EPO's products and services. But sustaining excellence in the long term is a journey. At the EPO that journey is inspired by our users and begins with our dedicated workforce of top scientific experts.

Career-long learning and a dynamic knowledge transfer network keep our staff up to date with the very latest legal and technical developments. Collaboration is not only enshrined in the EPO's three-person examining divisions, it is actively promoted at all levels of the organisation. In 2019 a promising Collaborative Quality Initiative pilot resulted in a quality increase in 28% of files and was developed into a SP2023 project at the end of the year.

But people are only part of the equation. Their ability to provide applicants with high legal certainty depends on their access to premium resources. The EPO has the **world's largest prior art databases** with over 1.5 billion technical records. In 2019 we continued to upgrade our increasingly Al-driven tools that help examiners find the most relevant prior art more effectively. Our ANSERA search tool, for instance, was enhanced with access to non-patent literature, resulting in a 20% increase in search report citations made using this tool.

In 2019 a promising Collaborative Quality Initiative pilot resulted in a quality increase in 28% of files.

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2019 also saw major achievements in **classification**. Accurate, timely classification is the cornerstone of a high-quality patent granting process. We invested heavily in bringing our classification backlogs down and are now in a state where we are able to classify documents as they are coming in. This marks a first milestone in our classification activities under SP2023.

Timeliness is another inherent aspect of quality that saw major improvements in 2019. The time to grant for EP direct and PCT applications where the EPO was the International Search Authority fell by 4 months and 4.8 months respectively.

On top of these achievements, 2019 was also a year of transition. In June the EPO launched its first **Strategic Plan (SP2023).** The plan's third goal focuses entirely on delivering higher quality services and products more efficiently. A new SP2023 programme will address all aspects of quality from incoming applications and the patent grant process to opposition and publication.

Going forward, the EPO will also **engage our users** in an ongoing dialogue on quality. At our 2019 SACEPO Working Party on Quality meetings we began to forge a common understanding of patent quality and gather input to shape our user satisfaction surveys. Working closely with our member states and non-European national patent offices as well as our IP5 partners and international organisations on quality also remains a top priority.

All these initiatives reflect the EPO's enduring pledge to provide the very highest levels of quality. As we move forward with SP2023, our annual Quality Report will update you on our progress towards excellence.

Accurate, timely classification is the cornerstone of a high-quality patent granting process.

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Our people (social aspects & engagement)

Our Social Report provides a comprehensive overview of staff and working conditions at the EPO, covering topics including demographics, professional development, health and social dialogue. Published annually since 2013, it underpins our commitment to transparency. In the context of our Strategic Plan 2023, it directly contributes to Goal 5, Key initiative 3: "Improve transparency and accountability". By helping to monitor numerous indicators, it also contributes to Goal 1 ("Build an engaged, knowledgeable and collaborative organisation") and to Goal 5 more generally ("Secure long-term sustainability").

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Key findings from the report include:

- At the end of 2019, the EPO had 6 608 staff; 34% were women. 25% of managers were female, a slight increase on previous years in line with the steady upward trend.
- EPO staff are of 35 different nationalities. 74% have a nationality different from that of the country they work in. At the end of 2019, the average age of an EPO employee was 48.2; 59% of staff had worked at the EPO for between 10 and 21 years.
- On average, the EPO received 131 applications per job vacancy in 2019 (2018: 119). 117 staff were recruited externally. 51 trainees started the Pan-European Seal Programme at the EPO, making a total of 219 trainees at the EPO since the programme began in 2015.
- The EPO spent over € 5 million on talent development activities in 2019, with 94% of staff receiving at least one training activity in the course of the year.

- The average monthly basic salary was € 9 523 in 2019.
 Allowances and benefits, entitlement to which depends on individual circumstances, totalled € 227 million.
- Payments from the EPO's pension and social security schemes totalled € 346 million in 2019. The social security scheme covered 23 508 people. The average monthly basic pension was € 6 245.
- At the end of 2019, 14% of staff worked part-time; 18%
 were on the part-time home working scheme.
- Health and safety-related expenditure in 2019 was
 € 1.8 million, including € 0.5 million for preventive medical
 measures and € 0.3 million for the Employee Assistance
 Programme. A further € 3.9 million was spent to subsidise
 general staff welfare and social activities.

- Social dialogue is fundamental at the EPO and the management therefore makes continual efforts to strengthen it. There were 103 meetings with social partners in 2019, as compared with 79 in 2018.
- In 2019, 301 employment-law disputes were discussed with the individuals concerned with a view to reaching an amicable settlement; such a settlement was reached in 36% of these cases.

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Engagement

The energy and commitment of our staff are the driving force behind the EPO. Our engaged employees are passionate about their work, dedicated to quality and keen to advance the organisation's strategic goals. Their emotional connection to the EPO's values not only channels their energy into a shared purpose, it also helps to secure the organisation's long-term sustainability.

Our Engagement Report provides an overview of our staff engagement activities in 2019, which started with an officewide staff engagement survey in February. Around 85% of EPO staff took part in the "Your voice, our future" survey, supported by external consultants Willis Towers Watson.

Personal development, empowerment and external reputation emerged as the key drivers of sustainable engagement at the EPO. The survey also highlighted communication with senior management, creating feedback channels and fostering a culture of continuous improvement as areas for improvement.

Engagement is also about defining and communicating a powerful vision that speaks to staff. In June 2019, the EPO's first Strategic Plan 2023 (SP2023) set out an ambitious roadmap for the years ahead. The plan's first goal: "Building an engaged, knowledgeable and collaborative organisation" integrates the survey's findings on staff engagement and defines how we will ensure that it remains part of our DNA.

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All of our initiatives aim to foster better communication, collaboration, knowledge-sharing and inclusion and diversity.

To increase engagement, we are taking a two-tier approach that combines EPO-wide actions and initiatives at an operational level. To track and co-ordinate these activities, teams were invited to log them in a new online tool. All of our initiatives aim to foster better communication, collaboration, knowledge-sharing and inclusion and diversity.

Towards the end of 2019, the "Your voice matters" project was set up to co-ordinate and improve the way we gather staff feedback and translate it into effective responses. As part of this project, we will also regularly monitor staff engagement levels with pulse surveys and a large-scale biennial survey.

This year's Engagement Report is the first in a series of annual updates that will chart our progress towards our goals. Looking to the future, the EPO is focused on building a workforce of empowered and highly engaged teams to create a win-win working environment.

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Environmental sustainability

The EPO is fully committed to boosting sustainability and reducing its environmental footprint. In 2009 we adopted the Eco-Management and Audit Scheme (EMAS¹) as the overarching framework for minimising our environmental impact and fostering a sustainable work environment for staff. But there is no one-size-fits-all approach to corporate sustainability.

Moving beyond early wins means constantly searching for solutions that are unique to our business and finding innovative ways to improve our sustainability. In 2019 the EPO once again set ambitious targets for cutting energy, water and paper consumption, improving its recycling ratio, reducing CO_2 emissions and increasing its use of renewable energies and organic food compounds. Compared to 2018, we achieved significant reductions in heat energy consumption (-19.2%), residual waste generation (-29.2%) and CO_2 emissions (24.2%).

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In accordance with Regulation (EC) No 1221/2009 of the European Parliament, Commission Regulation (EU) 2017/1505 and Commission Regulation (EU) 2018/2026.

The next phase in our journey towards greater sustainability is outlined in the EPO's Strategic Plan 2023. Under Goal 1 "Build an engaged, knowledgeable and collaborative organisation" we are planning maintenance and refurbishment projects to improve the condition and sustainability of our buildings, while cutting their running costs.

With energy-efficient, state-of-the-art buildings the EPO will reduce its impact on the environment by decreasing its energy intake and lowering its CO₂ output. We aim to achieve an outstanding level of "BREEAM²" certification for all of our buildings. To promote environmentally-friendly transport for our staff, we installed bike parks and charging stations for e-cars and e-bikes in 2019 and plan to expand these facilities in 2020.

We also launched new projects on cutting paper consumption, green IT and implementing environmental management systems, which are bundled under Goal 5 "Secure long-term sustainability." All of these projects feed into our long-term goal of cutting CO₂ emissions.

Going forward, the EPO will continuously track the environmental impact of its operations with a set of clearly-defined key performance indicators (KPIs) and remains firmly committed to creating a more sustainable future.

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BREEAM (Building Research Establishment Environmental Assessment Method) is a leading method for master planning projects, infrastructure and buildings. It recognizes and reflects the value in higher performing assets across the built environment lifecycle, from new construction to in-use refurbishment.

Co-operation and the Academy

Improve access to patent knowledge

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Interaction with users was again high on the EPO's agenda of priorities for 2019. Our "Partnership for Quality" meetings once again proved a highly successful channel for engaging in meaningful exchanges with our users from industry. These events offer a unique opportunity to meet user representatives from the IP5 regions and openly discuss a wide range of topics: from quality management issues, to guidelines, search and examination practices and opposition procedures and decisions.

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In 2019 we held six meetings with major user associations from Japan, Korea, the USA and Europe. For the first time, some of these meetings were organised together with patent drafting events to raise awareness of the European patent system and take full advantage of the presence and participation of EPO experts at these events.

The EPO was also well represented at user association events across Europe and beyond, promoting the European patent system, showcasing our products and reaffirming our commitment to quality and excellence. User associations also participated very actively in the EPO's consultations, showing their clear commitment to enhanced dialogue.



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Japanese delegation visits the EPO headquarters in November 2019

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Maximise the impact of co-operation

In 2019 the EPO and the EUIPO renewed and expanded their Memorandum of Understanding to enhance the cooperation between the sister organisations in charge of granting pan-European IP rights in Europe. The primary policy objectives for this close co-operation are to create:

- a more effective and accessible IP system in Europe
- a stronger IP culture in Europe
- a stronger support of European industry abroad

For the first time, the EPO and EUIPO established a detailed work plan aimed at increasing the number of common initiatives and endeavours. From joint webinars to comprehensive conferences and economic studies, the EPO and EUIPO are working closely together to foster a holistic approach to IP education and raise awareness for the benefit of all stakeholders. Another joint co-operation activity with the EUIPO, the flagship Pan-European Seal (PES) traineeship programme, entered its fifth year in September. A total of 52 interns from 27 universities in 17 member states were admitted to the programme in 2019 and are currently gaining on-the-job professional work experience at the EPO.

As of mid-2019 we started expanding the PES programme to include more partner universities. On top of promoting the programme in member states that have not yet joined the network, we also targeted other high-ranking technical universities in Europe and worldwide.

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It aims to ensure a well-functioning international patent system and promote European patent granting practices worldwide.

In terms of co-operation with other international organisations, the EPO has extended its Administrative Arrangement with the EU Community Plant Variety Office (CPVO) for another three years until 2022. Under this agreement, the EPO and the CPVO enhanced their bilateral co-operation and information exchanges with a view to supporting innovation in the plant sector.

As part of the EPO's co-operation with the European Commission, numerous activities were undertaken to inform and support the policy-making process. In 2019 the EPO is striving to establish a framework for this co-operation with clear objectives to reap the benefits of synergies between SP2023 and the European Commission's work programme.

The EPO also successfully implemented a new, extensive co-operation work plan with WIPO in 2019. The plan covers areas ranging from common actions in classification and the PCT to enhanced data exchange and access, as well as training for regional patent examiners. It aims to ensure a well-functioning international patent system and promote European patent granting practices worldwide.

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Strengthening the EPN

At the 13th Annual Meeting on Co-operation in Kilkenny in May 2019, discussions with present and future member states focused on SP2023 and their expectations of the plan. We reached an agreement on principles, priority areas and how to manage co-operation in the future. The outcome of these discussions is comprehensively reflected in Annex 2 of SP2023.

After the meeting we entered a transition phase that involved balancing ongoing activities with defining and implementing future activities as SP2023 projects. The underlying objective of future co-operation activities is to strengthen our relations with all member states and relevant stakeholders to positively impact the European patent network (EPN) and the European patent system.

Member states continued to participate in Academy and EPN events in 2019, as well as taking advantage of language training support and IP pre-diagnosis services. The candidate support programme (CSP) also sponsored candidates from member states with few qualified patent professionals to prepare for the European qualifying examination (EQE).

We also continued to promote working agreements on search with the EPO, with several agreements reaching the final stages of negotiation at the end of 2019. As part of SP2023 we are looking to make this scheme simpler to implement in the future, so it is more attractive for both existing and future participants.

In 2019 several back-file data collections from another eight member states were digitised and captured in full-text format and others are still in the pipeline for 2020. This was a bridging activity between the former "quality at source" project and the new "data quality" co-operation project.

In the second half of 2019, the Federated Register saw the addition of Lithuanian (October) and Maltese data (December) and progress was made towards adding data from Serbia in 2020. We also deepened our internal reflections and consultations on future co-operation policy with member states. The objective is to draw up a consolidated document that will be tabled for adoption by the EPO's governing bodies in 2020.

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Broaden the European patent system and network impact

One of the highlights of the EPO's international co-operation activities in 2019 was our signature of a historic agreement with CNIPA. This agreement provides for the launch of a two-year pilot enabling Chinese applicants filing their international applications with the CNIPA as receiving office to select the EPO as their international searching authority (ISA). It represents a landmark in the co-operation between the CNIPA and the EPO, particularly because this is the first time that the CNIPA has allowed another ISA to carry out international searches for Chinese applicants. Both offices continue to work on the specifications of the pilot, which is expected to be launched later in 2020.



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Delegation from CNIPA at the EPO in Munich in September 2019

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EPO President António Campinos and USPTO Director Andrei Iancu meet in Munich in September 2019

The EPO also enjoys longstanding and close working relations with both the Japan Patent Office (JPO) and the United States Patent and Trademark Office (USPTO). This co-operation started some 30 years ago and developed historically, mainly under the umbrellas of trilateral co-operation and, more recently, IP5 co-operation. In autumn 2019 the EPO signed its first bilateral Memoranda of Co-operation with both offices to formalise and expand its co-operation activities with these important patent jurisdictions.

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Another highlight of 2019 was the EPO's signature of a validation agreement with Georgia, bringing the total number of validation agreements signed up to five. We are now waiting for Georgia to take the legislative steps required to enact the entry into force of the validation agreement. Advanced discussions are also underway with Laos, Brunei, Angola, OAPI and Jordan which, in January 2019, became the tenth country or IP organisation to initiate validation negotiations.

The reinforced partnership, the EPO's new cooperation framework for non-member states, has generated a great deal of interest among countries all over the world. After the signature of the first Memorandum of Understanding of its kind with South Africa in 2018, the EPO has signed and launched another seven reinforced partnership agreements with Ethiopia, Argentina, Malaysia, Mexico, Indonesia, Brazil and ARIPO. This wide-reaching co-operation programme aims to further integrate and strengthen the global patent system by extending our network of partner offices. By systematically using EPO work products, tools and standards, our partners can increase their capacity, productivity and quality.



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Reinforced Partnership signed with Intellectual Property Corporation of Malaysia in October 2019

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The convergence of practices is one of our flagship co-operation initiatives under SP2023. This applies both to our co-operation with member states and our international co-operation activities. Convergence between IP offices will bring significant gains in the quality and validity of patents, as well as in the predictability of the legal process. A first round of harmonisation efforts in the areas of unity of invention, citation of prior art and written description/sufficiency of disclosure was successfully concluded by the IP5 offices. The unity of invention project (led by the EPO and CNIPA) introduced significant improvements in the way offices raise nonunity objections, enhancing transparency and predictability for users.

Following the agreement reached at the Heads of Office meeting in June, a new interdisciplinary IP5 task force was created at the initiative of the EPO to explore the legal, technical and policy aspects of NET and AI. It aims to identify those areas that stand to benefit the most from joint IP5 responses and prepare a roadmap for forthcoming initiatives.

The EPO also started developing a concept to promote synergies and increased collaboration between the IP5, ID5 and TM5 co-operation frameworks for the benefit of offices and stakeholders in industry.

A new innovative infrastructure to support Cooperative Patent Classification (CPC) data exchanges was successfully deployed in close co-operation with the USPTO. With this cloudbased infrastructure, the CPC data provided by national offices, the EPO or the USPTO is associated with the patent family. This puts the CPC of all offices on an equal footing.

A new interdisciplinary IP5 task force was created at the initiative of the EPO to explore the legal, technical and policy aspects of NET and AI.

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Access to patent knowledge

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The European Patent Academy is a global centre for training on patent matters. In 2019 the Academy was again very active in developing content and offering training events that address the needs of national offices, industry (and particularly SMEs), academia, patent professionals, judges and innovators in general.

When it comes to the Academy's catalogue, a significant number of events, whether physical or (increasingly) online, focus on supporting knowledge access, transfer and exchanges with national offices. In 2019 the EPO organised around 30 Academy seminars for examiners in our member states and from other partnering national offices, including several customised expert-level seminars and various discussion platforms on patenting procedures. These events once again proved a highly successful way of promoting stronger convergence with national offices and a better understanding of emerging patent-related issues across Europe.

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The Academy's flagship events "Examination matters" and "Search matters" for patent professionals and patent searchers were each attended by nearly 200 participants in 2019. These events offer both examiners and practitioners a unique opportunity to meet and debate on key issues related to search and examination.

In 2019 the Academy continued to expand its portfolio to areas beyond the EPO's core business. After signing a MoU with the Licensing Executives Society International (LESI), we offered joint technology commercialisation training for SMEs in a number of European cities. A top-level "High-growth technology business conference" on business strategy and IP management, followed by a full day of training sessions, also attracted 300 participants to Dublin. In close consultation with its member states, the Academy will continue to further develop its offering in this field.



Search Matters 2019 conference

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In 2019, we launched our third call for research proposals in the framework of our academic research programme. The programme covers IP commercialisation and technology transfer topics and attracted a total of 43 proposals in 2019. The EPO also published its first six research reports developed with grants totalling € 300 000 resulting from our first call for proposals in 2017. The launch of these reports had a major impact on the European academic community that conducts research in the field of IP.

In terms of training for IP judges, the Academy organised the annual "Boards of Appeal and key decisions" conference in co-operation with the Boards of Appeal. It also held an expert workshop to discuss patentability issues with national judges and representatives of the Boards of Appeal. The event featured indepth discussions on added subject-matter, plausibility, and current issues in computer-implemented inventions.

The Academy also continued to support the certification of IP professionals in 2019, with 672 candidates passing the European Qualifying Examination (EQE), marking a 27% increase versus 2018. In the framework of the candidate support project (CSP), 57 candidates from 17 member states have successfully completed the EQE to date.

Lastly, 300 participants actively participated in the first joint webinar organised in co-operation with the EUIPO. The webinar compared design and patent protection in human-machine interfaces. In response to extremely positive feedback from participants, the EPO and the EUIPO will include more joint events on a broad range of different IP rights in its 2020 workplan.



"Boards of Appeal and key decisions" conference in November 2019

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Communication

In December 2019, the Graphic Design, internal communication and external communication units merged to form the new Principal Directorate Communication. More detailed information on the set-up, strategy and first steps taken by the new team can be found in the section on the "Strengthening corporate culture" programme (see goal 1). The reports below summarise the 2019 activities of the internal and external communication units.

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Internal communication and change management

Strategic topics

SP2023 communication

To accompany the launch of the Strategic Plan, we developed multimedia content. To ensure that staff remain wellinformed of our progress in implementing the Strategic Plan, we launched a communication framework that draws on previous staff feedback and introduces the three principles of:

- Information straight from the source
 (featuring the people behind the programmes/projects);
- Sharing the journey (frequent updates); and
- Opening up two-way conversations.

As the framework requires close collaboration with programme and project managers, we organised several communication training and communication plan consultancy sessions for all SP2023 programme and project managers. A video and interview series was also launched to introduce staff to a number of SP2023 programmes.

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Annual Review 2019 ● • •

Financial Study 2019

Our communications campaign accompanying the Financial Study comprehensively covered its launch, the consultation process with internal and external stakeholders, the proposed bundle of measures and the envisaged timeline for implementation. We also held extensive consultation rounds on proposed measures to gather feedback from staff, staff representatives and external stakeholders. Various deep-dive explanatory videos provided full transparency on all aspects of the study and proposed measures. In a new live Q&A format, broadcast live to all staff, the President and VP4 answered questions from team managers on the Financial Study and envisaged measures.

Staff engagement survey

In January we launched a multimedia campaign to encourage participation in the 2019 staff engagement survey. It succeeded in encouraging 5 675 staff (85%) to participate in the staff engagement survey. The campaign enjoyed high visibility and generated a great deal of interest, with background material on it attracting over 70 000 clicks.

Women in the Lead

On International Women's Day (8 March), we organised a launch event and campaign to introduce the Women in the Lead Mentoring pilot programme to support women who would like to pursue a managerial career. Our campaign attracted 300 registrations to the programme, far outnumbering the places available in the pilot.

Ad hoc teleworking scheme pilot

In April we launched a communications campaign to accompany the Ad hoc teleworking (AHTW) pilot scheme, explaining how the scheme would bring the EPO into line with many other intergovernmental organisations and grant staff greater flexibility to work remotely.

Focus groups, discovery sessions and relaunch of the social dialogue intranet site

To take the pulse of staff on key strategic topics, we organised seven sets of focus groups involving a total of 200 participants, covering issues like diversity and inclusion and the performance appraisal system review. Together with the President's Office, we also arranged 217 discovery sessions for senior management (the President and VPs) and managers/staff, thus providing further fora for the discussion of strategic topics. As part of the overall effort to open up two-way conversations and increase transparency, our social dialogue intranet site was also relaunched.

Channels

In 2019 we also launched the EPO InfoPoints, an internal network of infoscreens delivering internal office news on 130 displays. EPOtv, the EPO's internal platform for videos on demand and live-streaming, was also relaunched and the EPO multimedia studio was opened in Munich, giving staff access to film and broadcast production facilities.

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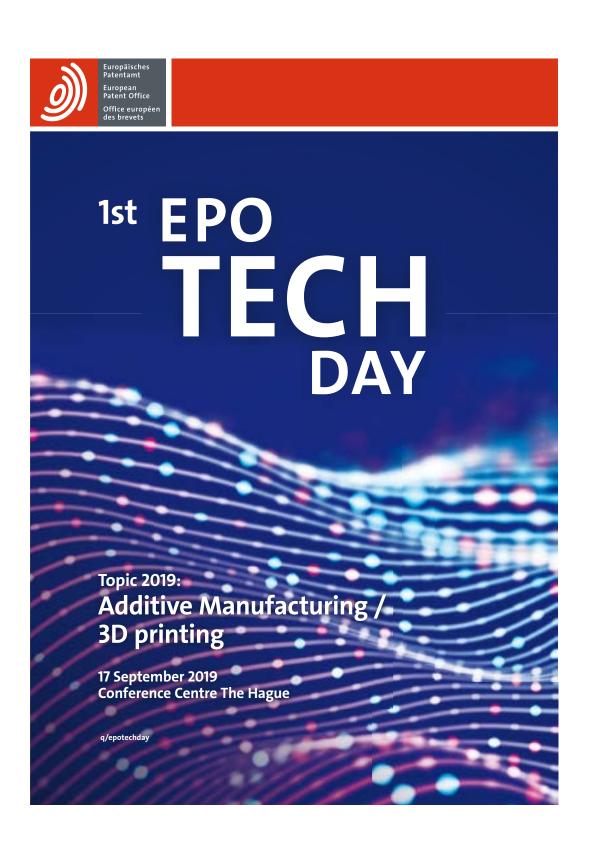
Events

Health and safety days

In September, the EPO launched a communication campaign to announce a two-month programme of health and safety offerings for staff, including medical check-ups, skin screening, stretching sessions, lunchtime lectures and the cycle-to-work day.

EPO Tech Day in the Hague on additive manufacturing/3D printing

In September we also launched the 1st EPO Tech Day, an annual internal event organised for staff by staff to explore various technological issues. The event included an internal AM/3D printing conference, featuring both internal and external expert speakers, and a series of workshops. The AM/3D printing exhibition showcased the evolution of AM technology supported by the European patent system. The event laid the foundations for an external conference on the same topic and proved so successful that the Tech Day will take place on an annual basis in the future.



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START-up

In November, the first art collection event in Haar brought together Board of Appeals colleagues and EPO staff at an exhibition of artworks by local artists. Around 200 staff attended the opening night of this joint initiative between the Kunstakademie München and Künstlerkreis Haar. Staff were also given an opportunity to attend guided tours throughout November and December.



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"START-up", a joint initiative between the Kunstakademie München and Künstlerkreis Haar

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External Communication

Annual Report 2018/ Annual results media campaign

The EPO's annual results were launched with a media campaign in March/April 2019 in EPO member states and the other IP5 regions. The campaign covered all media channels with localised press releases, graphs and infographics, video material and a special social media kit. The EPO's Annual Report 2018 attracted a great deal of European and global media interest. During the first four weeks of the campaign, a total of 1 770 media reports (2018: 2 053) were generated, including 59 newswire, 399 print, 1 279 online and 33 TV/radio reports. The campaign created an Advertising Equivalent Value (AVE) of some € 5.7 million (2018: € 5.8m) — a good result achieved mainly by an increase in high-value quality reporting by tier 1 outlets, and particularly by high-quality daily newspapers.

Our social media campaign hit new record highs, with nearly 815 000 users reading the EPO's messages, over 4 500 conversations, almost 11 000 clicks, over 275 000 video views, as well as 3 600 interactions on content related to our annual results. From March to August 2019, almost 100 000 page impressions were recorded our Annual Report section on epo.org.

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European Inventor Award 2019

With its European Inventor Award, the EPO promotes the role played by patents and the European patent system in supporting technological progress, innovation, prosperity and job creation. The European Inventor Award 2019 ceremony took place in Vienna on 20 June. The Award Ceremony at the Wiener Stadthalle was attended by over 600 guests.

Overall, the media coverage of the 2019 Award from 7 May 2019 to 1 August 2019 generated an advertising equivalent value (AEV) of some € 19.3 million, compared to € 16.4 million in 2018. This marks the highest AEV achieved to date by an EPO media campaign. It was mainly due to increased radio and TV coverage of the ceremony, including the first-ever live broadcast on free television (Servus TV broadcasting in Austria and Germany).

By the beginning of August a total of 2 229 media reports had been released (2018: 1 725), including 54 news agency reports, 386 print articles, 1 725 online articles and 64 TV/ radio broadcasts.

The EPO's social media posts reached over 22 million users, an increase of 950% compared to last year. There was a 1300% increase in the number of interactions (likes, shares, comments) on our posts compared to the same period last year. The EPO's short videos were seen by over 13 million users in the first month after the social media campaign launch.

The interest of journalists in the European Inventor Award is enormous and continues to grow every year. Almost 50 journalists registered to report on-site from the European Inventor Award ceremony, representing 17 countries, with many from leading media outlets such as *Il Sole24Ore* and *RAI Uno* (Italy), *PAP* and *Gazeta Wyborcza* (Poland), *EFE* and *El País* (Spain) and *Nikkan Kogyo Shimbun* (Japan). Almost 200 interviews were conducted with the finalists on-site in Vienna. TV teams from different member states also attended and covered the ceremony onsite.

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European Inventor Award 2019

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IP and economic studies

Our Chief Economist Unit (CEU) published a number of flagship reports in 2019, including:

- EUIPO/EPO joint study: "High growth firms and IP rights":
 Released in May 2019, this joint study by the EUIPO and the EPO attracted coverage in specialised IP magazines throughout the year and beyond.
- Update of the joint EPO/EUIPO study on the economic impact of IPR-intensive industries: On 25 September the EPO and EUIPO jointly launched the third instalment of their study on the economic impact of IPR-intensive industries in Europe. In the five markets DE, FR, NL, AT, UK assigned to the EPO for pitching the campaign, 290 media articles were generated in four weeks, creating an AVE of € 1.44 million.

- "Market success for inventions – Patent commercialisation scoreboard: European SMEs": Presented at a high-level conference on SMEs in Dublin in November, the study caught the attention of several media outlets with a special interest in IP and SMEs, and has regularly featured in press articles ever since its release.

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IT: driving digital transformation

Digital disruption is impacting industries across the globe. At the EPO we believe that IT is the enabler for an organisation that remains 'future ready'. After an audit of our IT operations, we swiftly implemented a major restructuring in 2019 by building empowered, cross-functional teams focused on delivering value to users. Last year these teams started work on turning the ambitious IT vision set out in the EPO's Strategic Plan 2023 into a reality.

Essentially, our IT strategy is about reimagining future business processes to target multiple workflows with the same technologies. This calls for seamless collaboration between IT and other business units. By gaining a deeper understanding of stakeholders' priorities and embedding their feedback into a continuous delivery cycle, we will create tools that offer an optimal user and customer experience. Our approach can be broken down into five main streams:

We will create tools that offer an optimal user and customer experience.

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Supporting an agile workforce

In 2019 we began to rollout new laptops equipped with state-of-the-art software for all staff. Coupled with upgraded remote access for teleworkers, these measures gave the EPO a far more flexible workforce. By relocating our service desk to The Hague under a new contract, we also started to provide higher quality support to users in a digital environment.

Faster delivery via a new highway

Based on a new reference architecture (Kubernetes), we launched a technical platform for streamlined continuous delivery (an IT delivery "highway"). After building crossfunctional teams and improving co-operation with all areas of the EPO, we began to prepare several pilots and create product teams. These initiatives were designed to pave the way for fast-track digitalisation and paperless solutions for the patent granting process (PGP).

Better tools for short-term benefits

We continued to improve our existing tools in 2019, delivering short-term benefits for both examiners and formalities officers. These "early wins" included NPL search, easier access to original documents, a higher-performance eDrex and optimised questionnaires in CASE. For our external users, we enhanced tools by launching the new Espacenet and a pilot for eFiling 2.0, as well as expanding Federated Register, implementing CPC International and participating in WIPO-DAS.

Migrating to cloud-native architectures

One of our goals is to simplify the EPO's overly-complex application landscape, replacing it with a harmonised, open source IT architecture. We embarked upon this journey in 2019 by beginning to decommission obsolete hardware and software, and roll out state-of-the-art alternatives. Going forward, we intend to decouple from our legacy systems and migrate to cloud-native architectures. This will positively impact information security, lower operating costs and ensure that our key applications are future-ready.

Creating a continuous learning culture

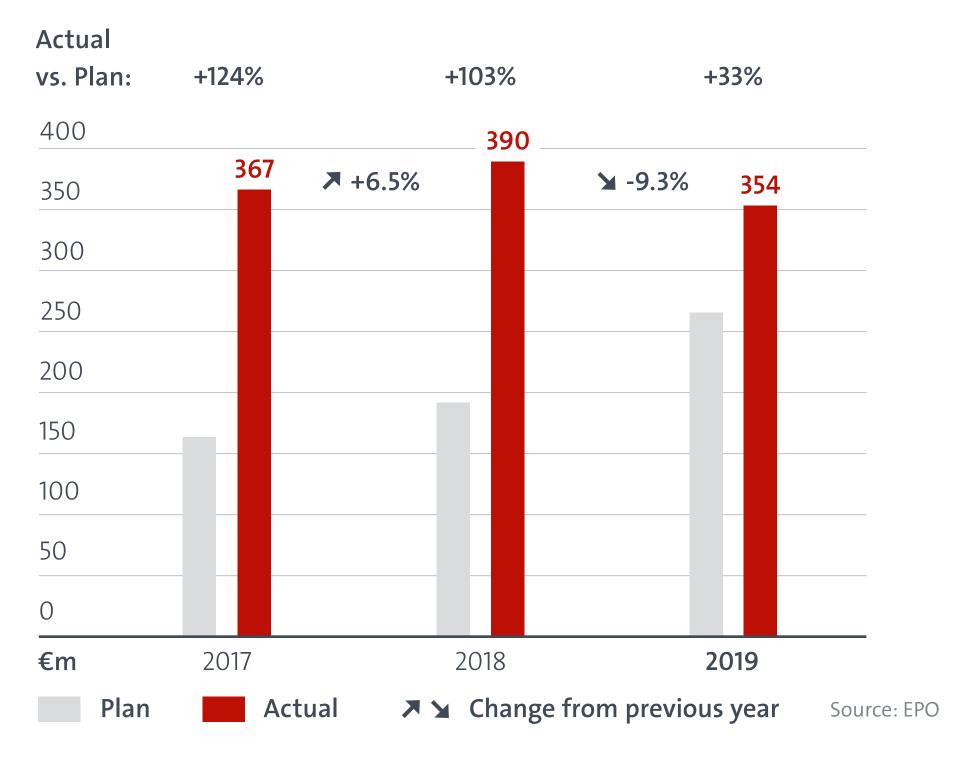
In 2019 we continued to promote a learning culture that equips our in-house IT experts respond effectively to uncertainty and adapt to stakeholders' evolving needs and even fail fast to bring some agility into our culture. Our approach to upskilling involved using design-thinking to engage in the PGP customer journey, adopting lean change management processes and setting up a specialised IT project office. Looking ahead, continuous learning will help us to fill skill gaps and boost staff engagement.

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Budget and finance

In 2019, the EPO achieved a standardised operating result of € 354m, one of its highest results to date, even if slightly below the 2018 figure. This reflects the high level of production of 421 250 search, examination, and opposition products (-2.1% compared to the 2018 peak) achieved in 2019.

Figure 13: Standardised operating result 2017 – 2019

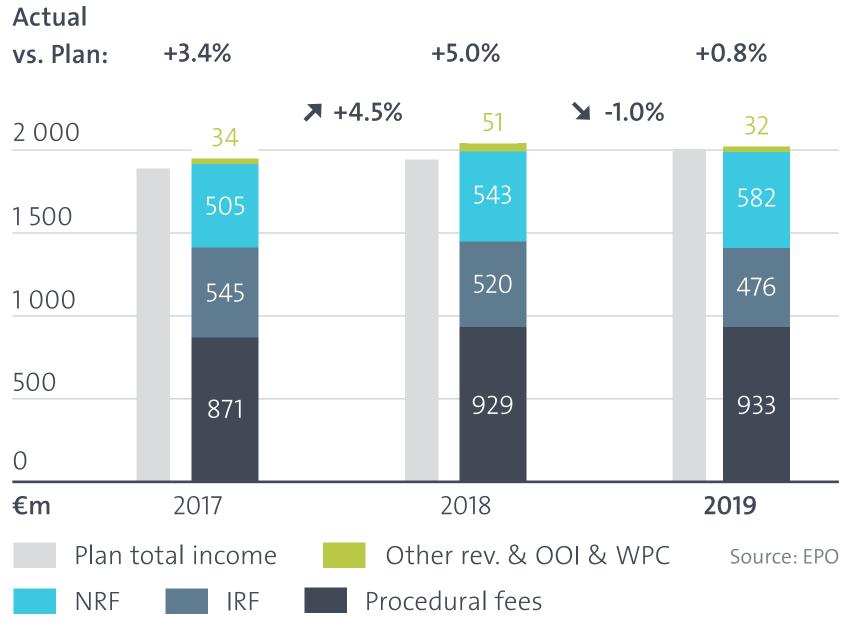


The EPO's revenues remained unchanged compared to 2018. Lower renewal fees for patent applications at \in 476m (-8%) were offset by higher renewal fees for granted patents, which totalled \in 582m (+7%). The revenues from procedural fees remained at the previous year's level (+ \in 6m, 0.7%), and growth in grant revenue compensated for the slight decline in search and examination.

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Figure 14: Standardised operating income 2017 – 2019



➤ Change from previous year

Budget surplus for 2019, after investments in the capital section, amounted to € 364m, exceeding forecasts, but remaining below the 2018 figure.

The IFRS operating result for 2019 was € -135m, marking an improvement of € 70m versus 2018. This was primarily due to a decrease in the current service cost for employee benefits resulting from a higher discount rate applied in 2019.

In 2019 the EPO generated a financial profit of € 1 348m, mainly resulting from gains on RFPSS assets (€ 1 435m) and EPOTIF (€ 325m), reduced by the interest cost on defined benefit obligation (€ 412m). It is worth noting that these results were achieved prior to the financial crisis in Q1 2020.

The value of the RFPSS assets at the end of the year was € 9 594m and the EPO Treasury Investment Fund (EPOTIF) closed the year at € 2 955m. The EPO's total assets amount to € 13 811m.

The equity of the Organisation decreased in 2019 by \in 6.8bn due to actuarial losses primarily resulting from lower interest rates applied at the year-end to the valuation of its post-employment benefit obligations. At the end of 2019 our negative equity amounted to \in -17.6bn.

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EPOTIF

In 2019 the EPO completed its implementation of the governance framework defined in the EPO Investment Guidelines (CA/F 18/17 Rev. 1). The EPOTIF Governance Framework regulations were issued by the President in March.

The Board of Auditors issued their report (CA/20/19) in April 2019, which confirmed that the set-up of the Master-KVG model and the internal structures and processes relating to the EPOTIF are in line with market practices.

The EPO created a new function, that of EPOTIF Risk and Compliance Officer, reporting directly to the President. The first EPOTIF Risk and Compliance Report was issued in July 2019.

The Investment Committee was set up in August 2019 and its first annual meeting was held in September 2019.

The Implementing Rules on EPOTIF Oversight were issued by the CFO in September 2019.

The external audit of the EPOTIF was performed in Q3 2019 and a reported was submitted to the BFC in October 2019 (CA/F 27/19). The auditors confirmed that the setup of EPOTIF is of high professional quality and adheres to best governance principles.

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Quality Report 2019 (CA/40/20 Add. 1)



Social Report 2019 (CA/40/20 Add. 2)

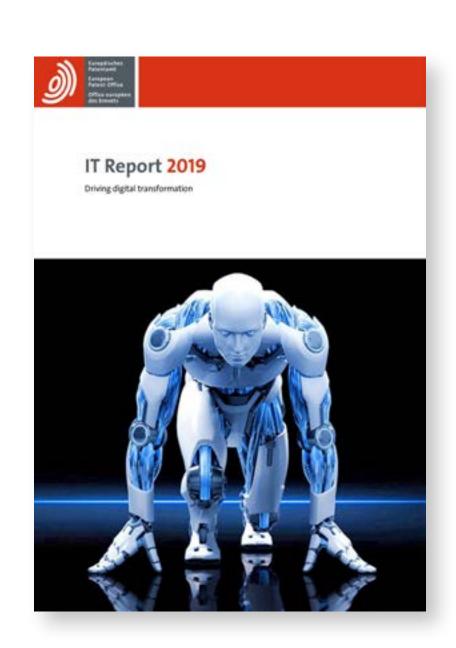


Engagement Report 2019 (CA/40/20 Add. 3)



Environmental Report 2019 (CA/40/20 Add. 4)

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IT Report 2019: driving digital transformation (CA/40/20 Add. 5)

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