

# **EPO Quality Report 2018**





#### **Foreword**

Since 2016 the EPO's annual quality report has contributed to greater transparency in our Quality Management System (QMS). It provides our users with a full picture of the way quality is evolving at the EPO, and it gives citizens throughout our Member States a better understanding of the patents that contribute so much to the European economy, and to Europe's attractiveness as a hub for innovation.

All those reading the report will see that we have made progress since the last annual quality report was published. For example, the report shows that the median time taken to send a communication or a grant, where there has been a request for accelerated examination (PACE), has improved. The User Satisfaction Surveys have also registered a slight increase in overall satisfaction, among the many other positive indicators.

By pursuing our ongoing quality initiatives, I'm confident we can continue to make incremental progress in the years to come and satisfactorily address any outstanding issues, such as a temporary dip in the results of our internal audit. After all, one of the strengths of the ISO 9001 certification system is that we can see where we need to make adjustments.

However, with the publishing of the Strategic Plan, I'm more convinced we now have an opportunity to raise our quality to another level altogether through a set of new initiatives. We have a chance to make significant advances in building upon a proud heritage of 43 years of high quality patents and to project legally robust patents throughout Europe. And with the work we carry out with our international partners, we have the opportunity to ensure that any progress we make on quality reverberates far beyond the shores of our furthest member states.

To achieve this, we have placed quality at the centre of major changes that we are aiming to implement throughout the Office over the next few years. As anyone who has read our new Strategic Plan 2023 will have seen, we have a vision for an Office in which quality is pervasive. We will be an organisation that works more collaboratively, so our highly skilled employees can share their knowledge and ensure greater accuracy when dealing with files. We have ambitions to undertake a digital transformation that will fundamentally change the way our examiners and formalities officers work and which will allow them to exploit new IT capabilities to achieve higher quality levels throughout the patent granting process. And we have aspirations of a re-engineered cooperation policy that will see our member states empowered with the right tools to achieve better quality both at the national and European level.

Those are just a few of the step changes we intend to take. They indicate that our aspirations of achieving higher quality still include modest adjustments to our QMS, but that we are now exploring major innovative solutions throughout the Office. With the support of our dedicated staff, I am convinced that these are goals which we will not just aspire to - but actively achieve.

However, as talented and as expert as the EPO's staff are, we cannot do this alone. The European Patent Office is an organisation that operates in an evolving IP system and the extensive dialogue we enjoy with our users has been crucial for delivering the services — and high standards — they require. And just as we have fundamentally evaluated the role of IT or cooperation in raising quality, we must not be afraid to ask if our dialogue is fit for purpose, or to ask direct questions of each other.

Over the last year we have grappled with a fundamental issue – does our perception of quality match that of our users? On occasion the answer has been "no". But rather than being afraid of such an answer, we should appreciate the frankness and honesty of the response. With our cards laid upon the table, we can set about finding a solution, so that when we speak of quality levels in the future, we can be confident that we share a common understanding from which we can all work together. And when we have those honest, frank and open discussions, we will be able to rely on this annual Quality report as an essential source of information for assessing our progress.

A great many staff at the EPO have dedicated themselves to making sure that this document contains all the information our users need and in a timely manner. I would therefore like to thank them for the extensive insight provided, and indeed to all those inside and outside the Office who are dedicating themselves to achieving higher quality European Patents. Though their contributions are witnessed by few, the positive effects of their work will be reaped by many.

António Campinos

Saturio Canning

President

## The EPO vision and mission

## Mission

As the patent office for Europe, we are proud to deliver high-quality patents and efficient services that foster innovation, competitiveness and economic growth.

#### Vision

We will empower and motivate our staff to set worldwide standards in intellectual property. Our Office will be effective and transparent, respond to the needs of our users and be agile in managing the changing demands and conditions of a dynamic global patent system. Our work will contribute to a safer, smarter and more sustainable world.

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## The EPO Quality Policy

The EPO is dedicated to meeting or exceeding its stakeholders' needs and expectations and to remaining the global quality leader in patent products and services. The performance and reliability of the EPO are based on the professional competence and personal responsibility of its management and staff. The management and staff commit themselves to the following principles:

#### Legal certainty

The users of the European patent system expect that patents granted by the EPO have the highest presumption of legal validity. The EPO therefore grants patents and provides decisions fully consistent with the applicable legal framework, in particular the requirements of the EPC and other international treaties, in both an efficient and timely manner.

#### Service

The EPO provides reliable, efficient and effective services for the benefit and satisfaction of all users of the European patent system and European society.

#### **Continual improvement**

The EPO commits itself to continually improving its training, tools, procedures and processes with a view to enhancing the thoroughness, consistency and timeliness of its products and services and the skills and competences of its staff.

#### Involvement

The EPO has a culture that encourages and empowers management and staff to participate in quality improvement activities.

#### Informed decision-making

Decisions taken at the EPO are based on facts enabling it to review, challenge and adapt planned actions as well as to improve the products and services it delivers.

#### **Openness**

The EPO engages with its users to enhance the quality and effectiveness of its processes and services.

#### Commitment

The top management of the EPO is committed to this Quality Policy through active participation in quality improvement activities and leadership by example.

In pursuing these principles the EPO builds on the culture of quality and excellence that has established its reputation.

## 1. Operational Highlights in 2018

2018 began with a reorganisation of the EPO's operational units which merged the directorates-general previously responsible for patent examination and operational support. The new Directorate-General Patent Granting Process consists of three sectors, each headed by a Chief Operating Officer (COO):

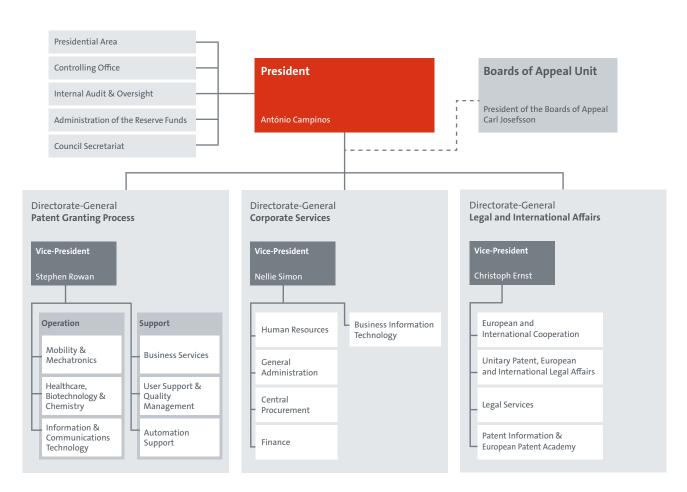
- Mobility and Mechatronics (Sector M&M)
- Healthcare, Biotechnology and Chemistry (Sector HBC)
- Information and Communications Technology (Sector ICT).

In order to provide more transparency, this report also contains performance results for each of these new sectors, where possible.

The reorganisation also brought changes to how staff in Directorate-General Patent Granting Process work. Formalities officers and patent examiners now work together in the same directorates and collaborate more closely on processing patent applications. Moreover, dedicated opposition and central formalities directorates were created within each of the three new technical sectors in order to harmonise practice and enhance the competencies of the 516 examiners and 117 formalities officers working on this procedure.

Five opposition and central formalities directorates have been created to ensure improved harmonisation in the opposition procedure.

Figure 1
Structure of the EPO (as of 15 May 2019)



In July 2018, António Campinos took office as President of the EPO, while three new Vice-Presidents – Stephen Rowan, Nellie Simon and Christoph Ernst – took up their duties on 1 January 2019.

Last year, the EPO's 4 276 patent examiners, supported by 615 formalities officers, delivered a record number of searches, examinations and oppositions. This growth in production and productivity resulted in a 31% reduction in the stock of pending cases since 2014 and has improved the EPO's timeliness performance.

Figure 2
Search, examinations and opposition products per year



Increased productivity and timeliness combined with reduced stocks improve legal certainty for all stakeholders.

Figure 3
Timeliness of search, examination and opposition procedures in 2018 (median averages)



The EPO has managed to reduce the stock by 31% in the past four years, bringing it to just under 19 months<sup>1</sup>.

Reduction of Backlog 2014 - 2018



## 2. The Foundations of EPO quality

#### 2.1 The EPC

The EPO is committed to ensuring that the patents it grants are fully compliant with the provisions of the European Patent Convention (EPC).<sup>2</sup> The EPC is the cornerstone of quality at the EPO. It specifies the criteria which inventions must meet in order to be patented, as well as the requirements applicable to applications. The EPC also governs the EPO's relationships with its applicants and third parties. For example, no patent may be granted or refused in examination or revoked or maintained in opposition without three skilled examiners reviewing the case and taking a joint decision.<sup>3</sup> Applicants, moreover, have the right to be heard<sup>4</sup> and third parties also have the right to file observations,<sup>5</sup> or even oppose a granted patent. The EPC also provides for the right to appeal EPO decisions before the boards of appeal, which carry out an independent review at second instance.<sup>6</sup> The EPC, therefore, is a robust legal framework that imposes quality controls and provides the checks and balances necessary at any step of the procedure to ensure fair treatment, consistency and predictability.

No patent may be granted or refused in examination (or revoked or maintained in opposition) without three skilled examiners reviewing the case and taking a joint decision.

<sup>1</sup> The stock is defined by the number of product orders (i.e. search, examination, opposition) for which a final legal decision is still pending with the EPO. A product order is pending irrespective of whether it is waiting for completion of the statutory period, or for action by the examiner or the applicant.

<sup>2</sup> https://www.epo.org/law-practice/legal-texts.html.

Articles 18 and 19 EPC. In relevant cases, opposition division may be enlarged by the addition of a legally qualified examiner.

<sup>4</sup> Article 116 EPC.

<sup>5</sup> Article 115 EPC

<sup>6</sup> Article 106 EPC

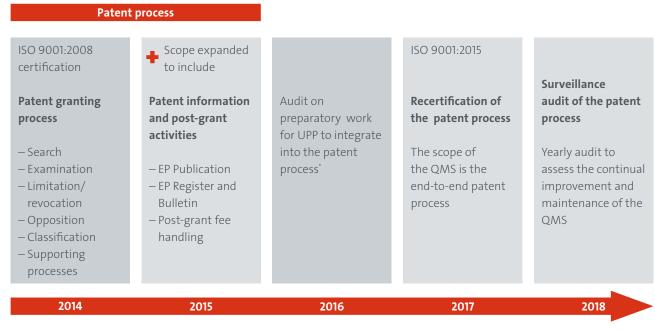
#### 2.2 ISO 9001 and the EPO's QMS

In the 2018 annual surveillance audit of the EPO's ISO9001:2015 certified QMS, no non-conformities were detected.

The EPO's Quality Management System (QMS) first achieved ISO 9001 certification in 2014 for the patent granting process. In 2015, the scope of the QMS was extended to cover patent information and other post-grant activities, and in 2017, recertification under the ISO 9001:2015 standard was achieved for the entire patent process. In October 2018, the QMS was subject to an annual external ISO 9001 surveillance audit, during which no non-conformities were identified and maintenance of the EPO's certificate was recommended.

Figure 5

#### Development of the EPO's QMS



 $\label{eq:continuous} \mbox{{\it "Ratification pending. Integration in the QMS after a period of operative implementation.}}$ 

#### 2.3 Recruitment and training

The EPO can be highly selective when hiring new staff: in 2018 there were over 11 000 job applications, leading to the recruitment of 22 new examiners and 31 non-examiner staff.

The key foundation for quality at the EPO is its exceptionally qualified and highly motivated staff. In 2018, the EPO had a total of 6 696 employees from 35 countries. Entry requirements are high. For example, prospective examiners must hold a master's or higher-level degree in a scientific field, be proficient in one of the EPO's three official languages and be able to understand the other two. The EPO is an attractive organisation for prospective employees and can be highly selective to ensure that only the best candidates are hired. In 2018 there were over 11 000 job applications (of which 4 222 were for the position of examiners), leading to the recruitment of 22 new examiners and 31 non-examiner staff.

Continuous development is also of strategic importance for the EPO. As an international organisation that faces new challenges every year, it must ensure that it provides its staff with the right skills to successfully do their job and adapt to changes in processes, tools

and procedures. The EPO Talent Academy offers a wide range of development programmes for staff, including examiner, language and leadership development, along with coaching and mentoring. Staff own their development and are given the support they need to grow in their jobs and within the organisation.

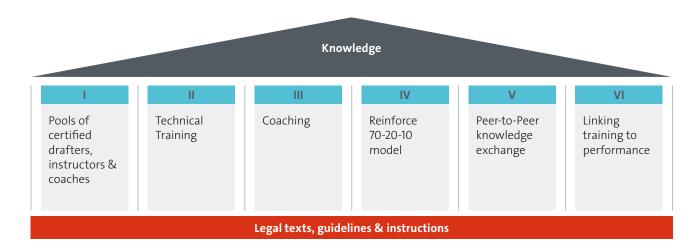
Newly recruited examiners participate in the EPO Talent Academy for new examiners. This journey includes around 45 days of instructor-led classroom training supported by peer coaching and on-the-job learning. Assessments at the end of the first and second years ensure that new examiners have the relevant skills and can meet the EPO's high quality standards. Examiners are considered fully trained after four years.

In addition to the initial Academy training for newcomers, experienced examiners are offered a range of courses to deepen their existing practical and procedural knowledge. For example, in 2018, the focus was placed on workshops on clarity and added subject-matter. Further courses help examiners to acquire specialist skills such as searching in chemical databases; or to take on additional roles, such as for opposition work.

A new approach to training formalities officers was launched in 2018 to enhance the quality of service provided to applicants and representatives. This included the establishment of a formalities officer development programme, incorporating a complete revision of the training materials to integrate blended learning techniques. In full alignment with the examiner development activities, the new approach also integrates peer coaching and on-the-job learning, as well as knowledge assessments.

New examiners receive 45 days of instructor-led classroom training as well as peer coaching and on-the-job learning. Examiners are considered fully trained after four years.

Technical training for formalities officers and examiners: development pillars



In 2018, 96.8% of all EPO staff participated in at least one development activity, including virtual learning sessions and e-learning.

#### 2.4 Documentation and tools

EPO examiners have access to the world's largest prior art collection which comprises over 1.3 billion technical records. In order to provide legal certainty as early as possible in the patent granting procedure, EPO staff issue comprehensive search reports in a timely manner. The EPO's documentation programme ensures that examiners cover an extremely broad scope of prior art when performing prior art searches. They have access to world's largest prior art collection, which comprises over 1.3 billion technical records in 179 databases. The collection contains 110 million patent documents, over 610 000 English-language abstracts and summaries of traditional knowledge documents originally published in India, China and Korea, as well as over 10 000 journal titles covering all areas of technology. They can also access numerous subscription-only external databases and collections. The EPO receives patent data from numerous IP offices worldwide and integrates it into its master documentation database (DOCDB). By continually expanding the collections of documents available and providing them to examiners in full-text form, the EPO ensures that its prior art searches are increasingly complete.

Thanks to Patent Translate,<sup>7</sup> a machine translation service developed by the EPO in co-operation with Google, examiners can understand and use prior art which is not in an official EPO language much more easily than before. Patent Translate is now available in Espacenet and the European Publication Server.

Figure 7
Countries contributing to DOCDB in 2018



<sup>7</sup> https://www.epo.org/searching-for-patents/helpful-resources/patent-translate.html#tab1.

#### 2.4.1 Asian prior art

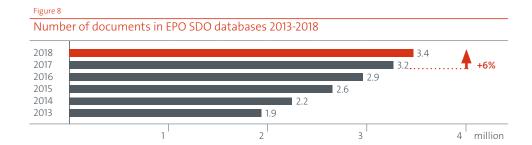
Asian prior art is increasingly important in numerous technologies and the EPO is continuously adding such citations to its collections. It now has over 50 million Asian-origin patent documents in its searchable databases.

#### 2.4.2 Standards documentation

Standards are a set of requirements for a specific item, material, component, system or service, or a particular method or procedure. They are developed to ensure the compatibility and interoperability of components, products and services. They are a central pillar of the modern knowledge economy and promote the dissemination of new technologies. The EPO continuously monitors developments to identify additional standards developing organisations (SDO) collections. Currently, EPO patent examiners can consult comprehensive literature collections from standardisation organisations including:

- European Telecommunications Standards Institute (ETSI)
- 3rd Generation Partnership Project (3GPP)
- Internet Engineering Task Force (IETF)
- International Telecommunication Union (ITU)
- Institute of Electrical and Electronics Engineers Standards Association (IEEE-SA)
- Digital Video Broadcasting Project (DVB)
- Open Mobile Alliance (OMA)
- oneM2M Standards for M2M and the Internet of Things
- International Electrotechnical Commission (IEC)

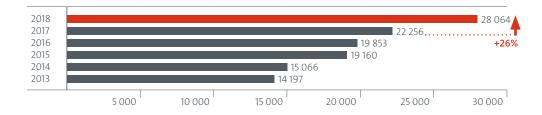
By continually expanding its collections various types of prior art such as standards documentation the EPO provides its staff with the resources they need to perform comprehensive searches.



The EPO has around 3.4 million standards documents (including draft versions) in its databases and they are being increasingly cited in EPO search reports. In some technical areas, most of the search reports issued by the EPO will contain at least one standards document (e.g. 66% for the field H04N19/008).

Figure 9

Total number of SDO documents cited in EPO search reports 2013-2018



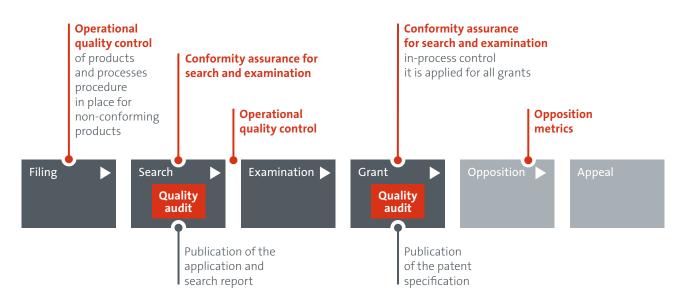
## 3. A Responsive Quality Management System

The EPO's system of checks is designed, as far as possible, to make sure that mistakes can be corrected before actions are sent to applicants.

The EPO's Quality Management System assesses procedures and products in order to identify opportunities for improvement. Input from external stakeholders is also crucial and plays a major role in the EPO's continual improvement activities.

#### Figure 10

Quality assurance throughout the patent process



<sup>8</sup> Methods or arrangements for coding, decoding, compressing or decompressing digital video signals.

#### 3.1 Conformity Assurance for Search and Examination

Conformity Assurance for Search and Examination – CASE – is an essential element of the EPO's Quality Management System. It keeps a record of in-process quality checks performed by the chairperson of the search/examining divisions for both searches and grants. Corrections are made before a file is sent to the applicant, thereby increasing the quality of our products. Moreover, CASE is used for continual internal improvement. Systematic quality issues can be identified and prevented from happening in the future, e.g. by means of training. CASE checks are performed on

- a sample size of 4% of the searches done (approx. 9 000 per year)
- all proposals for the grant of a patent (more than 150 000 per year).

In 2018, CASE was reviewed. It remains an important component of the QMS which will now also be used to help identify examiner training needs and target these efforts in a more effective manner. With this in mind, EPO external quality reporting will now focus on internal audit results (product audits carried out by Directorate Quality Audit) whereas CASE results will be used for internal continual improvement purposes. In addition, the office has also launched a pilot on increased collaboration (Collaborative Quality Improvement — CQI) where examiners are encouraged to consult even more intensively both within the examining division and within teams at various stages of the procedure.

#### 3.2 Quality Audits

The Directorate Quality Audit (DQA) is a key unit in the EPO's Quality Management System. It carries out two types of quality audit:

- audits on products (see sections 8.8 and 8.9.1)
- audits on processes.

DQA is part of Principal Directorate Internal Audit and Oversight, whose independence from operational departments is guaranteed by the fact that it reports directly to the President.

Internal QMS process audits are required by ISO 9001. They audit the compliance of procedures and working methods with the requirements of the standard and provide information on whether the QMS is being effectively implemented and maintained. In 2018, the internal audit plan focussed on the merger of the directorates-general previously responsible for operational aspects.

The audits confirmed that the QMS is being effectively implemented and maintained and that it was correctly integrated into the new end-to-end patent process.

Internal audits confirmed that the QMS is being effectively implemented and maintained and that it was correctly integrated into the new end-to-end patent process.

#### 3.3 Formalities Operational Quality Control (OQC-FO)

Following the reorganisation of the EPO's operational units in 2018, a review of the patent granting process quality control processes took place. In January 2019, the EPO introduced a new enhanced operational, mostly in-process quality control for formalities aspects (OQC-FO) which allow errors to be corrected before products are dispatched to applicants. It comprises three types of checks:

- Conformity assurance for search, examination and opposition products. These checks reflect the external user point of view on products which have recently been released or are about to be released by the EPO.
- Targeted checks running over a period of time. Here the focus is on internal processes and recent work done by formalities officers on specific quality issues.
- One-off targeted checks, where the focus is on internal processes to analyse areas of concern.

The checks are designed to be as in-process as possible so that errors are detected and corrected before delivery to users. The checks are carried out by a group of selected and trained quality officers. Organisational units cannot check their own files. Any non-conformities found are recorded and the quality experts give feedback to the formalities officers concerned so that corrections can be made.

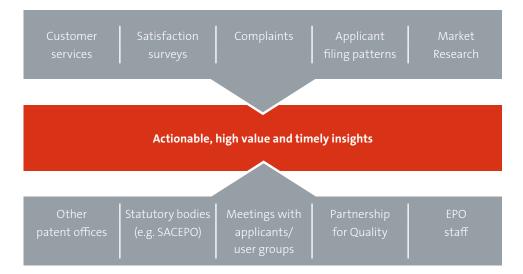
#### 3.4 User feedback mechanisms

User feedback is a crucial element of the EPO's ISO 9001:2015-certified Quality Management System (QMS). There are numerous mechanisms by which the EPO receives feedback and they are summarised in Figure 11. Some feedback can be assessed statistically (e.g. user satisfaction survey results). Other sources, such as minutes of meetings, must be assessed manually to extract pertinent information. The EPO's outreach activities are discussed in more detail in section 14. The EPO is currently improving the way it collects, manages and integrates user feedback in order to:

- generate a better understanding of user requirements
- further assist informed decision-making processes
- identify improvement opportunities

Figure 11

Sources of user feedback at the EPO

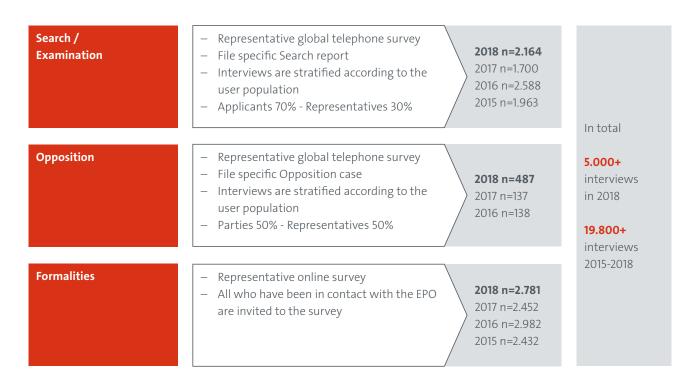


User feedback is a crucial element of the EPO's ISO 9001:2015-certified QMS and is actively used to identify improvement opportunities.

#### 3.4.1 User satisfaction surveys

For many years, the EPO has carried out comprehensive user satisfaction surveys (USS) covering all fields of technology over three-year survey cycles. To ensure impartiality, the surveys were conducted by an external contractor. Telephone interviews were carried out with users of the EPO's search, examination and opposition services in English, German, French, Japanese, Chinese and Korean, to ensure global coverage of major filing regions. In line with the Strategic Plan 2023, the EPO will further enhance the user engagement. In the area of user satisfaction surveys we will use 2019 to – together with our user community – redesign the user satisfaction survey where, ideally, all technical areas are surveyed every two years starting in 2020. The advantages will be that the new survey will be user-defined and will generate a complete picture every two years instead of every three years. Rather than being an EPO-centric survey, the new survey will be oriented more towards user needs, thereby allowing the Office to focus its improvements efforts on actual user expectations.

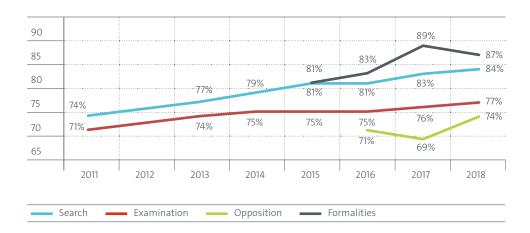
Figure 12
Methodology of 2018 user satisfaction survey



Overall satisfaction levels with the main operational aspects of the EPO's work are shown below. The figures show the percentage of respondents who were either satisfied or very satisfied with the services in question. Results show that over time satisfaction levels overall have risen. Satisfaction with specific aspects of the EPO's products and services will be addressed later in this report.

Figure 13

The percentage of respondents to the 2011-2018 user satisfaction surveys who were satisfied or very satisfied with the EPO's search, examination, opposition and formalities services (the opposition survey was conducted for the first time in 2016).



#### 3.4.2 Complaints

At the EPO, a complaint is defined as any feedback (written or oral) about a service or product which the user found to be unsatisfactory or below expectations in some way. Complaints are a particularly valuable source of user feedback, as they enable the EPO to identify areas where changes can be made to further improve quality. The EPO provides a convenient online tool for registering complaints, making it easier for users to bring potential issues to its attention.<sup>9</sup> In November 2017, the complaints handling procedure was incorporated into the EPO's Guidelines for Examination (E-VI, 4).

The EPO provides a convenient online tool for registering complaints and strives to respond to complainants within 20 working days.

Figure 14 (a)

Breakdown of complaints received in 2017 and 2018

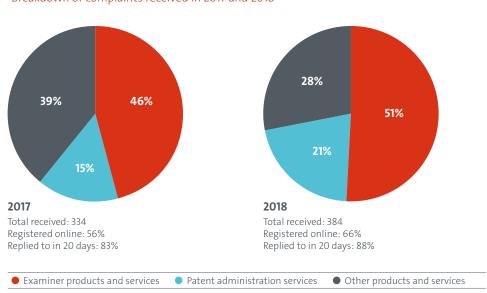


Figure 14 (b)
The number of complaints received 2015-2018

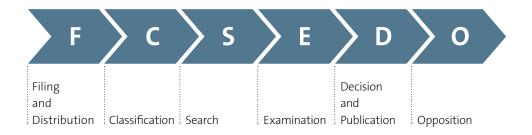


<sup>9</sup> www.epo.org/complaints.

## 4. The Scope of the EPO's Quality Management System

The EPO's quality management system covers the whole patent process, from filing, search, examination, limitation/revocation and opposition to patent information and postgrant activities. In this report, the process is set out as follows:

Figure 15
Scope of the patent process



## 5. Filing and Distribution



The filing of a patent application is the first step in the European patent granting process. Users expect an easy-to-use and fully accessible entry point as well as fast support in case they have questions or experience difficulties when filing an application.

#### 5.1 Pre-classification

Over 200 000 incoming applications need to be pre-classified each year. Correct pre-classification enables efficient distribution to the right examination directorate. In 2018, the quality of internal application routing was at 88-90%, and therefore consistently above the target (80%).

This ensured that searches were carried out by the right experts. It also helped to reduce the time taken to get the applications from the formalities officers in the Receiving Section to the examiners carrying out the search.

#### 5.2 Actions in 2018

In 2018, a total of about 12 000 operational quality control (OQC) checks were performed by formalities officer experts. The main issues detected were in the area of filing at the EPO as receiving Office, correct handling of the PCT preliminary examination phase (Chapter II) and incorrect handling of requests to enter the regional phase at the EPO early.

In order to address these issues, a variety of measures have been taken such as improvement of the training material for formalities officers, classroom and e-learning sessions and individual coaching. The areas remain under surveillance via the new, mostly in-process quality control for the formalities area (OQC-FO).

#### 5.3 Refunds

Formalities officers have to deal with fees and refunds throughout the entire patent granting process. Due to the design of the fee structure, a large number of refunds happen at the search stage. The EPO received some complaints because search fee refunds for applications previously searched by the EPO as part of a national procedure<sup>10</sup> were not always correctly allocated. In response the EPO introduced a form to support line managers in monitoring the correct assessment of such refunds. The form is already in use in one sector, and the other two will start using it during the course of 2019.

Workshops have been organised to improve the refund quality level and system improvements have been implemented to reduce the number of manual refunds and boost system support for formalities officers.



## 6. Classification



The Cooperative Patent Classification (CPC) is an extension of the IPC and is jointly managed by the EPO and the USPTO. There are approximately 250 000 classification entries.

The Cooperative Patent Classification (CPC) is an essential tool for the efficient and reliable retrieval of prior art during search, not only at the EPO but also for many other patent offices and external Espacenet users. CPC symbols are applied to patent applications and other documents by classifiers in the EPO and other offices and are used to retrieve these documents during searches. If any symbols are incorrect or missing, the time and effort required to retrieve a relevant document in a search will be increased, or it may even be overlooked altogether, leading to problems at a later stage in examination.

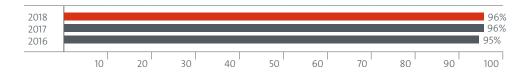
As co-owner of the CPC, together with the USPTO, the EPO has established a system of quality checks to ensure that CPC classification symbols are applied in a complete, correct and consistent way:

- Under operational quality control of classification (Class-OQC), the classification of around 50 000 classified applications and prior art documents is checked each year by expert classifiers. The results of the checks are used to give feedback to classifiers and to steer any localised improvement actions needed.
- A classification audit is carried out annually on a sample of documents by a team
  of trained auditors with the aim of establishing an Office-wide benchmark (KPI) for
  classification quality.
- Additionally, the CPC Quality Assurance programme monitors divergences between the EPO's classification work and that done by other offices through a mixture of expert checks and automated comparisons. The results of these checks are then used to reduce such divergences in the future.

In 2018, a new classification management (CLASMA) tool was launched which facilitates the document circulation process. At the end of 2018, to better reflect our classification priorities, new goals were defined in order to guide and prioritise our classification efforts and to align our classification indicators with our business needs.

Figure 16

Quality of classification (conformity in %)



#### 7. Search



As soon as the initial formal examination is concluded, the European search is initiated. The EPO strives to issue the European search report within six months of the filing of the application. The search report serves to provide the applicant, the examining division and, by means of its publication, the public with information on the relevant prior art. It is accompanied by an opinion on whether the application and the invention to which it relates meet the requirements of the EPC.

#### 7.1 Overall satisfaction levels

The following charts show the 2015 and 2018 results from the EPO's user satisfaction survey in response to the general question "How would you rate the EPO's search services in this technical area over the last 12 months?". In 2018, 84% of survey respondents were satisfied or very satisfied with the EPO's performance in this respect.

In 2018, 84% of survey respondents were satisfied or very satisfied with EPO search services.

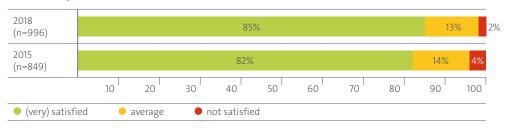
Figure 17

User satisfaction with EPO search services 2018 vs 2015, overall and for the three sectors in DG Patent Granting Process. Percentage figures per response category are shown.

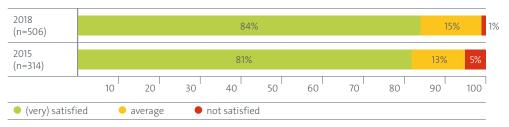
#### (a) DG Patent Granting Process overall



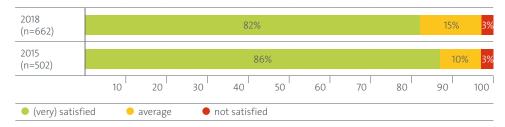
#### (b) Mobility and Mechatronics sector



#### (c) Healthcare, Biotechnology and Chemistry sector



#### (d) Information and Communications Technology sector



#### 7.2 Search timeliness

In 2018, the EPO issued searches and written opinions within a median time of 4.4 months, well below the median target of 6 months.

Figure 18

Median time taken to deliver EPO search reports (in months from receipt)

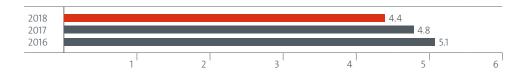
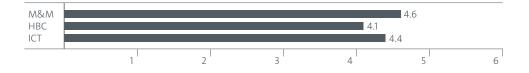


Figure 19

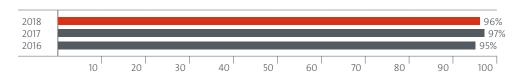
2018 median times taken to deliver EPO search reports (in months from receipt): breakdown by sector



As the International Authority processing the largest share of PCT searches, the EPO's high search timeliness performance benefits applicants, third parties and other patent offices across the globe.

The EPO has made improving PCT timeliness one of its main goals. The number of EPO international search reports published along with the application (i.e. A1 publications) has remained at a stable and high level for the past few years.

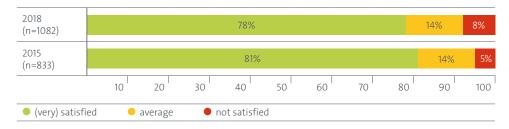
Figure 20
Percentage of PCT Chapter 1 international searches completed in time for publication along with the application (A1 publication)



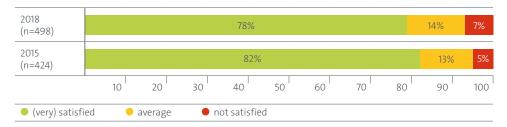
The EPO's user satisfaction survey asks users about their satisfaction with search timeliness. To generate greater accuracy, the question relates to the timeliness of specific applications. Search timeliness satisfaction levels in 2015 and 2018 are shown below. The overall satisfaction rate in 2018 was 78%.

User satisfaction with EPO search timeliness, 2018 vs 2015. Percentage figures per response category are shown.

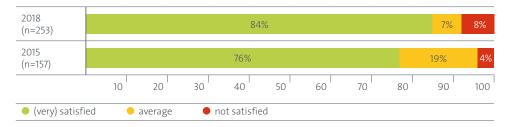
#### (a) DG Patent Granting Process overall



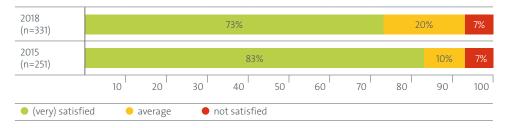
#### (b) Mobility and Mechatronics sector



#### (c) Healthcare, Biotechnology and Chemistry sector



#### (d) Information and Communications Technology sector



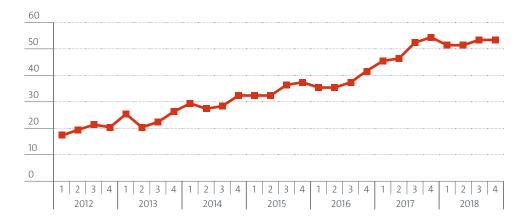
#### 7.3 Asian prior art coverage

Coverage of Asian prior art is an important element of the EPO's commitment to providing legal certainty to its users. In addition to the documentation experts who ensure that the EPO's prior art collections are as complete as possible, the Asian Patent Expert Group (APEG) plays a major role in the EPO's progress in this area. APEG consists of around 150 staff members who are committed to raising awareness of Asian prior art amongst examiners and who also provide training and ad hoc translation services. These and other efforts have resulted in increasing consultation and citation rates of Asian documents in EPO search reports.

EPO examiners increasingly consult machine translations of Asian prior art whilst performing search work. The figure below shows the average number of machine-translated, full-text Asian prior art documents assessed per search from 2012 to 2018. On average, the number of such documents consulted per search rose from 19 in Q1 2012 to 53 in Q4 2018.

Figure 22

Average number of machine-translated documents consulted by examiners per completed search report 2012-2018

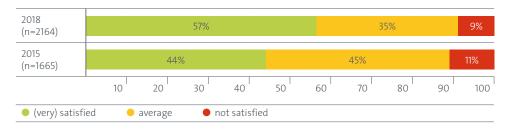


EPO examiners not only search within and assess Asian documentation, they also include Asian prior art in EPO search reports. In Q4 2018, 22.3% of EPO search reports contained at least one "Asian-only" citation, i.e. citations only available in an Asian language and thus having no Western family member. In the same period, 14.8% of EPO search reports contained at least one "Asian-only" citation which was deemed highly pertinent for the novelty or inventive step of the application being searched. As the results from the user satisfaction survey show below, the EPO's efforts with regard to Asian prior art have been recognised by the users of its services. Overall satisfaction rates rose from 44% in 2015 to 57% in 2018.

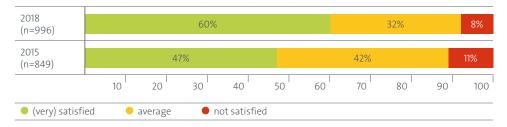
Figure 23

User satisfaction with EPO examiner coverage of Asian documentation in 2015 and 2018. Percentage figures per response category are shown.

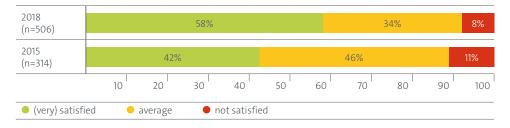
## (a) DG Patent Granting Process overall



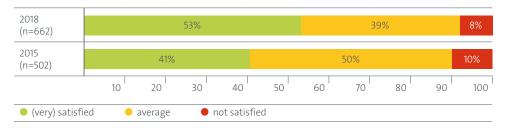
## (b) Mobility and Mechatronics sector



## (c) Healthcare, Biotechnology and Chemistry sector



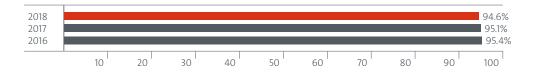
#### (d) Information and Communications Technology sector



#### 7.4 Quality Audit results

Directorate Quality Audit (DQA) also performs checks on search files every year. This is also an in-process check that allows mistakes to be corrected before dispatch. In 2018, conformity levels were 94.6%, in line with results from previous years.

Figure 24
Percentage of search reports found compliant by quality audits



#### 7.5 Actions taken in 2018

#### 7.5.1 New prior art documents cited in examination

The Guidelines for Examination state that search reports established by the EPO must cover all claims, unless only an incomplete or partial search can be issued. In particular, the search should be carried out in such a manner as to reduce to a minimum the possibility of failing to discover complete anticipations for any claims, or other highly relevant prior art. In other words, all EPO searches must be as complete as possible.

However, some users have reported that relevant prior art is sometimes being cited later in the proceedings. The introduction of new citations is sometimes required during examination, where, for example, the search for conflicting European applications could not be performed at the search stage. The substantiation of objections in response to amendments and arguments may also require the addition of new prior art. This may be the case, for example, when features from a non-preferred embodiment are introduced from the description or to demonstrate common general knowledge. A number of further such situations are listed in the Guidelines for Examination.

High-quality search reports are essential for providing the necessary legal clarity at an early stage. Consequently, the EPO has initiated quality monitoring and improvement actions to ensure that all pertinent prior art documents are identified and cited in EPO search reports. These measures focus on monitoring citations newly introduced during examination and determining whether they could have been cited earlier.

#### 7.5.2 Coverage of dependent claims

In response to user feedback, the EPO is focusing efforts on improving the treatment of dependent claims in search and examination.

Some applicants expressed dissatisfaction with the treatment of dependent claims during the search and examination phases at the EPO.

In response the EPO initiated efforts to ensure that the scope of search covers dependent claims and that there is an appropriate level of argumentation in the written opinion. These initiatives comprised the preparation of a presentation as training material for line managers as well as mandatory e-learning modules.

The effectiveness of these initiatives has been assessed via targeted operational quality control (TOQC). For a given period of time, line managers checked all search files completed by the first examiner and (where applicable) circulated the file within the division to verify the correct coverage of dependent claims in the search report and written opinion. The results are currently being assessed and improvement actions will be taken, if necessary.

#### 7.6 Outlook for 2019

#### 7.6.1 Non-unity objections

According to user feedback, the EPO's practice as to when to invite applicants to pay additional fees could be better harmonised to increase predictability for users. A root cause analysis established that the minimum arguments for raising non-unity objections were not harmonised, which led to different practices within the EPO. In response, the Guidelines for Examination were amended to emphasise the importance of minimum reasoning and to harmonise the practice as to when to invite applicants to pay additional search fees.

To determine the effectiveness of the measures implemented, all non-unity cases were systematically monitored before being dispatched to applicants using TOQC.

#### 7.6.2 Consultation during search

Reducing the EPO's search backlog means ensuring that the search workload is balanced between different directorates in accordance with available capacity. To promote a harmonised search practice for files treated by examiners in neighbouring areas of competence, mandatory consultation of nominated experts by the search examiner has been implemented together with special checks done by experts or by TOQC.

#### 8. Substantive Examination



Once an applicant has filed a request for examination, EPO examiners assess whether the application and the invention to which it relates meet the requirements of the European Patent Convention. This process results in the grant, refusal, withdrawal or abandonment of the application.

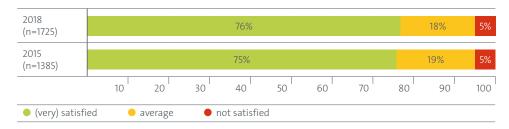
#### 8.1 Overall satisfaction levels

The following charts show 2015 and 2018 results from the EPO's user satisfaction survey in response to the general question "How would you rate the EPO's examination services in this technical area over the last 12 months?" Overall satisfaction rates in 2018 were at 76%, up slightly from 75% in 2015.

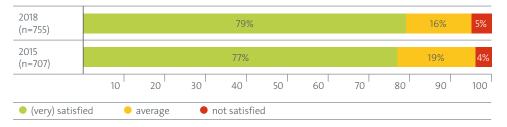
Figure 2

User satisfaction in 2015 and 2018 with overall examination services. Percentage figures per response category are shown.

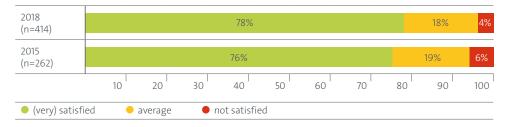
## (a) DG Patent Granting Process overall



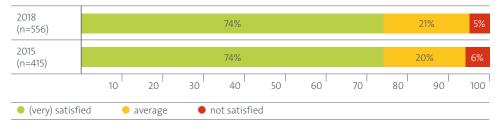
## (b) Mobility and Mechatronics sector



## (c) Healthcare, Biotechnology and Chemistry sector



#### (d) Information and Communications Technology sector



#### 8.2 Examination timeliness

As part of its Early Certainty from Examination programme, the EPO aims to complete examinations in a median time of 12 months. In 2018, a median examination pendency of 22.3 months was reached, up slightly from the 2017 figure of 22.1 months.

In January 2018, the EPO embarked on a specific programme to complete older examination files and this caused the examination timeliness indicator to temporarily rise. However, as the stock of older files is reduced, the overall median examination pendency will decline further towards the 12-month target.

Figure 26

Median examination timeliness (in months) under the Early Certainty from Examination programme

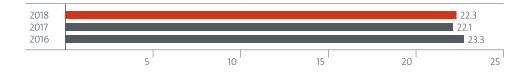
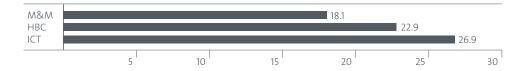


Figure 27

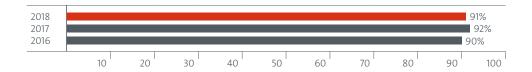
2018 median examination timeliness (in months) under the Early Certainty from Examination programme: breakdown by sector



Timeliness of PCT examination, has remained stable in recent years. The percentage of international applications filed with the EPO as IPEA<sup>11</sup> for which an IPER<sup>12</sup> was transmitted within 28 months was 91% in 2018

Figure 28

Percentage of PCT Chapter II examinations completed within 28 months from the priority date



<sup>11</sup> International Preliminary Examination Authority.

<sup>12</sup> International Preliminary Examination Report.

In order to monitor user satisfaction with examination pendency, a new question was included in the 2018 user satisfaction survey, the response to which indicates that overall satisfaction with examination timeliness was at 52% in 2018. As the question was newly introduced in 2018, there is no comparable data from previous years.

Figure 29

2018 user satisfaction with the EPO's examination timeliness for finished cases. Percentage figures per response category are shown.

#### (a) DG Patent Granting Process overall



#### (b) Mobility and Mechatronics sector



#### (c) Healthcare, Biotechnology and Chemistry sector



#### (d) Information and Communications Technology sector

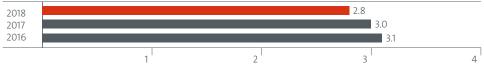


#### 8.3 Accelerated processing

This indicator shows the median time taken to send a communication or a grant where there has been a request for accelerated examination (PACE). The PACE time limit for sending a communication or a grant is three months; in 2018, the median time for sending the first communication in examination after an acceleration request was 2.8 months.

Figure 30
Median PACE timeliness for sending a communication in examination or a patent grant





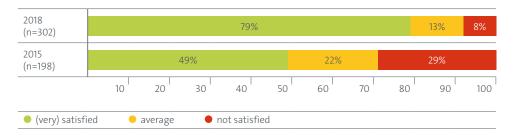
The 2018 user satisfaction survey asked "How satisfied are you with the timeliness of the response in such cases with accelerated examination under the PACE programme?" Overall, 79% of respondents were satisfied or very satisfied, a significant increase from 49% in 2015. Satisfaction levels for all three sectors in Directorate-General Patent Granting Process in 2018 were above 70%.

Figure 31

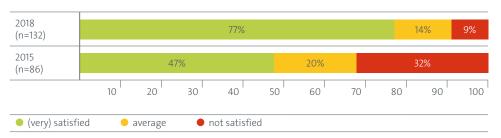
User satisfaction with the accelerated examination (PACE programme) in 2015 and 2018.

Percentage figures per response category are shown.

#### (a) DG Patent Granting Process overall

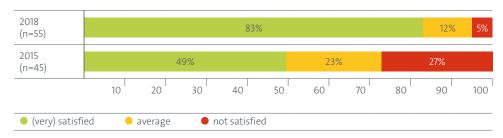


#### (b) Mobility and Mechatronics sector

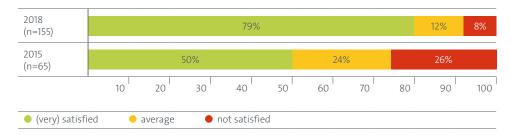


Accelerated examination under the PACE programme has improved in recent years, resulting in improved user satisfaction.

#### (c) Healthcare, Biotechnology and Chemistry sector



#### (d) Information and Communications Technology sector



### 8.4 Objections as to lack of clarity

The EPO is paying closer attention to clarity objections. It introduced a new question into its user satisfaction surveys and implemented a new training module.

Some users have stated that examiners are raising more clarity objections than before and that these can be "overly academic" or unfounded. The situation was analysed in 2017 and no evidence has been found to support these perceptions. An e-learning module for examiners aiming to harmonise non-unity practice has since been released. In order to monitor whether further actions, such as modifications of the Guidelines, are necessary, the 2018 user satisfaction survey asked how satisfied respondents were with the assessment of the clarity of their applications. Overall, 72% of respondents were either satisfied or very satisfied; variations between the sectors were small.

Figure 37

User satisfaction with the EPO's practice on clarity in in examination in 2018. Percentage figures per response category are shown.

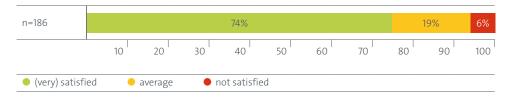
### (a) DG Patent Granting Process overall



#### (b) Mobility and Mechatronics sector



### (c) Healthcare, Biotechnology and Chemistry sector



#### (d) Information and Communications Technology sector



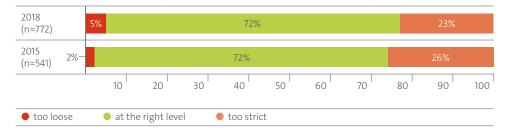
## 8.5 Assessment of inventive step

The user satisfaction survey includes the question "Do you consider the assessment of inventive step during the examination of your applications in this area to be about right, too broad or too strict?" The responses (shown below) indicate that perceptions of this aspect of practice in the three sectors in Directorate-General Patent Granting Process are similar, and that there has been little change in perceptions since 2015.

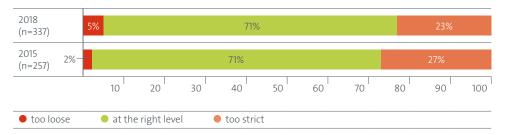
Figure 33

User views on the EPO's assessment of inventive step in examination (2015 vs 2018). Percentage figures per response category are shown.

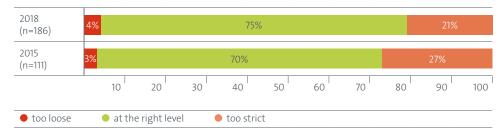
### (a) DG Patent Granting Process overall



#### (b) Mobility and Mechatronics sector



### (c) Healthcare, Biotechnology and Chemistry sector



### (d) Information and Communications Technology sector



## 8.6 Added subject-matter

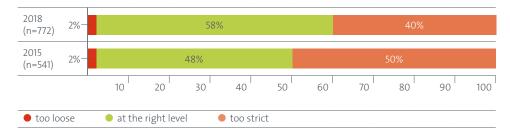
Increasing numbers of user satisfaction survey respondents report that the EPO's approach to added subject matter is "about right", while a significant proportion consider it still "too strict."

The user satisfaction survey includes the question "Do you consider the assessment of added subject-matter during the examination of your applications in this area to be about right, too broad or too strict?" 58% of 2018 respondents think that the EPO standard is about right, with only 2% saying that it is too broad. 40%, however, are of the view that the EPO approach is too strict.

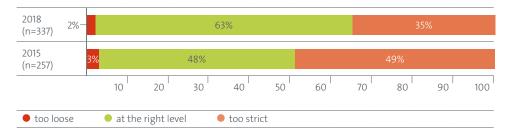
Figure 34

User views on the EPO's approach to added subject-matter (Article 123(2) EPC) in examination, 2015 vs 2018. Percentage figures per response category are shown.

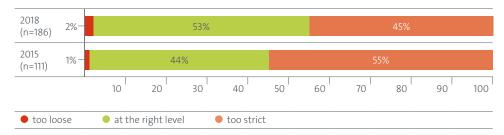
### (a) DG Patent Granting Process overall



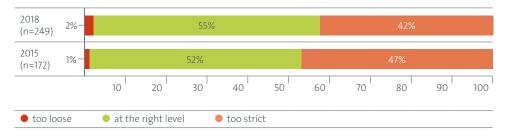
### (b) Mobility and Mechatronics sector



## (c) Healthcare, Biotechnology and Chemistry sector



### (d) Information and Communications Technology sector



### 8.7 Assessment of Computer-Implemented Inventions

User satisfaction survey respondents were also asked whether they thought that the technical content of CII applications was assessed too broadly, too narrowly or about right. In 2018, 72% of respondents said that the EPO was about right, an increase of 14 percentage points on the 2015 result. The percentage of respondents saying that it was too narrow declined from 38% in 2015 to 22% in 2018. A comprehensive training program on CII for examiners was implemented in 2018 in the sectors Mobility and Mechatronics and Healthcare, Biotechnology and Chemistry with the support of sector Information and Communications Technology to ensure a solid procedural knowledge on CII across operations. The chart below shows responses for Directorate-General Patent Granting Process overall.

Figure 35

Users' views on the EPO's assessment of the technical content of CII applications, 2015 vs 2018. Percentage figures per response category are shown.

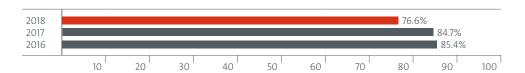


### 8.8 Quality Audit Results

The EPO's Directorate Quality Audit (DQA), which is independent of Directorate-General Patent Granting Process, audits the compliance of products delivered by patent examiners and formalities officers with legal requirements. Between 1 October 2017 and 30 September 2018, DQA performed 750 audits of applications proposed for grant.

The 2018 results of the quality audits are lower than in previous years. The difference between the values for audit years 2018 and 2017 indicates an actual decrease in the compliance rate. The audits produced targeted recommendations for improvement that are currently being addressed by specific actions.

Figure 36
Percentage of patent grants found compliant by quality audits



As a first response, the President decided to enlarge the sample size for the grant product audit from 750 to 1100 (+350), to have a more precise confidence interval width from  $\pm$ -2.9% to  $\pm$ -2.5%. This sample size should also permit limited post-process analyses of particular sub-groups (e.g. sectors).

#### 8.9 Actions taken in 2018

### 8.9.1 Actions arising from Quality Audit results

Following the decline in the compliance of proposals for grant, urgent measures were taken:

- Audits on applications proposed for grant are now performed in-process so that any errors may be corrected before an office action is dispatched to the applicant.
- A more detailed reasoning is now mandatory when examiners intend to propose an application for grant to the other members of the examining division. This enhanced reasoning covers, in addition to other matters, inventive step, added subject-matter and patentability. It helps to support the decision-making process by the chair and the second member of the examining division. Compliance with this requirement will be monitored by TOQC.
- In addition, when examiners intend to propose an application for grant, they must specify for each document previously used as a basis for a novelty or inventive step objection, why it is no longer considered prejudicial. This will be monitored by TOQC.
- Various mandatory trainings have been provided to examiners (e.g. Article 123(2) EPC)
   and more are planned for the near future (e.g. on novelty and clarity).
- The EPO is committed to improving its performance and aims to bring the grant conformity indicator to previous levels, or higher. In 2019, the quality audit grant conformity levels will be closely monitored, as well as the above (and further) improvement actions.

### 8.9.2 Intention to grant (Rule 71(3) EPC)

As a result of the Early Certainty initiative, there has been a significant increase in the number of Rule 71(3) EPC communications (intention to grant) issued in recent years.

Some users have expressed the view that the number of mistakes in Rule 71(3) EPC communications has generally increased. In addition, the EPO has also received feedback from applicants who claim that, increasingly, amendments made by the examining divisions are not in line with the limits set out in the Guidelines for Examination.

The EPO has analysed the matter on several occasions and has found that the applicant disapproval rate for the text proposed for grant has increased only slightly in recent years (it is currently around 14%). This is due to a number of factors. For example, applicants may introduce changes which are not directly related to any amendment introduced by examiners. In addition, some examining divisions have made amendments to the text proposed for grant which were not approved by applicants.

Actions have been taken to remind examiners of the applicable Guidelines and further analyses will be made in the future.

As a result of internal data and user feedback, the EPO is undertaking a number of actions to improve quality in examination.

### 8.9.3 Formal aspects during examination

Quality checks are carried out on a statistically relevant sample of the production covering the following aspects:

- correctness of requests for decisions in the formalities area
- accuracy and consistency of closure of examination proceedings
- accuracy of PCT new demands (IPEA 401) and written opinions (IPEA 409)

Based on the results of these checks workshops were organised on specific topics such as dispatch of communications relating to intentions to grant a patent or amendments received before the start of examination. Also, practical sessions were organised where formalities officers could bring files and ask experts about them.

## 9. Decisions and B Publications



The EPO sends the agreed text for patents to be published in image form to an external publisher. Where text aspects are not unambiguously clear, the publisher will send an enquiry to the EPO. The EPO monitors the frequency and content of these enquires and has an internal feedback loop to the examining divisions. In 2018, about 4.2% of published patents had an enquiry from the publisher.

During production of the publication documents, the text quality of each weekly batch is monitored using statistically relevant samples. The required quality level of 99.995% was exceeded in each publication week.

Various other aspects of B publication documents, including tables and formulas, are also monitored via targeted post-production checks.

# **10. Opposition Procedure**



Opposition is a procedure which demands high levels of expertise from examiners and formalities officers alike. Every year, around 4 000 opposition cases are concluded at the EPO within the opposition and central formalities directorates (OCFDs). There are five OCFDs with more than 500 selected examiners, who spend up to 30% of their time on opposition tasks, and 117 formalities officers. This concentration of resources on the opposition procedure within the directorates brings benefits to users of the system, including:

- enhanced opposition competencies for the examiners and formalities officers working on this procedure
- improved harmonisation of opposition practices
- increases in quality and efficiency
- improved timeliness

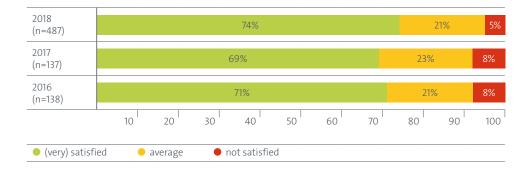
Every year, around 4 000 opposition cases are concluded at the EPO within the opposition and central formalities directorates.

### 10.1 Overall satisfaction rates

Overall satisfaction with the EPO's opposition procedure stood at 74% in 2018, up 3% on 2016. Earlier surveys, however, were carried out on smaller sample sizes.

Figure 37

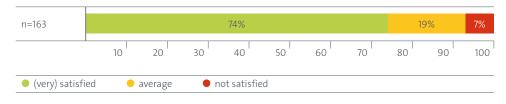
Overall satisfaction with the EPO's opposition procedure, DG Patent Granting Process overall, 2016-2018. Percentage figures per response category are shown.



For the previous pilot surveys on opposition (2016 and 2017), it was not possible to calculate results by sector because of the small sample sizes used. The sector-specific results below are therefore for 2018 only. As shown, satisfaction levels were similar.

Figure 38
Satisfaction with the EPO's opposition procedure by sector in 2018. Percentage figures per response category are shown.

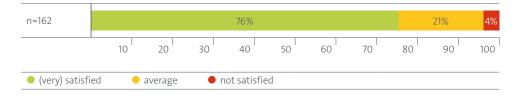
### (a) Mobility and Mechatronics sector



### (b) Healthcare, Biotechnology and Chemistry sector



#### (c) Information and Communications Technology sector



## 10.2 Timeliness of the opposition procedure

EPO opposition pendencies dropped by 6.2 months between 2016 and 2018. User satisfaction with opposition timeliness almost doubled during this period.

The duration of the opposition procedure fell to 18.6 months in 2018 (median) from 22.4 months in 2017.

Figure 39

Median duration of the opposition procedure in months, 2016-2018

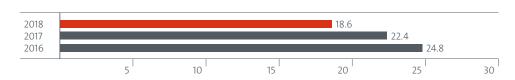
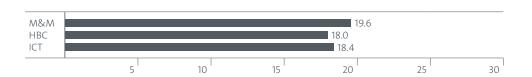


Figure 40

2018 median duration of the opposition procedure in months: breakdown by sector

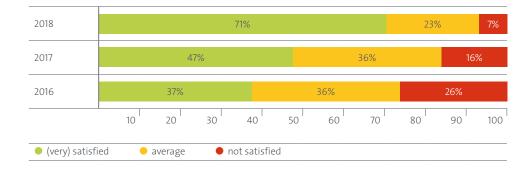


Since the implementation of Early Certainty from Opposition and the new opposition procedure in 2016, user satisfaction with timeliness in opposition has improved significantly from 37% in 2016 to 71% in 2018. User satisfaction with timeliness in the three Directorate-General Patent Granting Process sectors in 2018 stood at 65% for Mobility and Mechatronics, 73% for Healthcare, Biotechnology and Chemistry and 72% for Information and Communications Technology.

Figure 41

User satisfaction with the overall duration of the oppo

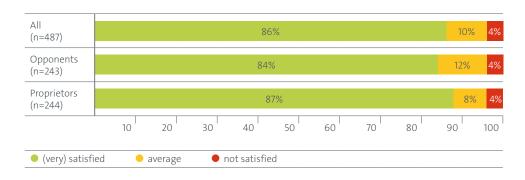
User satisfaction with the overall duration of the opposition procedure 2016-2018. Percentage figures per response category are shown.



## 10.3 Satisfaction with other aspects of the opposition procedure

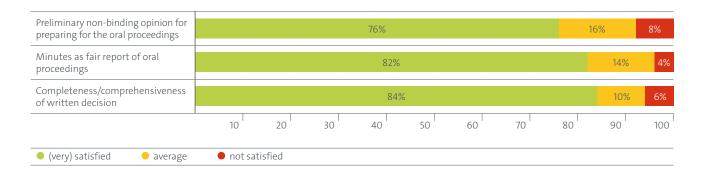
Fair treatment is essential in EPO procedures and the 2018 user satisfaction survey showed that 86% of respondents felt fairly treated, regardless of the outcome. The results by sector were 84% for Mobility and Mechatronics, 88% for Healthcare, Biotechnology and Chemistry and 81% for Information and Communications Technology.

Figure 42
User satisfaction with fairness of treatment in the opposition procedure in 2018.
Percentage figures per response category are shown.



In 2018, 86% of user satisfaction survey respondents felt fairly treated during the opposition procedure, regardless of the outcome.

Figure 43
User satisfaction with other aspects of the opposition procedure in 2018. Percentage figures per response category are shown.



#### 10.4 Actions taken in 2018

### 10.4.1 Substantive examination in opposition

Although user satisfaction with its opposition services is already at a very high level, the EPO wants to continue to improve. One of the main elements required is an effective and efficient operational quality control for substantive examination in opposition. This has been developed over 2018 and was rolled out to all opposition and central formalities directorates on 1 April 2019.

### 10.4.2 Formalities officers' work on opposition

In the opposition formalities area, quality checks were done on a statistically relevant sample of the production covering the following aspects:

- admissibility
- oral proceedings preparation
- decisions

Two of the main deficiencies identified were the incorrect calculation of the final day for making written submissions and the timely transmission of submissions to all parties.

To address these issues, instructions were improved, and workshops and other types of training were held. The effectiveness of these steps is being measured via operational quality control for formalities officers (OQC-FO).

### 11. Formalities Services

The EPO monitors user satisfaction with regard to various aspects of formalities services In 2018, respondents to the EPO's user satisfaction surveys were asked about their experience with formalities services during the previous 12 months.

Figure 44

User satisfaction with the EPO's formalities services. The EPO contacts users as a result of a previous enquiry. Percentage figures per response category are shown.

### (a) DG Patent Granting Process overall



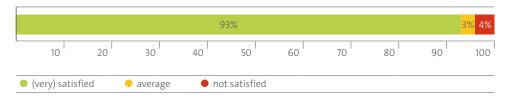
### (b) Mobility and Mechatronics sector



### (c) Healthcare, Biotechnology and Chemistry sector

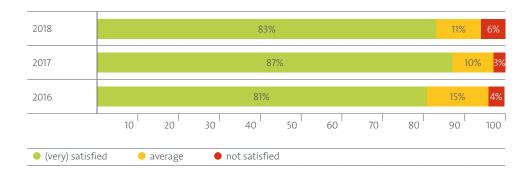


### (d) Information and Communications Technology sector



With regard to freetext communications issued by formalities officers, satisfaction levels in 2018 stood at 83%, down slightly from 2017 results. The results by sector were 84% for Mobility and Mechatronics, 81% for Healthcare, Biotechnology and Chemistry and 85% for Information and Communications Technology.

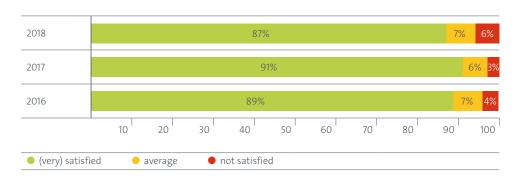
User satisfaction with freetext communications, 2016-2018. Percentage figures per response category are shown.



An internal audit by Directorate Quality Audit revealed that in general the free-text communications issued by formalities officers are of good quality. However, the free text formulations used were not uniform and standard clauses were not available. In response, a collection of standard clauses will be provided and an awareness campaign will be launched. Improvements will be measured using TOQC.

The EPO strives to handle external enquiries as quickly as possible. For that reason, the user satisfaction with the promptness of enquiry resolution is also regularly monitored. Overall satisfaction levels in 2018 stood at 87%. The results by sector were 87% for Mobility and Mechatronics, 86% for Healthcare, Biotechnology and Chemistry and 88% for Information and Communications Technology.

User satisfaction with promptness/timeliness of enquiry resolution, 2016-2018. Percentage figures per response category are shown.



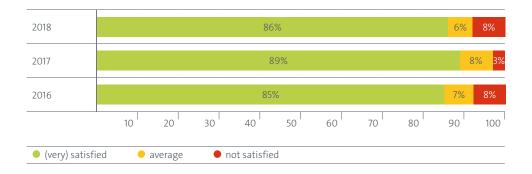
# 12. Patent Information and Post-grant Activities

This area covers all activities related to the publication of patent information products and services and the management of post-grant information. Publishing correct patent specifications is very important for the legal certainty users expect from patents granted by the EPO. The reliability of publication and post-grant services is essential for the EPO's management of post-grant fees. The EPO closely monitors the timeliness of these operations to ensure that no delays are encountered in bringing the information to the public.

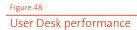
### 13. Customer Services

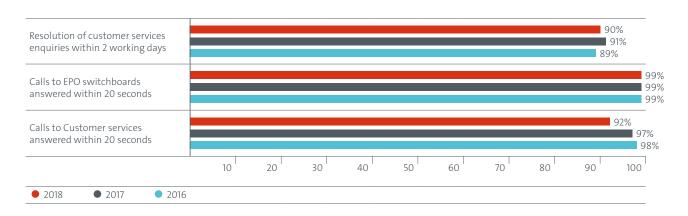
In 2018, respondents to the EPO's user satisfaction surveys were asked about their experience with customer services in the previous 12 months.

Figure 47:
User satisfaction with EPO's customer services, 2016-2018 (when the user contacts the EPO).
Percentage figures per response category are shown.



The EPO's User Desk is dedicated to improving user interaction and also understanding the business logic of users. A single point of contact has been established to enable a transparent workflow for answering customer queries in a timely and satisfactory manner and to improve user services. In total, 71 600 enquiries, registered as service tickets, were directed by the User Desk to the various operational services in 2018. Overall, users are satisfied with formalities and customer services.

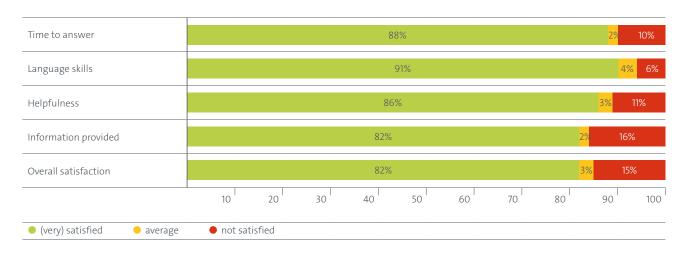




Each user enquiry is captured in the customer relationship management (CRM) tool with an electronic ticket (CRM ticket) to track the whole workflow from receipt to resolution of the matter. After resolution of the CRM ticket, the user automatically receives an e-mail with the possibility to provide feedback. Feedback can be given in the following categories: time to answer, language skills, helpfulness, information provided and overall satisfaction. The results of customer sentiment analysis are followed up internally and used for continual improvement in a structured way.

Figure 49

Customer sentiment results 2018. Percentage figures per response category are shown.



#### 14. User Outreach Activities

#### 14.1 Events in 2018

Quality is not limited to internal products and services; it extends to the way patents are drafted by our applicants. To this end, a series of 32 conferences, events and workshops, including patent drafting workshops, paralegal events and conferences on artificial intelligence and blockchain, attracted some 1 664 participants. In addition, 13 applicants visited the EPO to exchange views on their patent strategies with EPO management and examiners.

### 14.2 Account Manager activities

Continuous and direct interaction between applicants and EPO account managers has been established to respond to user needs and maximise the benefits of automation. The account management concept was broadened in 2017 to include non-European applicants. Account managers contribute to continuous improvement by gathering business information which helps to improve EPO tools and procedures. In 2018, EPO account managers undertook 65 visits to support mainly patent attorneys and paralegals in their approach to drafting and filing patent applications.

#### 14.3 Technical missions

The EPO has always had an extensive outreach programme whereby examiners and other staff visit stakeholders to

- inform them about developments in the legal framework,
- learn about the latest technological innovations,
- discuss specific aspects of practice and procedure,
- gain important feedback on EPO performance.

In 2018, over 528 examiners and other staff of Directorate-General Patent Granting Process visited 619 different companies. Feedback from these visits is routinely assessed and collated in order to identify opportunities for improvement, awareness issues and areas where EPO staff are performing well.

In 2018, over 528 examiners and other staff of Directorate-General Patent Granting Process visited 619 different companies. Feedback obtained was assessed to identify improvement opportunities.

### 14.4 Partnership for Quality

The EPO places a strong emphasis on consultation with stakeholders throughout the world. For several years, the EPO has been holding dedicated "partnership for quality" meetings with user organisations in Europe, America and Japan. Recent years have seen increasing filings from China and Korea at the EPO and as a consequence, the EPO is increasingly engaging with these stakeholders. Currently, the EPO is exploring ways of further improving its outreach activities in order to enhance dialogue and obtain improved feedback on the quality of its products and services.

### 14.5 SACEPO Working Party on Quality

The SACEPO Working Party on Quality meeting has proved to be a valuable forum for engagement between the EPO and its stakeholders. The Standing Advisory Committee before the EPO (SACEPO) Working Party on Quality was set up to engage with users and gather feedback on quality at the EPO. It forms part of the EPO's strategy to continuously improve its products, services and communication with users.



Participants at the SACEPO Working Party on Quality meeting in February 2018

The group includes representatives from user associations in all IP5 jurisdictions, as well as delegates from European industry and practice. The 2018 meeting opened with an overview of the EPO's recent structural re-organisation and the positive effect it will have on quality and efficiency. Participants welcomed the merger of the EPO's User Support and Quality Management departments, which aimed to reinforce the link between user needs, EPO services and quality.

Further presentations covered ongoing quality improvement measures and efforts to improve timeliness. As the meeting aims to address users' needs, a large part of the day was devoted to discussing points raised by the working party's external members and following up on the actions resulting from the previous year's discussions. The main topics addressed were timeliness, the EPO's approach to quality management and user feedback, and advances in the use of Asian prior art.

#### 14.6 Praktika intern

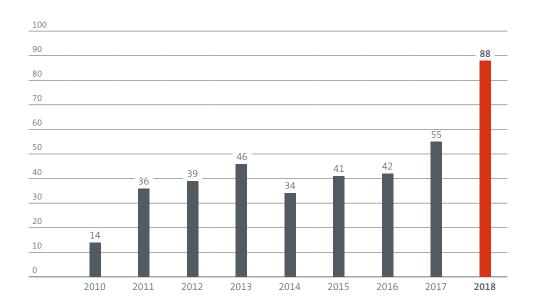
Organised by the European Patent Academy, the Praktika Intern programme is designed for experienced professional representatives. In 2018, 19 interns spent three weeks at the EPO working on actual case files under the supervision of an examiner. The combination of the interns' experiences and feedback from these programmes is extremely valuable in helping the EPO to understand user needs.

#### 14.7 Praktika extern

The Praktika Extern programme sends experienced EPO examiners to patent attorney firms in the EPC contracting states, as well as China, Japan, the Republic of Korea and the USA. All IP5 areas are therefore covered by the programme. Participating examiners gain a better understanding of the work of patent attorneys as well as the issues and challenges in the world of intellectual property. Host companies benefit from working directly with experienced examiners and gain deeper insights into EPO practice. The programme began in 2010 with 15 examiners. In 2018, 86 examiners were hosted by companies in 19 countries. Feedback obtained by examiners during their internships is used for further improvement of the EPO's products and services.

Figure 50

Number of examiners participating in Praktika Extern 2010-2018



### 14.8 The European Patent Academy

The Administrative Council created the European Patent Academy to promote and support patent-related IP training within Europe. The Academy either delivers or contributes to hundreds of seminars and workshops each year, often at the request of third parties seeking EPO or external IP expertise for their own programmes. Examiners, directors and other staff from across the EPO are involved in the Academy's activities each year.

To complement classroom training, the Academy's Learning Management System brings the EPO's knowledge and expertise to a much wider audience by providing training online.

The Academy works with the national patent offices in the EPC contracting states, the European Commission, WIPO, EUIPO, the epi and others. These partners are also sources of IP teaching competence, meaning that the Academy often transfers skills and knowledge from one external institution to another. The training provided focuses on the following five target groups (the names of the programme areas are given in brackets):

- staff of national patent offices and related institutions (Institutional Strengthening)
- EQE candidates and European patent attorneys (Professional Representatives)
- IP judges and IP litigators (Judicial Training)
- universities and technology transfer offices (Academia)
- current and future users of the European patent system (Innovation Support)

## 15. Closing Remarks

In this third edition of the Quality Report, we have continued to build on transparency and clarity. We have identified areas of improvement based on feedback from the user community and the initiatives which we are undertaking to move forward. This continual improvement process is a key pillar of our quality management system.

2018 was characterised by the successful reorganisation of EPO operations. This resulted in the merging of the former Directorate-General Operations with Directorate-General Operations Support to create the new Directorate-General Patent Granting Process. Affecting almost 5 000 staff members, the reorganisation brought together examiners and formalities officers, who now work more closely together in the same units, thus fostering an even more collaborative approach to their daily work.

Externally, we intensified in 2018 our engagement with our user community in the area of quality. Our efforts to define quality and align quality perceptions both internally and externally will eventually allow us to advance our quality endeavours in alignment with the user community. This is something that we will be seeing more of in 2019.

A frequently re-occurring topic in discussions with our users is adapting operations to meet the challenges posed by the increasing importance of computer-implemented inventions (CII) and the rapid permeation of these technologies into other technical areas. To ensure the harmonised and correct treatment of such applications, a full revision of the CII content of the Guidelines was completed and a network of CII experts was established throughout Directorate-General Patent Granting Process.

The EPO's user satisfaction survey results of 2018 showed further increases in user satisfaction with our services. 84% of survey respondents were satisfied or very satisfied with EPO search services (up 1%), 77% with examination (up 1%) and 74% with opposition (up 5%). A slight decrease was reported in the area of formalities examination, although from a very high level (89% to 87%).

Despite the high levels of user satisfaction with EPO products and services, internal audits on the quality of proposals for grant have indicated a decline in compliance from 84.7% in 2017 to 76.6% in 2018. These results have been carefully analysed and a number of urgent improvement actions are being taken.

With regard to timeliness and productivity, the EPO continued to provide improved service to its stakeholders in 2018. As the EPO moves towards a steady state of timely, high quality and efficient processing in the coming years, the question of optimal procedural lengths for different applicants will become increasingly important.

User feedback is crucial for the EPO in all aspects of quality. As this report shows, we take user feedback very seriously and it represents one of the core sources of information we use to improve our quality. As we move forward towards the goals of our Strategic Plan, the EPO will become even more user-oriented than before because we recognise that providing effective service is dependent on partnership and co-operation between the EPO and its stakeholders. I look forward to playing my part in that transition and to ensuring that the EPO remains user-oriented in terms of delivering high quality products and services in an efficient manner.

I hope that you found the 2018 Quality Report an interesting read. As always, we welcome your suggestions for improvement. Please write to quality@epo.org.



Stephen Rowan Vice-President DG 1

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