EUROPEAN MEDICINES AGENCY
SCIENCE MEDICINES HEALTH

12 June 2019
EMA/112688/2019
European Medicines Agency

Annual activity report 2018

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Management Board's assessment report

The Management Board,

- having regard to Regulation (EC) No 726/2004 of the European Parliament and of the Council of 31 March 2004,
- having regard to the Financial Regulation applicable to the budget of the European Medicines Agency ('the Agency') and in particular Article 47 thereof,
- having regard to the 2018 work programme of the Agency, adopted by the Management Board at its meeting in December 2017,
- having regard to the annual report 2018 of the Agency adopted by the Management Board at its meeting in March 2019,
- having regard to the annual activity report 2018 of the Agency presented to the Management Board at its meeting of 12 June 2018,

1. Recognises that 2018 was another challenging year for the Agency and welcomes the results presented in the annual report 2018, as well as the work programme delivered in 2018 despite the challenges presented by the Brexit circumstances. Notes also that a number of activities were scaled back, delayed or postponed due to Brexit or other external circumstances.
2. Acknowledges that the Business Continuity Plan put in place by the Agency has well identified and preserved the core activities of the Agency, and looks forward to the Agency's plan to resume suspended and reduced activities as soon as resources allow. Is concerned, however, about the lack of adequate resources to face increasing workload due to new tasks and legislation, and specifically the loss of short term contract staff due to relocation and specifics of labour legislation in the Netherlands.
3. Is pleased with the fact that the Agency's work is well aligned with the European policy agenda and its mission, namely to protect human and animal health in the EU, and to ensure access to medicines that are safe, effective and of good quality, supporting also the innovation, availability and accessibility of medicines.

BREXIT PREPARATIONS

4. Is pleased with the Agency preparedness for UK's withdrawal from the Union and is impressed with the work done to organize a smooth transfer of the Agency to its new premises in Amsterdam.
5. Is pleased with the successful move of the EMA data centre to Hamburg during 2018. Notes with satisfaction that the project was delivered on time with minimal downtime.
6. Is pleased with the work done in collaboration with the European regulatory network to prepare for the consequences of Brexit and ensure timely transfer of procedures and tasks to other EEA states, thus ensuring continued availability of medicines across the EU.
7. Is grateful to the Dutch Government for the signing of the seat agreement between the Agency and The Netherlands, to ensure the EMA can function properly and independently in its new location.

8. Regrets the significant additional expenditure the Agency has incurred in relation to Brexit, amounting to EUR 15.5 million, including to cover the cost of transferring the Agency's data centre to its new location in Hamburg and the cost related to staff relocation to Amsterdam.

ACTIVITIES

9. Welcomes the work on marketing authorisations via the centralised procedure – both in human and veterinary medicines. In 2018, EMA recommended 84 new human medicines, including 42 new active substances and 10 new veterinary medicines, including 4 new active substances, for marketing authorisation.

10. Is pleased to see that many of these human medicines include medicines for children, for rare diseases, and advanced therapies. In the veterinary field, the medicines approved included two vaccines that have the potential to reduce the need for antimicrobial treatment in food-producing animals, 2 innovative medicines including the first stem cell-based veterinary medicine and 3 products for minor-use-minor-species (MUMS)/limited market. Highlights the importance of innovation also for broader indications with unmet medical needs that affects a high number of patients.

11. Welcomes the increase in scientific advice in both areas and notes with satisfaction that close to 70% of the applicants who received a positive opinion had also received scientific advice from EMA during the development phase. Sees the importance of parallel consultations with simultaneous coordinated regulatory scientific and HTA advice on the medicines' development plans.

12. Is pleased to see the first two medicines supported through PRIME received positive opinions from CAT and CHMP, demonstrating the valuable support that the scheme provides to promising medicines that target unmet needs, allowing to optimise development plans and speeding up evaluation so these medicines can reach patients earlier.

13. Appreciates the high interest for PRIME scheme and notes that out of the 215 requests EMA have received since the establishment of the scheme, a total of 48 (22%) requests has been accepted. Is pleased to see that of the medicines admitted into PRIME, 41% are advanced therapy products (ATMP), which have the potential to reshape the treatment of a wide range of conditions.

14. Welcomes the increased transparency on orphan medicinal products and the publishing of orphan maintenance assessment reports (OMAR) for every orphan-designated medicine that has been recommended for marketing authorisation.

15. Welcomes the launch of IRIS, the secure online portal for orphan designation applications, which is expected to significantly reduce the submission times and make the procedures more efficient and user-friendly.

16. Acknowledges the publication of two papers on biosimilar medicines that have proven very useful to build trust in biosimilars among patients and healthcare professionals, and appreciates the translation of the documents in different EU languages, facilitating the usage of these papers at a national level.

17. Welcomes the substantial growth in reported Adverse Drug Reactions (30%) to EudraVigilance, following the new release of the system in 2017.

18. Is pleased to see the work and achievements in fighting antimicrobial resistance, and especially the collaboration between EMA, FDA and Japanese Pharmaceutical and Medical Devices Agency (PMDA) to align data requirements for new antibiotic and on development of new antibiotics in children.

19. Applauds the overall decrease in sales of veterinary antimicrobials across Europe by more than 20% between 2011 and 2016. Urges EMA to further work on the action plan on specific regulatory approaches to facilitate authorisation of alternatives to antimicrobials and to further work on the prioritisation of antimicrobials in order to minimise the risk for antimicrobial resistance.

20. Welcomes the efforts made to encourage more ethical use of animals in medicine testing through publishing a first report summarising the Agency's actions to support the implementation of the so-called 3Rs principles.

21. Applauds the recognition of the patients' voice in safety reviews through the public hearings arranged by PRAC at EMA. Is pleased with the decisions made regarding the medicines discussed at these hearings.

22. Notes with interest the "EMA Regulatory Science to 2025" published for public consultation. Agrees on the need to focus on the development of innovative therapies and diagnostics to ensure the regulatory environment and assessment is up to date with the recent knowledge and accelerated changes to the field. Stresses the importance of a close cooperation on the subject and how this project could be included in the European Regulatory Network Strategy 2025.

23. Welcomes the work done towards electronic product information for EU medicines, and highlights the importance of this work in increasing accessibility to unbiased and up-to-date information on efficacy, side-effects and proper use of medicines for patients and health care professionals. Recognises the need to seize the momentum to secure a harmonized approach and common electronic standard among the Member States, and looks forward to the follow-up to the outcome of the workshop arranged by EMA, HMA and EC in November.

24. Applauds the collaboration with the EUnetHTA, HTA bodies and payers, with the aim to give patients timely access to innovative medicines by optimising cooperation, procedures and evidence generation, developing guidance, ensuring information flow and efficient use of resources.

25. Highlights the importance of the HMA-EMA Task Force on the Availability of Authorised Medicines for Human and Veterinary Use to tackle disruptions in supply of human and veterinary medicines and ensure their continued availability. Is pleased with the two-year work programme, adopted by HMA-EMA Task Force in 2018.

26. Welcomes the EMA focus on increasing the availability of veterinary medicines, including by organising the Veterinary Medicines Innovation Day, supporting the FishMedPlus Coalition (aiming to increase authorised products for fish) and providing guidance regarding innovative medicines.

27. Commends the Agency on the way it supported the coordination of network actions, via the Incident Review Network and Rapid Alert Network, after EU authorities were informed of an impurity in blood pressure medicines.

28. Appreciates that the EU Network Training Centre continues its important tasks in broadening the regulatory knowledge in Europe. Recognises the increase of 60 new events during 2018 and notes the continuous challenge to open more NCAs' trainings to the EU NTC.

29. Welcomes the general efforts to ensure global collaboration and exchange of knowledge – both within the global supply chain and training of regulators. Takes note of the decrease in regulatory collaboration to concentrate on supply chain inspections, due to business continuity considerations in the Brexit environment.

30. Praises the collaboration that the Agency has implemented with non-EU regulators as these interactions are essential to better protect patients in Europe and across the world. Welcomes the broadening of collaboration between the EU and Japan to include additional types of medicines and

waiving of batch testing if done by one of the territories. Appreciates the progress of the EU-US mutual recognition agreement for inspections – where the capability of 20 EU member states is now accepted with regards to GMP inspections by the FDA.

31. Encourages the Agency to advocate expanding such collaboration to include other partners in Europe that are currently not included in an equivalent agreement, such as the EEA/EFTA states, as the lack of such an agreement complicates the otherwise equal role the EEA/EFTA states have in the evaluation and approval of medicines in the EU/EEA.

32. Applauds the international collaboration on API inspections done by EMA, NCAs, EDQM, FDA, Australia, Canada, Japan towards API sites located outside the participating parties. Is pleased to see an increase in GMP API inspection coverage done by the participating parties collected.

33. Congratulates the EMA and its five staff members for winning an ISO Excellence Award for their contributions in the work of international standards for the identification of medicinal products (IDMP). Recognises that this is an important tool to facilitate global exchange of data and information on pharmaceuticals.

34. Appreciates the efforts of the Agency to provide stakeholders and partners with consistent, high-quality, timely, targeted, and accessible information on the Agency's work, outputs and medicinal products, while realising that stakeholder interaction had to be reduced or put on hold due to the business continuity plan. Urges the Agency to pick up this work in 2019.

35. Appreciates the launch of the new EMA website. Encourages the Agency to continue improving the site's functionality and user-friendliness.

LEGISLATION

36. Notes with satisfaction the impact that the Paediatric regulation has had on the treatment of children and on the mind-set regarding the need to study medicines in children as well as adults. Applauds the joint action plan adopted by EMA and the EC's Directorate-General for Health and Food Safety (DG SANTE) in October 2018 with the aim to increase the efficiency of paediatric regulatory processes in the current legal framework and boost the availability of medicines for children.

37. Appreciates the Clinical trial regulation with the aim to create an environment that is favourable to conducting clinical trials in EU. Is concerned about the delay of implementation due to the postponement of the EU portal and database.

38. Welcomes the adoption of the new veterinary regulations on veterinary medicines (2019/6) and medicated feed (2019/4). Follows with interest the possible positive effects on reduction of administrative burden for veterinary medicine developers, stimulating competitiveness and innovation in the veterinary sector, increasing availability of medicines, streamlining the functioning of the internal market and addressing in particular the public health risk of antimicrobial resistance.

39. Acknowledges that the practical implementation into guidelines and practices will require substantial effort by both EMA and NCAs during 2019. Is concerned that EMA has received no additional resources to support the implementation of this Regulation, which will require substantial additional activities, including telematics. Calls for the Agency and the budgeting Authority to ensure that it can meet the increased demand on financial and human resources that is expected to arise from the new legislation.

40. Expects the Agency to implement the requirements of the new data protection rules that entered into force in December 2018 for institutions (Regulation (EU) 2018/1725 (EU DPR)), as the new regulation introduces some changes in the way agencies must deal with personal data.

TELEMATICS/IT ISSUES

41. Understands that several Telematics projects had to be postponed or reduced (e.g. Eudravigilance Veterinary) due to Brexit. Regrets that others were over time or over budget, and in particular that the delivery of the fully functional system of the clinical trials programme was postponed. Suggests to keep close attention to the feasibility, delivery and budgeting of future Telematics programmes.

42. Appreciates the work performed by HMA-EMA joint Big Data Task Force on how big data can be used in medicines development to support research and innovation, and looks forward to the report that is expected in 2019. Stresses the importance of EMA to take the lead in the use of big data to improve human and animal health.

FINANCES AND HUMAN RESOURCES

43. Is pleased that the European Parliament granted the discharge in respect of the implementation of the budget of the Agency for the financial year 2017.

44. Notes that the Agency's final budget for 2018 amounted to EUR 337,761,000; that 89.69% of its revenue derived from the evaluation of medicines and other business related activities; 10.28% from the European Union budget to fund various public health and harmonisation activities, including positive outturn of previous year; and 0.03% from external assigned revenue as described in the work programme.

45. Recognizes the Agency's work on its key competencies tool, job grading framework, and the new e-recruitment tool that facilitated resources identification and allocation, and supported business continuity activities.

46. Notes that at the end of 2018, the Agency achieved occupancy rate for temporary agents of 98.3% and that during 2018 the total number of staff joining EMA amounted to 156, while the total number of staff leaving the Agency during the same year amounted to 160. Is concerned to see the significant and continuous increase in resignation rates as a result of Brexit and upcoming relocation of the Agency: 74% of those who left the Agency in 2018 left by resignation, double the average resignation rate for the preceding 5 years. Recommends continuing to closely monitor staffing levels, considering the persistently volatile situation due to Brexit.

AUDITS AND INTERNAL CONTROLS

47. Acknowledges the results of the audit of the European Court of Auditors, confirming the reliability of the 2017 accounts and the legality and regularity of the transaction underlying the accounts of the Agency.

48. Welcomes the Internal Audit Service's final report on the 'Signal Management procedures in the EMA' that confirmed that the design and practical implementation of the management and internal control system in the EMA with regard to its mandate, role, responsibilities and tasks related to the process of signal management are effective and efficient.

49. Regrets that some internal audits planned by the Internal Audit Capability for 2018 had to be postponed due to preparation for the relocation of the Agency to the Netherlands.

50. Is satisfied that no critical recommendations stemming from audits carried out up to 31 December 2018 were open, and expects the closure of the very important recommendations within the agreed timelines.

51. Notes that the assessment on the compliance and effectiveness of internal control standards concluded that the system in place is generally compliant with the standards, and is calling on the Agency to implement the identified planned actions to further improve efficiency.

52. Acknowledges that in regard to ex-ante verifications, all transactions without exception were checked by applying appropriate checklists, in line with the financial regulations and the Charter of the Verifying Officer.

53. Notes that the ex-post controls carried out highlighted no significant weaknesses of the processes analysed, that only few areas with potential for improvement were identified and that these are re being addressed by specific improvement action plans.

54. Notes that all the actions mandated by the Anti-Fraud Strategy Action Plan for 2018 have been successfully implemented within the assigned deadlines, including the development of a specific anti-fraud training instrument for the contractors working at EMA, and the creation of a register for internal whistleblowing.

DECLARATION OF ASSURANCE

55. Takes note of the declaration of assurance of the Executive Director and acknowledges that no reservations were made.

56. As last year, concurs with the Executive Director's concern that significant new tasks have been assigned to the Agency over the years, without any increase in staff and that such shortage of human resources may result in challenges for the Agency to fulfil its core and legislative responsibilities.

57. Thanks scientific committees' members, experts, and patient representatives, as well as all NCAs and EMA staff for their exceptional commitment, and appreciates the good collaboration in the network.

Amsterdam, 12 June 2019

[Signature on file]

Christa Wirthumer-Hoche
Management Board Chair

Introduction

The consolidated annual activity report provides an overview of the activities and achievements of the European Medicines Agency (EMA) in 2018. The EMA annual activity report 2018 is a report of the EMA executive director. It is a key component of the strategic planning and programming cycle and the basis upon which the EMA executive director takes his responsibility for the management of resources, and the achievement of objectives. It also allows the EMA executive director to decide on the necessary measures in addressing any potential management and control weaknesses identified.

The annual activity report 2018 comprises four main parts and annexes, as follows:

Part I: Key achievements in 2018. This section provides an overview of the Agency's major achievements.

Part II: Work programme implementation. This section mirrors the structure of the annual work programme of EMA for the year 2018, and provides information on achievements of objectives set in the annual work programme. This section also includes references to key performance indicators (KPIs) and targets.

Part III: Organisational management and internal control. This section provides information on EMA governance; information on budgetary, financial and human resources management assessment provided by the EMA management; assessment of audit results during 2018; as well as the follow-up on recommendations and action plans resulting from audits. It also includes components of the follow-up on observations from the Discharge Authority and the assessment of the effectiveness of the internal control systems.

Part IV: Management assurance. The report concludes with a declaration of assurance in which the EMA executive director, in his role as the authorising officer, takes responsibility for the legality and regularity of all financial transactions.

In the *annexes*, the report provides information on the EMA establishment plan, human and financial resources used by activity, the organisational chart, project implementation, and further specific annexes related to Part II and Part III of the report.

The EMA annual activity report is a public document and is available on the EMA corporate website.

European Medicines Agency in brief

The European Medicines Agency is a decentralised agency of the European Union (EU), created in 1995. Its creation followed the decision by the EU Heads of State and Government on 29 October 1993, choosing London as the location for EMA's premises. As a result of the UK's decision to leave the EU, after 24 years the Agency will be leaving London in early 2019. On 20 November 2017 the EU 27 Member States decided in the margins of the General Affairs Council (Article 50) of the European Council that the new seat of the Agency will be Amsterdam.

The mission of EMA is to protect human and animal health in the EU, and to ensure access to medicines that are safe, effective and of good quality. It is the sole EU body responsible for the scientific assessment of medicines, with respect to the authorisation, maintenance and supervision, in the following therapeutic areas: treatment of cancer, diabetes, neuro-degenerative dysfunctions, viral diseases and rare human diseases ('orphan' medicines). Also, medicines derived from biotechnology processes (such as genetic engineering), as well as advanced-therapy medicines (such as gene-therapy, somatic cell-therapy or tissue-engineered medicines) must be submitted for assessment to EMA on behalf of the EU. To achieve this, EMA provides a single route for the evaluation of innovative medicines in the EU, thus avoiding the duplication of the evaluation in each of the 28 Member States. This allows making highly needed medicines available to all EU citizens and within the shortest possible timeframe, whilst guaranteeing a robust scientific assessment process.

In addition, EMA monitors the safety of all medicines authorised in the EU throughout their lifecycle, and provides for regulatory action (such as restricting a medicine's use, or withdrawing a medicine from the EU market) within the shortest possible timeframe, where public or animal health is endangered. Information to patients and healthcare professionals is simultaneously made available in all EU languages, ensuring that consistent information on medicines is provided to all EU citizens.

To achieve its tasks, EMA brings together the best scientific expertise on medicines from across the EU. This translates into 7 scientific committees[1] which evaluate medicines along their lifecycle, from early stages of development, through marketing authorisation, to safety monitoring once they are on the market. These scientific committees are supported by working parties and scientific advisory groups, and can draw from a network of some 4000 scientific experts, made available by the Member States to the Agency.

EMA is also involved in other public health activities, such as in stimulating research and innovation in the pharmaceutical sector. It facilitates medicines development by giving scientific advice and guidance to developers of medicines, including on the development of medicines for children or medicines to treat rare diseases. On behalf of the EU, EMA coordinates inspections to verify compliance with the principles of good manufacturing, clinical, pharmacovigilance and laboratory practices.

EMA is responsible for the provision of data and information technology (IT) services to implement European pharmaceutical policy and legislation. These services are provided to the EU regulatory network, comprising national competent authorities (medicines regulatory authorities in Member States), the European Commission and the EMA. In this context, EMA delivers, maintains and provides data services, IT systems and infrastructure to Member States.

[1] CHMP: Committee for Medicinal Products for Human Use
CVMP: Committee for Medicinal Products for Veterinary Use
PDCO: Paediatric Committee
COMP: Committee for Orphan Medicinal Products
CAT: Committee for Advanced Therapies
PRAC: Pharmacovigilance Risk Assessment Committee
HMPC: Committee on Herbal Medicinal Products

On behalf of the EU, EMA hosts a number of databases, important for public health, such as EudraVigilance — one of the largest databases in the world on adverse reactions reported for all medicines authorised in the EU. In addition, EMA plays a key role in tackling public health threats, such as antimicrobial resistance; and public health emergencies. Over the past years, EMA has also become a recognised pioneer in terms of transparency and openness of operation, and in terms of interaction with patients.

Since its creation in 1995, the environment in which EMA operates has undergone major changes. As a result of the Agency's achievements over the years – widely recognised by its stakeholders and partners, including at international level – EMA's responsibilities have continuously increased, resulting not only in a well-established and mature agency, but also an agency that covers a wide range of activities in the regulation of human and veterinary medicines, and, therefore, plays a key role in the protection of human and animal health in the EU.

The success of EMA is based on the EU regulatory system for medicines. At the heart of it is a network of around 50 medicines regulatory authorities from the European Economic Area (EEA) Member States, the European Commission, and EMA. National competent authorities (NCA) work closely with EMA, providing scientific expertise to EMA committees, working parties and experts groups for: assessing centralised products; supporting innovation, including centralised scientific advice; working on orphan and paediatric medicines; and EU-wide safety procedures. This network is what makes the EU regulatory system unique. The diversity of the experts from across Europe, involved in the regulation of medicines in the EU, encourages the exchange of knowledge, ideas, and best practices between scientists striving for the highest standards for medicines regulation.

1. Key achievements in 2018

2018 was another challenging year for EMA as the preparations for the withdrawal of the United Kingdom from the European Union continued, but it was also the year that has proven the robustness and flexibility of the EU network.

The main theme of the year was Brexit and managing its implications. EMA worked closely with the European Commission and the network to ensure an orderly redistribution of the work so far carried out by the UK; over 370 centrally authorised products were transferred from the UK to new rapporteurs and co-rapporteurs from the EU27 Member States, plus Iceland and Norway. EMA also provided detailed advice to pharmaceutical companies very early on, to help them take the necessary steps to be able to operate in the EU27 and continue to make their medicines available to patients.

The Agency implemented a phased business continuity plan to maintain activities directly related to the evaluation and supervision of medicines as well as our core public health activities. This was, unfortunately, at the expense of activities that did not have an immediate impact on public health.

Despite the challenges faced, the Agency managed to maintain its core operations and deliver the work programme 2018.

1.1. Human and veterinary medicines highlights

1.1.1. Human medicines

In 2018, EMA recommended 84 medicines for marketing authorisation. Of these, 42 had a new active substance, i.e. one that had not previously been authorised in the EU.

Some of the medicines approved in 2018 represent a significant advance in their respective therapeutic areas; these include medicines for children, for rare diseases, and for advanced therapies.

Four medicines received a recommendation for marketing authorisation following an accelerated assessment. This mechanism is reserved for medicines that address unmet medical needs. It allows for a faster assessment of eligible medicines by EMA's scientific committees (within 150 days rather than up to 210 days).

One cancer medicine received a recommendation for a conditional marketing authorisation, one of the mechanisms in the EU to give patients early access to new medicines. Conditional authorisation allows early approval of a medicine that addresses an unmet medical need on the basis of less complete clinical data than normally required. This authorisation is subject to specific post-authorisation obligations to ensure that the pharmaceutical company generates complete data on the medicine.

In addition, the Committee for Medicinal Products for Human Use (CHMP) issued negative opinions on five medicines in 2018. In these cases, the CHMP could not conclude that the benefits of the medicine outweighed the risks.

Some 93% of all opinions (positive and negative) were reached by consensus among the 28 CHMP members, meaning that the experts agreed on all aspects of the marketing authorisations following in-depth discussions.

Around 69% of applicants who received a positive opinion for their medicine had received scientific advice from EMA during the development phase of their product. This early engagement with the developers allows EMA to clarify what kind of evidence is required to evaluate the medicine for

authorisation, and so protects patients from taking part in unnecessary or poorly designed clinical trials.

The product information for 414 centrally authorised medicines was updated on the basis of new safety data in 2018. Furthermore, every year, the recommendations of the PRAC on safety warnings are included in the product information of many thousands of nationally authorised products. The revised information is expected to help patients and healthcare professionals to make informed decisions when using or prescribing a specific medicine.

Ensuring integrity of clinical trial conduct and the manufacture and supply of medicines

Medicines development and manufacturing are global activities. It is important for regulators to ensure that EU standards are adhered to no matter where clinical trials or manufacturing take place.

In 2018 EMA supported coordination of network actions, via the Incident Review Network and Rapid Alert Network, after the EU authorities were informed of an impurity in a blood pressure medicines' (valsartan) active substance produced by an API manufacturer in China. The impurity, N-nitrosodimethylamine (NDMA), is classified as a probable human carcinogen (a substance that could cause cancer). Subsequently other sartans, related impurities and manufacturing sites, also in India, were identified.

The EMA started a review of several of these blood pressure medicines (sartans) in relation to the impurities found in some batches of these medicines, from several manufacturers. The review evaluated the root causes for the presence of these impurities, their possible impact on patients and what measures can be taken to reduce or eliminate these impurities from future batches. Some medicines covered by this review were recalled and are no longer marketed in the EU.

The CHMP also adopted a negative opinion (refusing the granting of the marketing authorisation) for a medicine for which a GCP (good clinical practice) inspection reported non-compliance issues with the clinical study submitted.

1.1.2. Veterinary medicines

In 2018, EMA recommended 10 veterinary medicines for marketing authorisation. Of these, four had a new active substance, i.e. one that had not previously been authorised in the EU, and three were vaccines. Of these ten medicines two were vaccines that have the potential to reduce the need for antimicrobial treatment in food-producing animals and could therefore limit the development of antimicrobial resistance. Three medicines were recommended for marketing authorisation under EMA's minor-use-minor-species (MUMS)/limited market policy. This scheme aims to stimulate development of new veterinary medicines for minor species and for rare diseases in major species that would otherwise not be developed under current market conditions.

Product information for 14 veterinary centrally authorised products was updated on the basis of new safety data. The revised information is expected to help animal owners and healthcare professionals to make informed decisions when using or prescribing a medicine. The Committee for Medicinal Products for Veterinary Use (CVMP) adopted six positive opinions for extensions of existing authorisations.

In 2018 an MRL was established for one active substance; MRLs were extended to further species for two other active substances.

1.2. Advancing human health

1.2.1. Supporting development of promising or much-needed medicines for patients

PRIME: first results for the benefit of patients

EMA's PRIority Medicines (PRIME) scheme was launched in March 2016 to support and optimise medicine development, so that patients whose diseases cannot be treated or who need better treatment options have earlier access to new medicines that enable them to live healthier lives.

In June 2018, the first two medicines supported through PRIME received a positive opinion from the CHMP for approval in the EU. These belong to a new generation of personalised immunotherapies for the treatment of blood cancer.

From the launch of PRIME to December 2018, EMA had received and assessed a total of 215 requests for eligibility. Of these, 48 (22%) have been accepted. Over half of all requests received (54.4% or 117 requests) and 50% of the requests admitted to the scheme originated from small and medium-sized enterprises (SMEs). The requests cover a wide range of therapeutic areas. Oncology and haematology medicines make up the largest share of PRIME products, but there have also been notable submissions for medicines that cover indications in infectious diseases, neurology and psychiatric disorders.

Of the medicines admitted into PRIME, 41% are advanced therapy medicinal products (ATMPs), which have the potential to reshape the treatment of a wide range of conditions. A large proportion of these medicines are being developed by small and medium-sized enterprises (SMEs) that often lack experience in the regulatory approval process and can receive valuable guidance through the scheme.

Supporting development of medicines for children

The EU Paediatric Regulation, which has been in place for over 10 years, has changed the mind-set regarding the need to study medicines in children as well as adults and has had a positive impact on the treatment of children. Although research in children is a standard practice in the development of medicines, there are still some therapeutic areas, such as oncology or neonatology, where the changes brought about by the Regulation have not been as effective. To address these and other challenges identified by the EC's report 'State of Paediatric Medicines in the EU 10 years of the EU Paediatric Regulation', EMA and the EC's Directorate-General for Health and Food Safety (DG SANTE) adopted a joint action plan in October 2018, taking into account ideas and feedback collected at the 'EMA-EC multi-stakeholder workshop to further improve the implementation of the Paediatric Regulation' held at EMA on 20 March 2018.

The actions are clustered around five key areas:

- identifying paediatric medical needs;
- strengthening cooperation between decision makers;
- ensuring timely completion of paediatric investigation plans (PIPs);
- improving the handling of PIP applications;
- increasing transparency around paediatric medicines.

It is expected that the implementation of the plan will increase the efficiency of paediatric regulatory processes in the current legal framework and boost the availability of medicines for children.

10th annual Enpr-EMA workshop

The European Network of Paediatric Research at the European Medicines Agency (Enpr-EMA) held its annual workshop on 7 and 8 June 2018. Enpr-EMA is a network of investigators, research networks and centres with recognised expertise in performing clinical studies in children, aiming to foster high-quality, ethical research in children.

This year's workshop marked the 10th anniversary of the network, which now includes 46 members and has grown substantially and expanded beyond Europe with the inclusion of networks from US, Canada and Japan. In 2018, among other activities, Enpr-EMA provided input to the paediatric action plan, which now includes several initiatives supported by Enpr-EMA expertise, such as the increase of global interactions between regulators and networks, preparedness considerations for paediatric trials, information on assent/consent forms, and training of research nurses to name a few.

Towards a global approach for new antibiotic development

The lack of treatment options for infections caused by drug-resistant bacteria is cause for growing alarm for public health authorities worldwide and there is an urgent need for new medicines and treatment approaches. EMA has been working with its international partners, the Japanese Pharmaceuticals and Medical Devices Agency (PMDA) and FDA for several years to explore and agree how to align data requirements as much so that medicine developers can design clinical trials that meet the evidence needs of multiple regulatory agencies.

A particular focus of the tripartite work is the development of new antibiotics in children. On 21 and 22 June 2018, the three regulatory agencies co-organised a workshop in London to discuss the topic.

The workshop provided an opportunity for international regulators to explore with medicine developers, clinicians and clinical trial investigators, clinical development plans that would allow for the timely development of antibiotics for children and discuss a regulatory pathway for their approval.

Increased transparency on orphan medicinal products

In 2018 the Agency started to publish a so-called orphan maintenance assessment report (OMAR) for every orphan-designated medicine that had been recommended for marketing authorisation by the Agency.

The new report summarises the reasoning of the Agency's Committee for Orphan Medicinal Products (COMP) on whether or not a medicine designated as an orphan medicine during its development still fulfils the designation criteria at the time of its authorisation. This is the precondition for granting a marketing authorisation for an orphan medicinal product by the EC and to benefit from ten year market exclusivity, one of the incentives of the EU orphan framework. The report is published as part of a medicine's European Public Assessment Report (EPAR) once the EC has adopted its marketing authorisation decision.

28 OMARs in total were published (25 initial marketing authorisations and 3 variations) as well as 8 withdrawal assessment reports (4 initial marketing authorisations and 4 variations).

1.2.2. Working with HTA bodies and payers to facilitate access to medicines

EMA interacts with numerous HTA bodies through the European Network for Health Technology Assessment (EUnetHTA), which is the central point for EU level cooperation on HTA. The aim of this interaction is to facilitate patients' access to innovative medicines by optimising evidence generation, developing guidance, ensuring information flow and efficient use of resources.

2018 saw the first full calendar year of the new platform for parallel consultation, a procedure in which EMA and HTA bodies give parallel scientific advice to medicine developers so that they can design a single development programme that fulfils the needs for both regulatory and relative effectiveness assessment. 27 procedures were requested in 2018. This shows a constant level of demand for parallel procedures over the last 4 years and a seamless transition to the new system.

A survey carried out among applicants who used this platform during the first year showed positive feedback overall and highlighted areas for further development. 46% of the respondents stated that the parallel consultation facilitated a single development trial/plan approach for their product to meet the evidentiary needs of the stakeholders involved.

2018 saw the first parallel qualification together with HTA bodies of the ECFSPR patient registry from the European Cystic Fibrosis Society. Furthermore, HTA bodies engaged in the qualification of the European Bone Marrow Transplant registry, which can support CAR T-cell medicines.

Building on the experience of the first three collaborations at market entry, EMA and EUnetHTA jointly reviewed their product-specific exchanges after CHMP opinion on a new medicine. Most frequent questions of interest by HTA bodies were on the interpretation of study results and the methodology for assessment. It is anticipated that these exchanges can guide optimisation of the regulatory output for subsequent decision making by HTA bodies, foster mutual understanding of assessment practices and contribute to shared perspectives on available evidence.

These activities are part of the EMA-EUnetHTA joint work plan for 2017–2020, which also includes activities to foster mutual understanding of decision makers on key concepts and methodologies. In this regard, highlights in 2018 included a joint analysis of the concepts of significant benefit and relative effectiveness, clarification of the concept of unmet medical need and sharing experiences on the identification of the therapeutic indication.

These topics were reviewed by EMA and EUnetHTA at their 16th bilateral meeting in December. The meeting held at the Agency's premises in London, saw for the first time representatives from the payer community attending as observers.

HTA bodies and payers participated in more than 15 meetings and workshops held organised at EMA in 2018. EMA also participated in a number of events organised by HTA bodies in order to facilitate alignment of views and progress development of topics of mutual interest.

1.2.3. Improving the availability of medicines in the EU

The availability and continuous supply of human and veterinary medicines authorised in the EU is a key priority of the EU network. Medicine shortages can occur for many reasons, including manufacturing difficulties or problems affecting the quality of medicines that can impact on patient care.

EMA and the Heads of Medicines Agencies (HMA) created an HMA-EMA Task Force on the Availability of Authorised Medicines for Human and Veterinary Use to tackle disruptions in supply of human and veterinary medicines and ensure their continued availability.

In 2018, the task force adopted a two-year work programme, which lists actions for regulators and pharmaceutical companies on how to try to prevent supply issues and/or minimise their impact on patients. Its key priorities include:

- looking at ways to minimise supply disruptions and avoid shortages by facilitating approval and marketing of medicines using the existing regulatory framework (for example by work sharing and reduced timetables when possible);

- developing strategies to improve prevention and management of shortages caused by disruptions in the supply chain (for example developing guidance for companies on reporting of shortages);
- encouraging best practices within the pharmaceutical industry to minimise the risk of shortages;
- improving sharing of information and best practices among EU regulatory authorities to better coordinate actions across the EU;
- fostering collaboration with stakeholders and enhancing communication on supply problems to EU citizens.

Following the publication of the work programme in September 2018, the Task Force organised a multi-stakeholder workshop on 8 and 9 November 2018 to gather stakeholders' perspectives on how to address availability issues and to include their input into the deliverables of the task force.

1.2.4. EU Clinical Trial Regulation and the development of the Clinical Trials Information System

The way clinical trials are conducted in the EU will go through a major change when the Clinical Trial Regulation comes into application. The goal of this new legislation is to create an environment that is favourable to conducting clinical trials in the EU, with the highest standards of safety for participants and increased transparency of trial information.

The regulation harmonises the assessment and supervision processes for clinical trials throughout the Union via an EU portal and database, called the Clinical Trials Information System. EMA will set up and maintain this system in collaboration with the Member States and the EC. It will be the single entry point for submitting clinical trial information in the EU, which will be stored in the database. EMA will make information in the database publicly available, according to its transparency rules.

The system is in a phase of pre-testing of the auditable release by the Agency together with stakeholders, before user acceptance testing (UAT) can start. The Agency continued work to fix the remaining bugs with the contractor and will implement improvements in the system prior to user acceptance testing. At the same time work to develop the safety reporting part of the system is progressing.

The project plan was revised to improve delivery and to ensure that stakeholders can give feedback more regularly during the process so that their expectations can be taken into account as early as possible. This revision is expected to be finalised in early 2019. Further announcements will be made in 2019, before user acceptance testing of release 0.7 commences. The Agency and the Member States are fully committed to ensuring the success of this project and its delivery.

1.2.5. Ensuring patient safety throughout the life cycle of medicines

Safety monitoring of medicines used in children

In November 2018, EMA published the new good pharmacovigilance practice (GVP) chapter IV on specific considerations for the paediatric population. It offers a holistic view of paediatric pharmacovigilance and provides guidance on how to make best use of existing tools and processes to address the specific needs and challenges of safety monitoring of medicines used in children. In addition, it advises on how to adapt regulatory requirements to the paediatric population in the EU.

The new GVP chapter covers approved medicines with a paediatric indication or with ongoing paediatric development and also medicines only approved for adults but used ‘off-label’ to treat children, that is for a medical purpose not in accordance with the terms of the marketing authorisation.

A dedicated approach to pharmacovigilance in children is especially important given that paediatric clinical trials are often limited in size and duration, and adverse reactions in children may substantially differ in terms of frequency, nature, severity and presentation from those occurring in adults.

Patient voices in safety reviews – public hearings at EMA

The EU's pharmacovigilance legislation enables the PRAC to hold public hearings during certain safety reviews of medicines. These public hearings support the committee's decision-making by providing additional perspectives, knowledge and insights into the way medicines are used.

EMA held its second public hearing on 13 June 2018. The hearing was part of a review carried out by the PRAC on quinolones and fluoroquinolones, a class of antibiotics widely prescribed in the EU.

The objective of the hearing was to listen to the views and experiences of patients and the general public on the possible side effects reported with this group of medicines. These reports included long-term disabilities and pain.

In total, 69 participants attended the hearing at the Agency's premises in London (or joined by telephone), including 40 patients and patient representatives, 14 healthcare professionals and academics, 13 representatives from pharmaceutical industry and two members of the media. Many other members of the public who could not attend sent their submissions in writing to the PRAC.

Following the hearing, the Agency finished its review in November 2018 and recommended to suspend the marketing authorisations of quinolone medicines (cinoxacin, nalidixic acid and pipemidic acid) and of flumequine, and introduce changes including restrictions on the use of the remaining fluoroquinolone antibiotics.

In addition, the information for healthcare professionals and the product information for patients will describe the disabling and potentially permanent side effects and advise patients to stop treatment with a fluoroquinolone antibiotic at the first sign of a side effect involving pain in the muscles, tendons or joints, or the nervous system.

Outcome of public hearing on valproate

2018 also saw the conclusion of the review of valproate-containing medicines, which had led to the Agency's first-ever public hearing on 26 September 2017. Valproate is used to treat epilepsy, bipolar disorder and migraine. Its safety in women and girls who are pregnant or of childbearing age was reviewed because of concerns that current EU-wide measures to reduce the risk of malformations and neurodevelopmental problems occurring in babies who are exposed to valproate in the womb, were not fully effective.

In February 2018, after evaluating the available evidence, the PRAC recommended strengthening restrictions on the use of valproate and introducing new measures to avoid exposure of babies in the womb. Babies exposed are at risk of malformations and developmental problems. These measures were endorsed by the Coordination Group for Mutual Recognition and Decentralised Procedures – Human (CMDh), a body representing EU Member States, in March 2018.

Measurement of the impact of pharmacovigilance activities

In 2018, the implementation of the revised PRAC Strategy on Measuring the Impact of Pharmacovigilance Activities continued according to the work plan. A new chapter and appendix on methods for pharmacovigilance impact research has been included in the annual revision of the ENCePP Guide on Methodological Standards in Pharmacoepidemiology. Four impact studies were launched through EMA's framework contract to evaluate the post-referral utilisation, prescribing trends, as well as patients' and healthcare professionals' awareness of EU label changes and pregnancy prevention programmes for medicines containing valproate and retinoids.

Big data and real-world evidence

The increasing volume and complexity of data now being captured across multiple settings and devices offers opportunities for medicines regulation in terms of a better understanding of diseases, medicines and the performance of products in the healthcare system. During 2018, an HMA–EMA Joint Big Data Task Force, composed of experienced medicines regulators from 14 national competent authorities and EMA, described the big data landscape from a regulatory perspective in order to ensure the EU regulatory system has the capability and capacity to guide, analyse and interpret these data for better decisions on the regulation of medicines. A draft report, including recommendations on six subgroups of data sources relevant to regulatory decision making, was delivered by the Task Force in 2018 and will be published in 2019.

In 2018, EMA used three in-house databases of electronic healthcare records to perform 14 studies providing real world evidence (RWE) to Committees. EMA also launched new framework contracts with 9 academic institutions or contract research organisations for EMA-funded efficacy or safety studies; 4 studies have been contracted through this framework to assess the effectiveness of risk minimisation measures taken for valproate and isotretinoin.

Patient registries are another important source of real world data (RWD). The EMA Patient Registry Initiative was started in 2015 to facilitate use of disease registries by introducing and supporting a systematic approach to their contribution to the benefit-risk evaluation of medicines. In 2018, the initiative made important progress by organising and publishing the reports of two workshops, on CAR-T cell therapies and on haemophilia registries and by publishing for consultation a discussion paper on methodological and operational considerations for the use of patient registries for regulatory purposes. This document will be used to develop guidance on patient registries in 2019.

European Network of Centres for Pharmacoepidemiology and Pharmacovigilance (ENCePP)

ENCePP is a network coordinated by EMA. By the end of 2018 ENCePP network included 176 centres and 24 research networks from 19 different European countries, as well as 134 registered data sources. In 2018, ENCePP published a revision of the ENCePP Guide of Methodological Standards in Pharmacoepidemiology, an update of the ENCePP Code of Conduct as well as a revision of the ENCePP Checklist for study protocols.

EU PAS Register

The European Post-authorisation Studies (PAS) Register, hosted on the ENCePP website, allows registration of studies and publication of study protocols and results. Registration of PAS is mandatory for studies imposed to marketing authorisation holders (MAHs) by regulators as a legal obligation and is recommended for other PAS. While initially developed for the registration of studies conducted in the EU, this unique tool promoting transparency is increasingly used worldwide. In 2018, 204 new studies were registered with a total of 1419 studies registered by end of December 2018. A process to check MAHs' compliance to their registration obligation was formalised.

Opioid misuse and abuse

The Agency, with participation of its Committees, set up a strategic group with OECD, EMCDDA and NCAs on the opioid abuse and misuse in Europe to avert a crisis similar to that in US and Canada. The European Commission is also integrated in the group.

1.3. Contributing to animal health

EMA and the EU national competent authorities (NCAs) safeguard animal health in the 28 EU Member States, as well as in the EEA countries, by ensuring that all medicines available on the market are safe, effective and of high quality.

The Agency's key responsibilities are scientific evaluation, supervision and safety monitoring of medicines developed by pharmaceutical companies for use in animals. In 2018, EMA's activities in the veterinary field mainly focused on increasing the availability of innovative veterinary medicines, encouraging a more ethical use of animals in medicine testing and supporting the fight against antimicrobial resistance (AMR). EMA also started to prepare for the implementation of the new EU veterinary medicines legislation.

1.3.1. Encouraging a more ethical use of animals in medicine testing

In February, EMA published its first report summarising the Agency's actions to support the implementation of the so-called 3Rs principles (replacement – switch from animal studies to non-animal methods, reduction – perform as few animal studies as required and necessary, and refinement – minimise animal stress). The actions described in this report are driven by a dedicated, long-term working group, the Joint CVMP/CHMP 3Rs Working Group (J3RsWG) that provides advice to the CVMP and the CHMP on all matters concerning the use of animals in regulatory testing of medicines. The ultimate goal is to abolish the use of live animals in medicine testing. However, until scientific progress provides adequate alternatives, the use of animals will still be necessary in some areas of medical research to protect human and animal health as well as the environment. The Agency plans to maintain its engagement with stakeholders on 3Rs initiatives and to continue providing expert input on regulatory issues to facilitate a smooth implementation of the principles.

1.3.2. New guidance on maximum residue limits (MRLs)

The EU requires by law that foodstuffs such as meat, milk or eggs must be free from residues of veterinary medicines or biocidal products that might pose a threat to the health of consumers. A set of three implementing measures envisaged in Regulation (EC) No 470/2009, and in relation to which the CVMP provided detailed scientific recommendations, were adopted by the EC in May 2018. These replace the previous guidance on the establishment of MRLs in the EU. The measures detail the CVMP approach to the assessment of MRLs for veterinary medicines and provide up-to-date guidance to companies who apply for the establishment of MRLs for their respective medicines.

1.3.3. Decrease in the sales of veterinary antimicrobials

Reducing the use of antimicrobials in food-producing animals and replacing antimicrobials where possible is essential for the sustainability of the future livestock production system. AMR is one of the world's most pressing public health issues and the use of antimicrobials in animals contributes to this problem. Therefore, it is crucial to eliminate unnecessary use of antimicrobials and promote its responsible use in animals.

In 2018, EMA published the 8th European Surveillance of Veterinary Antimicrobial Consumption (ESVAC) report. The report is published annually and, over the years, the overall quality of sales data collected and analysed has continuously improved. The trends highlight a more responsible attitude towards the use of antibiotics in animals. According to the report, the overall sales of veterinary antimicrobials across Europe have decreased by more than 20% between 2011 and 2016. However, the report still presents a mixed picture across the EU as sales vary greatly between Member States.

1.4. Optimising the operation of the network

To safeguard human and animal health in all 28 EU Member States, EMA works closely with more than 50 national competent authorities, the European Commission, international regulators and a broad range of stakeholders such as patients and consumers, healthcare professionals, academia, HTA bodies, payers and the pharmaceutical industry. As the EU medicines network has had to prepare for the UK's withdrawal from the EU, redistribute the work performed by the UK and mitigate the impact of Brexit, this close collaboration became even more important.

It is essential that this network responds in a timely and effective way to technical and scientific developments as well as public health challenges, such as shortages of medicines or antimicrobial resistance. Hence, the Agency is making consistent efforts to strengthen the network and to engage better with all stakeholders.

1.4.1. Preparing for the future - Regulatory Science to 2025

In December 2018, the Agency published its strategic reflections on 'EMA regulatory science to 2025' for a six-month public consultation. Regulatory science includes all scientific disciplines that are necessary to assess the quality, safety and efficacy of medicines and to inform regulatory decision-making throughout the lifespan of a medicine.

The strategy provides a plan for advancing regulatory science over the next five to ten years, covering both human and veterinary medicines. It seeks to offer informed guidance on modern medicines development and facilitate the optimisation of regulatory activities and the assessment of the benefits and risks of innovative therapies and diagnostics. The strategy is a response to the dramatic acceleration of the pace of innovation in recent years and the need for regulators to be ready to support the development of increasingly complex medicines that often deliver healthcare solutions by converging different technologies.

Prior to the launch of the public consultation, EMA hosted two workshops. The feedback and insights from stakeholders and EU citizens on the key areas covered will be incorporated in the final strategy.

The outcome of this exercise will be a key element of the next European Regulatory Network Strategy to 2025, which will be developed together with the Member States and the EC. It will enable EMA to keep up with the accelerated technological change and innovation in medicine development. It will also allow the Agency to identify the gaps between science and healthcare systems and bring together the various stakeholders needed to bridge those gaps.

1.4.2. EU Network Training Centre

Evolving science and technology requires the network to keep its knowledge and expertise continuously up to date in order to meet the new regulatory challenges. The EU Network Training Centre (EU NTC) provides a central platform for scientific and regulatory training supporting the spread of good practices and improving the work performed by EMA and NCAs in the EU regulatory network.

During 2018, the number of training courses made available to the EU regulatory network continued to increase, with new training courses being offered across all curricula. By the end of the year, a total of 108 online trainings were made available on the platform, with 60 new events advertised to the EU network in 2018. Two new training curricula, one for the assessment of non-clinical data and the other for the development of product information, were developed, bringing the total number of training curricula to eleven.

In addition, a joint HMA–EMA survey was carried out among NCAs to better understand the training needs in the EU network and Member States' capacity to provide training. The results of the survey will serve to further improve the EU NTC training offer.

1.4.3. Stakeholders, communication and transparency

A new corporate website

EMA relaunched its corporate website (www.ema.europa.eu) on a new platform in 2018. Working in close collaboration with the Directorate-General for Informatics (DG DIGIT) enabled EMA to deliver a new corporate website despite resource constraints due to BCP. A number of new features to enhance user experience were incorporated, such as:

- an advanced search, allowing users to find content easily and to filter search results;
- a 'responsive' design for cleaner display on mobile devices;
- simpler URLs based on the location and title of webpages or documents;
- an updated visual design offering users a clearer reading experience and simpler navigation.

With this new version of the website, EMA aims to further improve its communication with partners and stakeholders, as well as to support the Agency in reaching out to EU citizens by providing them with evidence-based and easily accessible information on medicines.

Towards electronic product information for EU medicines

In November, EMA, the HMA and the EC organised a workshop to agree with stakeholders on common EU key principles for implementing electronic product information (ePI) for medicines across the EU.

The workshop followed up on a 2017 EC report which highlighted that, despite efforts to make the product information on medicines easy to read and useful, there is still a need to improve how this information is conveyed to patients and healthcare professionals. The use of electronic means for better dissemination of product information is one of the key priorities listed in an EMA action plan, also published in 2017, that aims to address the shortcomings identified in the EC report.

The workshop was the culmination of a year of mapping and consultation on the topic, and it offered a platform for healthcare professionals, patients and consumers, academics, non-profit organisations, regulators and the pharmaceutical industry to discuss their needs and concerns and the opportunities and challenges of ePI. It also looked at ongoing initiatives in the EU, and discussed how ePI fits into other EU and global initiatives.

The outcome of the workshop will serve as a basis for draft key principles for the use of ePI in the EU.

1.4.4. Management of the network information systems

EMA looks after the IT systems connecting all parties in the network. They facilitate important exchanges of information on aspects such as safety monitoring of medicines, authorisation and supervision of clinical trials, and compliance with good manufacturing and distribution practices.

Orphan designation goes digital

EMA launched a secure online portal for orphan designation applications on 19 June 2018. The portal, named 'IRIS', allows applicants to submit and manage the information and documents related to their applications for orphan designation. This is expected to significantly reduce the time needed to submit applications, and to increase the security of confidential documents via new sharing systems.

During the review process, applicants can check the status of their applications from any device and receive automatic notifications when the status changes.

IRIS is part of a longer-term programme that aims to make the handling of product-related applications easier and to integrate master data of pharmaceutical regulatory processes for substances, products, organisations and referentials (SPOR).

Data centre relocation project

EMA's data centre centralises the organisation's IT operations and equipment as well as stores, manages and disseminates its data. It houses EMA's most critical IT systems and business applications which are vital for the continuity of operations of the European medicines regulatory network.

The data centre relocation project (DCRP) project was launched in August 2017 to relocate EMA data centres from London to Hamburg, Germany by 30 March 2019. The objective of the project was to move the existing centre with minimal architectural changes and minimal downtime of production and non-production systems. During the course of 2018, the preparation for removal and transit was organised and physical removal began from September 2018 with the final transit phase taking place in January 2019. The project is on track to be delivered on time and within forecast budgets and succeeded in minimising production system downtime during the relocation period and ensuring that there was no significant change in overall network latency following installation in Hamburg.

1.4.5. Three EMA committees elected new chairs

2018 saw changes at the helm of three of the Agency's scientific committees as the PRAC, COMP and CHMP all elected new chairs.

PRAC

In July 2018, the PRAC elected Sabine Straus from the Netherlands as its new Chair. She took over from Dr June Raine, Director of Vigilance and Risk Management of Medicines at the United Kingdom's Medicines and Healthcare products Regulatory Agency (MHRA), who retired in September 2018, having chaired the Committee since its inception for two consecutive three-year mandates.

Sabine Straus is a member of the Dutch NCA, the Medicines Evaluation Board (MEB), with strong expertise in pharmacovigilance. She has been a member of the PRAC since 2012, when the committee was established.

COMP

In September 2018, EMA's Committee for Orphan Medicinal Products (COMP) elected Dr Violeta Stoyanova-Beninska as its new chair. She followed Professor Bruno Sepodes who served as COMP chair for two three-year terms, the maximum allowed.

Dr Stoyanova-Beninska has been working since 2007 at the Dutch national competent authority, the Medicines Evaluation Board (MEB), as a senior clinical assessor. She has strong expertise in neurology and psychiatry, as well as in ophthalmology, dermatology and pain management.

CHMP

At its September 2018 meeting, EMA's CHMP elected Harald Enzmann from Germany as its new chair, with a three-year mandate. Dr Enzmann follows Dr Tomas Salmonson, senior scientific advisor at the Swedish Medical Products Agency (MPA), who retired as chair after the September 2018 meeting, having served the maximum of two three-year mandates at the helm of the committee.

Dr Enzmann, a medical doctor, works for the Federal Institute for Drugs and Medical Devices (BfArM) in Germany, where he is Head of European and International Affairs. Dr Enzmann has been a member of the CHMP since 2005 and served as its vice-chair from 2016 to 2018.

1.5. Regulatory collaboration to improve global health

A central pillar in EMA's strategy to protect public health is the strengthening of collaboration with other international regulators. In 2018, the Agency continued to work with its partners in Europe and beyond, to contribute to the health of EU citizens and people around the world, but had to significantly decrease its contribution. To protect public health, priority was given to activities related to ensuring supply chain integrity and as well as encouraging development of medicines for low- and middle-income countries. The main initiatives focused on improving global oversight of medicines production through international collaboration on inspections.

Through its participation in the activities of the International Council for Harmonisation, the Agency played a key contribution in the finalisation of the ICH E17 guideline on "General principles for planning and design of multi-regional clinical trials", which is now implemented in the EU.

1.5.1. Interactions with non-EU regulators

The Agency collaborates with the Therapeutic Goods Administrations (TGA) in Australia, Health Canada (HC), the Ministry of Health, Labour and Welfare (MHLW) and the Pharmaceuticals and Medical Devices Agency (PMDA) in Japan and the Food and Drug Administration (FDA) in the United States (US) based on confidentiality agreements. Interactions with these authorities take place almost daily, partly structured around clusters of activities and partly *ad hoc*.

Reinforced EU–US collaboration on medicines

In June 2018, senior officials from the EC, EMA and the US FDA held a two-day bilateral meeting in Brussels, Belgium, to review joint initiatives, discuss strategic priorities for the coming years, taking into consideration the BCP, and further strengthen the close collaboration with specific focus on the field of pharmaceuticals.

The parties discussed the EU-US mutual recognition agreement (MRA) on pharmaceutical inspections of good manufacturing practices (GMP), which came into operation in November 2017 and was progressed further during the year. They committed to continue to work closely together at a technical level to further streamline the process, measure progress made, and monitor closely the implementation of the MRA. The participants also discussed ongoing initiatives and strategic priorities, such as support for the development of ATMPs, where similar regulatory challenges are faced on both sides of the Atlantic. The parties agreed to encourage early parallel scientific advice and to further strengthen the existing collaboration on ATMPs with a view to developing common scientific approaches on the regulation of these medicines. Other topics discussed included identification of possible ways of streamlining the scientific requirements for approvals of generic medicines through technical guideline harmonisation (i.e. ICH), as well as real-world evidence (RWE), where transatlantic collaboration can leverage expertise, experience and available data to help address methodological and practical challenges related to its analysis.

1.5.2. Improving oversight of global supply chains

Continued success of the international API inspection programme

EMA and its European and international partners have successfully strengthened their interactions to improve the oversight of active pharmaceutical ingredient (API) manufacturers worldwide.

This international collaboration allows EMA, several NCAs (France, Denmark, Ireland, Italy, and the United Kingdom), European Directorate for the Quality of Medicines (EDQM), the FDA, Australia's TGA, Health Canada, the Japanese MHLW and PMDA, and the World Health Organization (WHO) to share information on GMP inspections of API manufacturers that are located outside the participating countries.

The overall objective of the initiative is to ensure more API production sites are monitored all over the world by making best use of inspection resources through increased cooperation and mutual reliance between participating regulatory bodies, reducing duplication of inspections as well as increasing inspection coverage.

In 2018 the international API inspection programme report for 2011 to 2016 was published, concluding that there was an increase in the number of API sites inspected by participating authorities included in the programme and that this increase has supported the exchange of information on inspections which in turn supported better GMP oversight for the participating authorities.

EU-US mutual recognition agreement for inspections makes further progress

Throughout 2018, the mutual recognition agreement (MRA) between the EU and the US, which came into operation in November 2017, was further progressed. The agreement allows for recognition of each other's inspection outcomes and hence for better use of inspection expertise and resources. In 2018 the FDA confirmed the capability of 12 additional EU Member States to carry out GMP inspections at a level equivalent to the FDA –Belgium, Czech Republic, Denmark, Estonia, Finland, Greece, Hungary, Ireland, Latvia, Lithuania, Portugal and Romania (Austria, Croatia, France, Italy, Malta, Spain, Sweden and the UK were already confirmed in 2017). This means that at the end of the year, the FDA relied on a total of 20 Member States whose inspection results can replace their own inspections.

On the part of the EU, the European Commission had confirmed in June 2017 that the FDA has the capability, capacity and procedures in place to carry out GMP inspections at a level equivalent to the EU. The implementation of the mutual recognition agreement is progressing well and all EU Member States should be assessed by US FDA in 2019.

EU and Japan reinforce their collaboration on inspections

The EU and Japan agreed to broaden the range of medicines included in their MRA. This agreement, which is operational since May 2004, allows regulators to rely on GMP inspections in each other's territories, to waive batch testing of medicines that enter Japan from EU countries and vice versa, and to share information on inspections and quality defects.

The scope of the agreement was extended to include sterile medicines, certain biological medicines including vaccines and immunologicals, and active pharmaceutical ingredients (APIs) of any medicine covered in the agreement. The full scope of the MRA now covers chemical pharmaceuticals; homeopathic medicinal products (as long as treated as medicinal products and subject to GMP requirements in Japan); vitamins, minerals and herbal medicines (if considered as medicinal products in the EU and Japan); certain biological pharmaceuticals including immunologicals and vaccines; and APIs and sterile products of the above categories.

As part of the expansion of the scope of medicines covered by the MRA, Japan also evaluated and recognised as equivalent all EU competent authorities for human medicines inspection.

1.5.3. The EU regulatory network as a global model

Rise in non-EU country participations in EMA trainings

The participation of representatives of non-EU country regulators in trainings organised by EMA has grown steadily in the past few years, with a peak in 2018, when 202 people attended EMA trainings, a growth of 47% compared to 2017. These trainings covered topics such as good clinical practice, good manufacturing practice, inspections and quality assessment of medicines. EMA trainings help to build capacity for the oversight of the development and production of medicines in other parts of the world, and improve non-EU regulators' capabilities to better protect patients in their home countries and elsewhere.

Sharing EU expertise with African regulators

EMA's collaboration with African regulators continued in 2018. The Agency participated in workshops organised with Zazibona/SADC (Southern African Development Community) in Lusaka, Zambia, and with ECOWAS (Economic Community of West African States) in Dakar, Senegal. These meetings fostered trust in the scientific output of the CHMP, in particular the Agency's 'Article 58 procedure' for medicines intended for use outside the EU.

ISO award – increase global convergence of regulatory standards

Five EMA staff members won an ISO Excellence Awards for their achievements in the development of international standards for the identification of medicinal products (IDMP).

These standards facilitate the global exchange of information about medicines between regulators, data sources and pharmaceutical companies. They provide common formats, data structures, quality criteria and terminologies to identify medicines and enable information sharing between regulators and healthcare communities worldwide. ISO IDMP covers the entire product lifecycle: medicines in development, medicines under evaluation and authorised products.

EMA's team was supported by other EMA staff and experts from across the EU. They were part of a global collaborative effort led by ISO, involving medical experts from 32 participating and 27 observing countries who developed a set of five international IDMP standards.

1.6. New EU pharmaceutical legislation

At the end of 2018, the Regulation (EU) 2019/6 on veterinary medicinal products was formally adopted by the European Parliament and the Council of the EU. This new piece of legislation was proposed by the EC in 2014 to increase the availability of veterinary medicines, reduce administrative burden for veterinary medicine developers, stimulate competitiveness and innovation in the veterinary sector, improve the functioning of the internal market and address in particular the public health risk of AMR. The new regulation covers all aspects of veterinary medicines regulation at national and EU level and will start to apply from 28 January 2022.

In parallel with the new veterinary regulation, Regulation (EU) 2019/5 amending Regulation (EC) No 726/2004 was adopted in December 2018 to delete references to veterinary medicines and align EMA's Founding Regulation (726/2004) to Articles 290 and 291 of the Lisbon Treaty. This revision also included some minor changes unrelated to veterinary medicines, for instance with regard to alignment of certain provisions of EMA's basic act with the new EU financial regulation, existing jurisprudence on penalties and the framework for Conditional Marketing Authorisation and variations. These changes will become applicable on 28 January 2019.

In 2018 the Agency continued to support the EC and Member States in the implementation of the new Regulation (EU) 2017/745 on medical devices (MDR) and Regulation (EU) 2017/746 on in vitro

diagnostic medical devices (IVDR), which introduce new responsibilities for EMA and for national competent authorities for medicinal products. EMA will have a role in the review of companion diagnostics and can be consulted for complex products that are considered borderline between medicinal products and other regulatory frameworks. These two new regulations, which came into force on 25 May 2017, replace the three existing medical device Directives (93/42/EEC, 98/79/EC and 90/385/EEC). They will become fully applicable in May 2020 for medical devices and May 2022 for in vitro diagnostic medical devices, following a transition period to allow manufacturers, notified bodies and authorities to comply with the changes.

On 11 December 2018, new data protection rules for EU institutions, including the EMA, entered into force. The new Regulation (EU) 2018/1725 (EU DPR) ensures that the standard of data protection within EU institutions is in line with those provided for in the General Data Protection Regulation (GDPR). The EU DPR introduces some changes in the way agencies must deal with personal data, such as the need to build data protection principles into operations from the outset (data protection 'by design' and 'by default'), the obligation to properly document all data processing operations and store such records in a publicly accessible central register and the obligation to promptly inform the European Data Protection Supervisor of data breaches.

2. Work programme implementation

The work programme consists of four parts: evaluation activities for human medicines; evaluation activities for veterinary medicines; horizontal activities and other areas; and support and governance activities. Each of these is further broken down into chapters covering the Agency's activities in specific areas or stages in the medicines lifecycle.

Each of the chapters outlines the achievement of the workload and performance indicators included in each chapter of the work programme; as well as covers a set of objectives, with the relevant activities and results outlined.

Explanation of symbols used

A traffic light system is used to describe performance against objectives and targets.

	Results more than 10% above the 2018 forecast/target
	Results within +/- 10% of the 2018 forecast/target
	Results 10%~25% below the 2018 forecast/target
	Results more than 25% below 2018 forecast/target
	No activity/result to report

In general, the traffic light system reflects the direction and magnitude of changes, as described above.

However, for some performance indicators, where the optimal results should be lower than the targets, such as average assessment or clock-stop days, or calls reopened due to incorrect handling, the traffic light system is reversed to better reflect the essence of these indicators: results below the target are marked green or blue, while results above the target will appear amber or red.

In cases where absolute numerical change results in disproportionate variation, discretion should be used to reflect more accurately the significance of the change. For example, a number of applications falling from 1 to 0 (or rising from 0 to 1) can be marked green rather than red (blue), if this is in line with regular variations.

For indicators that have been included in the work programme for the first time, data on the previous year's results are not provided.

To be noted that some of the activities listed in the following sections had to be delayed or postponed due to resource reallocation linked to the relocation of the Agency or external circumstances.

Evaluation activities for human medicines

Pre-authorisation activities

Workload indicators

Procedure	2015 result	2016 result	2017 result	2018 forecast	2018 result
Scientific advice/protocol assistance pre-submission meetings	89	117	118	94	97
Scientific advice and protocol assistance requests, of which:	510	582	630	663	634
Parallel scientific advice with international regulators	3	6	3	4	2
Joint scientific advice with HTA bodies	30	23	29	32	27
Post-authorisation scientific advice	89	148	144	130	162
Scientific advice for PRIME products	n/a [1]	4	28	40	36
Protocol assistance requests	137	126	159	175	168
Novel technologies qualification advice/opinions	20	14	19	18	9
PRIME eligibility requests	n/a[1]	84	81	60	57
Scientific advice finalised	386	439	490	480	444
Protocol assistance finalised	139	122	156	165	170
Orphan medicines applications, of which:	258	329	260	250	236
Parallel orphan applications with international regulators	86	96	55	13	-[2]
Submitted applications on the amendment of an existing orphan designation	1	4	2	2	1
Oral explanations for orphan designation	-[3]	87	80	80	86
Paediatric procedure applications (PIPs, waivers, PIP modifications, compliance checks)	515	549	630	500	669
Finalised procedures for compliance check on PIPs	67	73	67	70	96
Annual reports on paediatric deferred measures processed	172	189	197	170	270
EMA paediatric decisions processed	319	369	402	350	407
Requests for classification of ATMPs	61	60	46	50	55
Innovation Task Force briefing/meeting requests	35	41	33	25	22
Innovation Task Force Art 57 CHMP opinion requests	0	2	0	1	5

[1] PRIME initiative was launched in March 2016.
[2] Following IRIS implementation common applications no longer used.
[3] New indicator introduced in 2016 work programme.

Performance indicators

Performance indicators related to core business	2015 result	2016 result	2017 result	2018 target	2018 result
Scientific advice/protocol assistance procedures completed within regulatory timeframes	100%	99.5%	100%	100%	100%
PRIME eligibility requests assessed within regulatory timeframe	-[1]	-[1]	100%	100%	100%
Orphan designation opinions delivered within the legal timeframe	100%	100%	100%	100%	96%
PDCO opinions sent to applicants within legal timelines	99.7%[2]	99.5%[2]	99.75%	100%	99.9%
Increase in scientific advice requests	-8%	14%	8%	0%	0.6%
SME requests for scientific advice (percentage of total SA requests)	32%	30%	31%	30%	31%

[1] New indicator introduced in 2017 work programme.
[2] Slight delays incurred due to re-examination (1 opinion in 2014, 1 opinion in 2015, and 2 opinions in 2016).

Achievements

Objective	Activity	% complete	Achievements/results
Facilitate research and development of new medicines	Identify areas in need of further research and communicate it to funding bodies (e.g. IMI, Horizon 2020) to stimulate targeted research projects	100%	EMA provided regular input through IMI, regulatory summit, public consultation of the EC on R&D budget, DG Research.
	Identify recurring topics from ITF discussions with the highest potential benefit in terms of driving science and innovation	90%	2017 - 2018 data has been entered, 2016 has to be finalised. Work to develop Dynamics from sandbox to live status for ITF is ongoing.
	Based on the horizon scanning activities and gaps identified, organise workshops with key opinion leaders and innovators, and involving NCAs, to address specific areas for innovation	50%	Training on additive manufacturing and digital and ADHD temporarily on hold due to the BCP.
	Reinforce collaboration via EU innovation Network with academia and research hospitals that could benefit most of the innovation offices regulatory support	100%	The CSA has been successfully assigned to a number of NCAs and EMA as partners under the leadership of BfArM (DE). The workshop has been held and successfully provided initial orientation on the needs of Academia.
	Use business forecasting and	100%	Notwithstanding the deprioritisation of IRIS for

Objective	Activity	% complete	Achievements/results
	analysis tools to better inform the EU Network about past and prospective development and improve regulatory preparedness		BAF due to the BCP, interaction with the EU network, HTAs and the payers has been supported.
	Establish a platform to review and explore opportunities for optimising activities and procedures during the development phase	50%	The scope of activity was fine-tuned to ensure alignment with other initiatives and renewed nominations were received. Due to reprioritisation under the BCP, work initiation was moved to 2019.
	Support a coordinated approach to ATMP-related activities in the Agency and maximise the outputs by involving all relevant actors and stakeholders	90%	The vast majority of deliverables of the joint 'European Commission-DG Health and Food Safety and European Medicines Agency Action Plan on ATMPs" have been finalised. Two more guidelines were released for public consultation in 2018, and one draft guideline was adopted for release for consultation in early 2019. The Committee for Advanced Therapies (CAT) held a successful meeting with interested parties in September 2018 as well as an EMA/CAT Regulatory session at the ESGCT 2018 congress in October.
Ensure that the needs of specific populations are met, including the elderly, children, patients with rare diseases, and others	Identify specific actions for EMA and PDCO that allow implementation of the European Commission/EMA action plan following the 10-year report on the Paediatric Regulation	100%	- March 2018 multi-stakeholder meeting to get wide input for EMA/EC action plan; - specific actions together with PDCO identified and integrated into action plan (specifically with respect to unmet needs, PIP model, optimisation of assessment work and handling); - Oct 2018 publication of EC-EMA action plan; - link to 'regulatory science till 2025' strategy for regulatory science aspects.
	Contribute to the activities of the International Neonatal Consortium (INC)	100%	- participation of PDCO members at annual workshop; - contribution to specific working groups (PDCO members, EMA staff); - publication of ROP paper with contribution by EMA.
	Contribute scientifically to the methodological aspects of drug development for paediatric rare diseases, particularly for rare inborn metabolic disorders	100%	The EMA/FDA document on Gaucher disease (strategic collaborative approach) has been finalised. Continuous engagement on paediatric rare diseases as follows: - discussions as part of the “PIP Strategy Review Project” from PDCO - Several PIP procedures in rare paediatric diseases, including inborn metabolic disorders

Objective	Activity	% complete	Achievements/results
			- contribution to the Rare Disease Cluster.
	Review the experience with the "Orphan Notice" and interaction with stakeholders	100%	Products impacted by the Notice were followed up in the autumn, and an oral hearing at the Court of Justice where the topic was brought up was attended.
Improve cooperation with partners (e.g. HTA bodies, European networks, international partners) throughout the product lifecycle	Coordinate delivery of actions under the EMA/EUnetHTA work plan, in conjunction with Joint Action 3	100%	Progress with actions is continuously monitored through the HTA collaboration matrix and as part of the EMA/EUnetHTA engagement; specific topics are progressed through the EMA/EUnetHTA bilateral. Internal bulletin with "facts and figures 2018" produced.
Reduce time-to-patient of medicines through the use of existing and new assessment approaches within existing legal frameworks, including through collaboration with international partners	Build Network capacity to support accelerated development pathways (including PRIME), with a focus on quality aspects on critical development path	100%	Joint EMA - FDA multi-stakeholder workshop on quality related to PRIME activities was run very successfully in November 2018.
Optimise the current regulatory framework by ensuring efficiency of the existing regulatory operations	Analyse experience with legislative provisions, identify gaps in regulatory framework and provide technical support to the EC and the Network in relation to optimising existing regulatory framework, including development and/or implementation of new or amended laws and regulation	75%	The regulatory analysis on the concepts of significant benefit across different pieces of legislation was presented to CHMP, CAT, COMP, PDCO and SAWP (between September and December 2018). This topic was identified by Committees Members as one suitable for a training of assessors, which is currently being considered in the RA training plan for 2019. It was also presented to EMA management at MLT and very good feedback received; in view of interest expressed by EC presentation was also given at the last STAMP meeting in December 2018; comments are currently awaited from the EC on the document, following which the activity can be finalised. The analysis on the experience with Regulation 847/2000 on assessment of similarity vis-a-vis orphan medicinal products was finalised in 2018 by RA and has undergone internal review by the end

Objective	Activity	% complete	Achievements/results
			of the year; presentation to be given to EMA management and relevant Committees Q1, 2019. This is also planned for sharing with the EC. A focused training for assessors and EMA staff is also being proposed as part of the 2019 training plan. The review of the Agency's experience with borderline medicinal products is currently on-going.
	Prepare for implementation of Medical Devices and In vitro Diagnostics Legislation, in relation to the implementation of the new consultation on borderline products, on products that may be systemically absorbed by the human body, and on companion diagnostics	75%	Consultation for medical device with ancillary substance: • completed revision of ancillary substance internal and external guidance. Consultation on medical device composed of substances: • Drafted external procedural guidance for substance based medical devices; • Collaborated with industry representative to obtaining information on numbers of products expected for the consultation. • Appointed committee sponsors for consultation and requested their input in the types of devices subject to consultation. Consultation on companion diagnostics: • Collaborated with industry associations in obtaining information on numbers of products expected for the new consultations Appointed committee sponsors • Continued to support implementation in EC In-vitro diagnostic technical group (for companion diagnostics), • supported concept paper development and organisation of expert meeting to discuss regulatory and procedural aspects related to companion diagnostic evaluation; • work on guideline was temporarily suspended mid-2018 due to BCP phase III. Consultation on borderline products: • Continued to support EC borderline and classification group for discussions on amendments of the MEDDEV guidance documents. • Commenced the Art 57 opinion on the definitions of mode of action and medical diagnosis in the context of revision of the

Objective	Activity	% complete	Achievements/results
			MEDDEV guidance. EMA coordinators prepared the initial report for discussion with appointed sponsors from CHMP and CAT. Article 117 (Medicinal products with integral device). • Continued to support QWP/BWP in developing guidance for medicinal product-medical device combination products in relation to the implementation of Article 117. • Held TCs with notified bodies in preparation of new requirements for DDC. • Developed Q&A document for critical Article 117 questions, which has been shared with EC, CMDh and medical device authorities with expected publication in Q1 2019. General implementation activities: • shared implementation plans with EMA committees and EC • Established communication links with DG GROW and DG SANTE for implementation and organised regular TCs. • Organised EMA regulatory awareness session on medical devices, which was opened to EU network and non-EU regulators. • Participated in external conferences (TOPRA, TOPRA/RAPS) and EMA industry meetings (R&D stakeholder platform and SME) to support/raise awareness of the changes introduced by the medical device Regulations.
Contribute to removing obstacles to optimal utilisation to biosimilar medicines	Coordinate efforts and drive activities to enhance the benefits of biosimilar medicines for public health	100%	All pending deliverables have now been finalised. A number of activities related to communication and facilitation will remain and be maintained for the long term, as will be the coordination of network actions on this filed. Among other achievements, two scientific papers were accepted for publication and more are being prepared. Also, translations of the 'Biosimilars in the EU - information guide for healthcare professionals' and an accompanying video have been published in a number of EU languages.
Ensure and run highly effective and efficient processes to deliver initial evaluation	Review and implement optimised operations for all functions supporting medicines' development, including knowledge management	90%	In view of Brexit operational changes have been introduced to increase versatility and flexibility of staff including knowledge sharing and transfer and to ensure support to scientific Committees during the business continuity

Objective	Activity	% complete	Achievements/results
activities			phase. Final changes to be implemented in February 2019 according to division timelines.

Initial evaluation activities

Workload indicators

Procedure	2015 result	2016 result	2017 result	2018 forecast	2018 result
Number of MAA pre-submission meetings	102	85	63	50	71
Initial evaluation applications, of which:	111	114	90	109	84
New non-orphan medicinal products	36	41	32	42	31
New orphan medicinal products	25	27	19	22	17
Similar biological products	12	12	17	13	9
Generic products, hybrid and abridged applications	37	31	15	22	23
Scientific opinions for non-EU markets (Art 58)	1	0	1	1	1
Paediatric-use marketing authorisations	1	1	2	0	0
Number of granted requests for accelerated assessment	17	12	10	6	11
Number of consultations of SAGs/Ad-hoc expert groups in the context of MAAs	7	8	14	20	13
Reviews on the maintenance of the orphan designation criteria at MAA stage		20	24	40	45

Performance indicators

Performance indicators related to core business	2015 result	2016 result	2017 result	2018 target	2018 result
Applications evaluated within legal timeframes[1]	100%	99%	100%	100%	100%
Average assessment time for new active substances and biosimilars (days)	200.7	197.2	175.7	205	205.3
Average clock-stop for new active substances and biosimilars (days)	138.4	136.1	136.9	180	195.2
Requests granted for accelerated assessment	73%	48%	63%	70%	46%
MAAs initiated under accelerated assessment that have been completed as accelerated assessment	-[2]	43%	58%	75%	44%

Performance indicators related to core business	2015 result	2016 result	2017 result	2018 target	2018 result
Initial marketing authorisation applications (orphan/non-orphan/biosimilar) that had received centralised scientific advice	82%	63%	69%	80%	68%
Labelling review of the English product information annexes for new MAAs and line extensions by Day 10 and Day 140 of the evaluation process	-[2]	97%	95%	90%	96%
Therapeutic guidelines progressed to the next step or finalised (percentage vs planned)	-[3]	-[3]	60%	70%	70%
Early background summaries drafted and sent to assessment teams (percentage vs planned)	-[3]	-[3]	100%	100%	100%
Percentage of outcomes/results of workshops on therapeutic objectives published on EMA corporate website	-[3]	-[3]	90%	100%	100%

[1] Includes marketing authorisation and plasma master file applications
[2] New indicator introduced in the 2016 work programme
[3] New indicator introduced in the 2017 work programme

Achievements

Objective	Activity	% complete	Achievements/results
Ensure and run highly effective and efficient processes to deliver post-authorisation activities	Streamline and strengthen the process of input by Quality Working Party and other quality of medicines working groups to the relevant parts of assessment report	100%	CHMP Overview templates have been updated and assessor training to the network provided. Quality information in Overview reports has improved significantly following implementation.
Provide high-quality, robust, scientifically sound and consistent scientific assessments	Continuously improve the tools (guidance and databases) available to EMA staff supporting scientific evaluation activities of the committees	0%	This activity has been reprioritised (2B) in line with the BCP and closed. (0% activity in 2018)
	Strengthen the support in clinical pharmacology and non-clinical aspects to centrally authorised products along their life-cycle	100%	Consolidation and maintenance of objectives attained at mid-year point.
	Develop the scientific assessment further and improve communication on the benefit/risk ratio of medicines: Improve the structure and information on benefit/risk in the EPAR by including the	75%	a1) Monitoring implementation of benefit-risk template structure and guidance (completed). a2) To produce guidance about contextualising benefit-risk assessment on the basis of available treatment options (on track).

Objective	Activity	% complete	Achievements/results
	effects table and implement new templates and guidance. Explore feasibility of using a more explicit approach in describing value-judgments in the benefit risk assessment.		b) To explore the feasibility of using a more explicit approach in describing value-judgments in the current benefit risk assessment framework/template. This will be achieved by means of case-study based focus groups with assessors, supported by available frameworks, instruments, and data sources (e.g., PROACT-URL, MCDA, patient preference studies). The added value of this approach and the need to develop further training material on regulatory decision-making and structured benefit-risk assessment of medicines for assessors will be evaluated (on track).
	Develop the scientific assessment further and improve communication on the benefit/risk ratio of medicines: Increase patients' involvement in assessment work and support the IMI PREFER project.	0%	Activity not yet started. Business need to be reconsidered.
	Develop the scientific assessment further and improve communication on the benefit/risk ratio of medicines: Explain the rationale for single-arm trials-based approvals to the public and explore the need for wider discussion of such approvals.	50%	Draft (oncology) agreed within drafting group; framework document to be agreed.
	Implement EMA action plan on EC's report to improve Product Information	100%	All actions set initially to implement recommendation number 5 of the EC report on electronic product information (ePI) were completed. The key milestone to organise a multi-stakeholder workshop to agree on the principles to govern the selection of the electronic standard for ePI was also successfully held on 28/11/2018.
	Prepare an implementation plan to address actions to meet the needs of patients and healthcare professionals with regards to readability, layout and content of product information contained in the summary of product characteristics and the package	100%	Completed and published.

Objective	Activity	% complete	Achievements/results
	leaflet		
Reduce time-to-patient of medicines through the use of existing and new assessment approaches within existing legal frameworks, including through collaboration with international partners	Support activities stemming from Joint Action 3 / work package 4 by providing relevant information from regulatory assessment to HTA bodies for relative effectiveness assessments	100%	Review of experience together with EUnetHTA, including comparison of respective outputs for the first three products; preparatory work for the next two REAs identified by EUnetHTA.

Post-authorisation activities

Workload indicators

Procedure	2015 result	2016 result	2017 result	2018 forecast	2018 result
Variation applications, of which:	5,999	6,204	6,267	6,505	6,716
Type IA variations	2,864	3,019	3,080	3,119	3,433
Type IB variations	1,980	2,000	2,054	2,084	2,164
Type II variations	1,155	1,185	1,133	1,302	1,119
Line extensions of marketing authorisations	14	25	21	19	20
PASS scientific advice through SAWP	1	2	1	3	3
Number of consultations of SAGs/ad hoc expert groups in the context of post-authorisation activities	-[1]	6	15	12	13
Renewal applications	-[1]	107	94	85	90
Annual reassessment applications	-[1]	25	19	24	22
Transfer of marketing authorisation applications	-[1]	35	47	375	377
Article 61(3) applications	-[1]	216	234	200	258
Post-authorisation measure data submissions	-[1]	1,016	795	850	812
Plasma master file annual update and variation applications	-[1]	19	22	19	19

[1] New indicator introduced in the 2016 work programme.

Performance indicators

Performance indicators related to core business		2015 result	2016 result	2017 result	2018 target	2018 result
	Post-authorisation applications evaluated within legal timeframes	99%	99%	99%	99%	99%
	Average assessment time for variations that include an extension of indication	160	165	162	180	157
	Average clock-stop for variations that include an extension of indication	65.5	73	67	90	66
	Percentage of submitted risk-management plans, peer-reviewed by the Agency as part of the extension of indication and line extensions	100%	100%	100%	100%	100%

Achievements

Objective	Activity	% complete	Achievements/results
Ensure and run highly effective and efficient processes to deliver post-authorisation activities	Optimise processes that include interactions among multiple Committees	100%	In view of Brexit operational changes have been introduced to increase versatility and flexibility of staff including knowledge sharing and transfer and to ensure support to scientific Committees during business continuity phase. In addition, the discussions of the joint CHMP/PRAC working group to clarify the lead Committee for Safety related Type II variations were finalised in the end of Q4 2018. As a next step the relevant Committees will be informed and process / relevant guidance will be updated in Q2-Q3 2019.
Further promote use of scientific advice throughout the lifecycle of the product, including further development of authorised medicines (e.g. extensions of indications, post-authorisation safety and efficacy studies)	Analyse the impact of scientific advice on the likelihood of obtaining a positive opinion for extensions of indication		Activity suspended in line with the BCP.
Strengthen the quality of the scientific review processes	Improve the benefit-risk methodology and expand it to post-authorisation updates		Activity suspended in line with the BCP.

Referrals

Workload indicators

Procedure	2015 result	2016 result	2017 result	2018 forecast	2018 result
Pharmacovigilance referrals started	5	8	7	6	2
Non-pharmacovigilance referrals started	16	10	3	10	15

Performance indicators

Performance indicators related to core business	2015 result	2016 result	2017 result	2018 target	2018 result
Referral procedures managed within legal timelines	100%	100%	100%	100%	100%

Achievements

Objective	Activity	% complete	Achievements/results
Ensure and run highly effective and efficient processes to assess referrals	Development of a common understanding with the Network on the best use of Referrals	30%	The need to develop a common understanding within the Network on the best use of referrals was adopted by HMA in November 2017 (referrals roadmap). Working groups have been formed with the relevant Committees (PRAC, CHMP and CMDh). A mapping of benefit-risk balance reviews by CHMP in referral procedures, including relevant lessons learned was finalised in Q4 2018. The report will be presented to the relevant Committees (CHMP, CMDh) in Q1 2019. Training and awareness sessions will be organised by the end of Q4 2019. Work is ongoing in mapping key PhV referrals and referrals that are initiated following GMP/GCP non-compliance. Reports summarising experience and learnings is expected to be prepared by Q2 2020.

Pharmacovigilance activities

Workload indicators

Procedure	2015 result	2016 result	2017 result	2018 forecast	2018 result
Number of signals peer-reviewed by EMA	2,372	2,372	2,062	1,800	2,204
Number of signals validated by EMA	61	61	82	55	74

Procedure	2015 result	2016 result	2017 result	2018 forecast	2018 result
PSURs (standalone CAPs only) started	512	518	551	540	554
PSUSAs started	268	243	372	346	327
Number of imposed PASS protocol procedures started	31	12	6	12	17
Number of imposed PASS result procedures started	2	3	6	10	8
Number of emerging safety issues received	34	21	21	10	8
Number of notifications of withdrawn products received	160	118	302	400	413
Cumulative number of products on the list of products to be subject to additional monitoring	261	301	336	320	351
Number of incident management plans triggered	-[2]	7	4	9	11
Number of non-urgent information or rapid alert notifications submitted through EPITT	-[2]	49	61	55	44
Number of external requests for EV analyses	-[2]	34	32	20	17
Number of MLM ICSRs created	-[2]	8,495	14,193	11,000	13,275

[1] New indicator added in 2018. Increase following the launch of the new Eudravigilance system in November 2017 includes mandatory reporting of non-serious cases
[2] New indicator introduced in the 2016 work programme

Performance indicators

Performance indicators related to core business	2015 result	2016 result	2017 result	2018 target	2018 result
Periodic safety update reports (PSURs standalone CAPs only) assessed within the legal timeframe	100%	100%	100%	100%	100%
Periodic safety assessment reports (PSUSAs result procedures) assessed within the legal timeframe	98.5%	100%	100%	95%	100%
Protocols and reports for non-interventional post-authorisation safety studies assessed within the legal timeframe	98.4%	100%	100%	100%	100%
Percentage of reaction monitoring reports supplied to the lead Member State monthly	100%	97%	97%	95%	95%
PRAC recommendations on signals and translation of labelling changes in EU languages published		100%	100%	100%	100%

Achievements

Objective	Activity	% complete	Achievements/results
Support efficient and effective conduct of pharmacovigilance by providing the necessary guidance and systems, and delivering high-quality processes and services	Coordinate data collection and analysis to measure pharmacovigilance impact as feedback to improve processes, and to provide input into the EC report on EU network pharmacovigilance tasks in 2018	100%	Implementation of the revised PRAC strategy on measuring the impact of pharmacovigilance (http://www.ema.europa.eu/docs/en_GB/document_library/Other/2016/01/WC500199756.pdf) continued in 2018 according to work plan. A new chapter on methods for pharmacovigilance impact research has been included in the annual revision of the ENCePP Guide on Methodological Standards in Pharmacoepidemiology. Four impact studies were launched through EMA's framework contract, for medicinal products containing valproate-related substances and for medicinal products containing retinoids. The prioritisation of regulatory actions for impact research has been improved with a specific impact section in assessment report templates agreed for selected post-authorisation procedures which will be fully implemented after BCP.
	Support ECDC in the delivery of the vaccine risk/benefit blueprint, as anticipated in the IMI ADVANCE project, by providing governance and code of conduct for such studies and regulatory support, as required	100%	ECDC submitted the final version of the ADVANCE Blueprint, including the governance and code of conduct for studies provided by EMA. The Blueprint was discussed in the ADVANCE General Assembly meeting which took place at EMA on 6-7 September 2018. ADVANCE was terminated end of September but a 6-month extension was agreed by IMI to perform a last validation study. EMA is not participating in this extension phase. A final ADVANCE event will take place on 6th March 2019.
	Conduct a lessons-learned exercise after one year experience of public hearings	100%	Lessons learned were published on the external website on 8 June 2018.
	Launch public consultation (2018) and finalise (2019) GVP product- or population-specific considerations III on pregnant and breastfeeding women	70%	Chapter GVP P III on pregnancy and breast-feeding has been prioritised for public consultation in 2019. Drafting of the text takes into account the outcomes of the latest expert/stakeholders meetings held in 2018.
	Finalise GVP product- or population-specific considerations IV on the paediatric population. Conduct public consultation and finalise GVP product- or population-	70%	Chapter GVP P IV on paediatrics was finalised addressing the comments from the public consultation and published on 7 November 2018. The development of chapter GVP P V on

Objective	Activity	% complete	Achievements/results
	specific considerations V on geriatric population		geriatrics has been suspended in line with the BCP; however discussions on the scope continued in 2018 at stakeholder meetings to pro-actively support resuming the development of the chapter in the future.
	Consider review of GVP Module VII on Periodic safety update report and GVP Module XVI on Rick minimisation measures: selection of tools and effectiveness indicators	25%	Revisions of existing GVP modules, such as GVP module XVI on risk minimisation measures and GVP Module VII on Periodic safety update report, have been suspended due to BCP.
Maximise benefits to public health promotion and protection by enhancing benefit-risk monitoring of authorised medicines and pharmacovigilance decision-making through the use of high-quality data, information and knowledge	Build capacity for EU Network analysis of epidemiological data	Continuous	Procurement procedure (EMA/2017/09/PE) 'Efficacy and safety studies on medicines' has been finalised. Five EMA funded studies have been finalised in 2018 and results have been presented to PRAC/CHMP. A new study to be performed with regulatory authorities on measurement of switching patients from codeine to alternative treatment has been agreed. Testing of new analytical approaches for electronic health records is on-going.
	Further develop and maintain inventory to facilitate access to real-world data	Continuous	The ENCePP database of resources is continuously updated with description of disease registries used for regulatory decision-making (http://www.encepp.eu/encepp/resourcesDatabase.jsp). The document "Electronic healthcare databases in Europe: characterisation and assessment of usefulness for benefit-risk evaluation of medicines" has been finalised in April 2018 (with final description of 35 databases) and has been published in a scientific journal (https://www.ncbi.nlm.nih.gov/pubmed/30185579).
	Initiate at least 4 EMA studies on real world evidence data	100%	14 EMA in-house studies have been initiated in 2018 using the THIN and IMS databases, and 8 have been finalised and results have been fed into Committee decision-making.
	Review the scientific advice process for post-authorisation studies to identify possible process improvement opportunities	Continuous	Process established to identify products in Scientific Advice where real world data may be of use. EMA RWD specialists attend Scientific Advice, pre-submission and PRIME meetings to support product development.
	Continue leadership of work package for WebRADR on governance aspects of social	100%	All deliverables allocated to EMA were delivered by the planned milestones. The WEB-RADR project has closed in December 2017.

Objective	Activity	% complete	Achievements/results
	media monitoring		
	Based on evaluation of the options and feasibility, provide increased support to the use of registries for targeted products on the EU market from learnings from the pilot process	Continuous	The reports of all the workshops to support the use of registries in generating data to support regulatory decision-making have been published on the Patient registry webpage of the EMA website (https://www.ema.europa.eu/en/human-regulatory/post-authorisation/patient-registries).
	Implement the recommendations from 2017 guidance on key principles for use of registries from a regulatory perspective	50%	A "Discussion paper on methodological and operational aspects of the use of patient registries for regulatory purposes" has been finalised by the EMA Task Force on patient registries and posted on the EMA website for consultation until 30 June 2019. Due to BCP the guidance will be developed with Committees based on the Discussion paper and the comments received in Q3/Q4 2019.
	Implement phase 1 of the pilot on the new process of signals submitted by MAHs, including analysis of operational capacity, functionality of EV tools, added value of MAH involvement, and areas of process and guidance improvements (2018-2019). Analyse the outcome of phase 1 of the pilot and initiate phase 2 of the pilot (2019-2020)	70%	With a view to gain more experience with the process, the pilot, initially planned for one year, has been prolonged beyond February 2019 in agreement with the European Commission. By the end of September 2019, the Agency will finalise a report outlining the first year of experience (February 2018 - February 2019). By the end of December 2019, a decision on the next implementation phase, including the scope of products to be included and the date of coming into effect, will be communicated to stakeholders.

Other specialised areas and activities

Workload indicators

Procedure	2015 result	2016 result	2017 result	2018 forecast	2018 result
Herbal monographs, new[1]	14	8	4	3	4
Herbal monographs, revised	3	9	8	12	15
List entries	0	2	0	1	0

[1] Where assessment does not lead to the establishment of a monograph, a public statement is prepared.

Performance indicators

Performance indicators related to core business	2015 result	2016 result	2017 result	2018 forecast	2018 result
n/a					

Achievements

Objective	Activity	% complete	Achievements/results
Strengthen the quality of the scientific review processes	Establish a pragmatic approach setting European standards for herbal combination products		Activity suspended in line with the BCP.
Promote application of harmonised international standards	Provide technical and scientific contribution to the development of ICH guidelines (Carcinogenicity assessment document evaluation for ICH S1)	75%	Organised and relayed information from monthly teleconferences supporting the progress towards end of data review activities aimed at an overhaul of nonclinical carcinogenicity testing (ICH S1 guideline).
Implement the Clinical Trials Regulation	Finalise the new and revised guidelines related to the implementation of the Clinical Trials Regulation, considering as applicable the comments received during public consultation	85%	- The revision of the GCP inspection related guidelines have been finalised and have been published in EudraLex Volume 10. - The "Guideline on the content, management and archiving of the clinical trial master file (paper and/or electronic)" has been finalised and was published on the EMA website on the 6 December 2018 (https://www.ema.europa.eu/documents/scientific-guideline/guideline-content-management-archiving-clinical-trial-master-file-paper/electronic_en.pdf). - The draft "Guideline on the responsibilities of the sponsor with regard to handling and shipping of investigational medicinal products for human use in accordance with Good Clinical Practice and Good Manufacturing Practice" (http://www.ema.europa.eu/docs/en_GB/document_library/Scientific_guideline/2018/05/WC500249275.pdf) is pending revision to take into account the comments received from the public consultation ended on 31 August 2018, suspended due to BCP. - The finalisation of the "Procedure for the management of serious breaches by the EEA Member States, including their assessment and the appointment of a lead Member State" is on

Objective	Activity	% complete	Achievements/results
			hold to ensure its alignment with the implementation of relevant functionalities in the CT Information System currently under development. - Guideline for the notification of serious breaches of Regulation (EU) No 536/2014 or the clinical trial protocol is still pending revision following public consultation and finalisation and publication is planned for the second half of 2019, suspended due to BCP.
Reduce prescription medicines misuse	Cooperate with Horizontal Drug Group of the Council on the topic of misuse and dependence on prescribed medicines	100%	Completed
Effectively manage risks to the environment arising from the use of human medicines	Collaborate with the EC on the roadmap "Strategic approach to pharmaceuticals in the environment" and update EMA guideline on environmental risk assessment (ERA). Participate in EC cross-service group on medicines in the environment	100%	Coordinated the responses to the public consultation from CHMP and EMA including input from veterinary and GMP inspectorate. Attended meetings with the Commission in person and by teleconference as EMA representative on the steering group to draw up the communication on the strategic approach to pharmaceuticals in the environment.
Promote responsible use of antibiotics in human and veterinary medicine adopting a 'One Health' perspective	[1] Establish and run cross-Agency Task Force on anti-microbial resistance. Provide proposals and implement them for EMA activities to address antimicrobial resistance.	100% on track	Contribution to AMEG activities as expected.
Enhance ability to respond quickly to public-health emergencies	[1] Collaborate with international stakeholders on the clinical study design and emergency use of medicines in case of a public health emergency and interact with medicines developers in the early stages of the development to facilitate early introduction of appropriate treatments or preventive measures.	100% on track	EMA Health Threats Plan has been released. Contribution to WHO R&D Blueprint activities is continuing as planned. Interaction with funded project such as ECRAID ongoing.
	[1] Contribute to Joint Action on Vaccines and EC vaccines task force on vaccines (action the plan from the Council Recommendations on	100% on track	EMA supported the content and finalisation of the vaccination CRs and the JAV as far as envisaged for the time being.

Objective	Activity	% complete	Achievements/results
	vaccination). This includes activities related to support R&D of vaccines including dialogue with NITAGs; discussion with EC and ECDC on platform for B/R monitoring of vaccines.		

[1] New activities added to 2018 work programme.

Evaluation activities for veterinary medicines

Pre-authorisation activities

Workload indicators

Procedure	2015 result	2016 result	2017 result	2018 target	2018 result
Innovation Task Force briefing requests	2	4	7	4	5
Scientific advice requests received	27	18	17	20	25
Requests for classification as MUMS/limited market	30	25	25	25	32
Of which reclassification requests	1	6	8	5	5

Performance indicators

Performance indicators related to core business	2015 result	2016 result	2017 result	2018 target	2018 result
Scientific advice procedures completed within set timeframes	100%	100%	100%	100%	96%

Achievements

Objective	Activity	% complete	Achievements/results
Provide support and incentives to the development of new medicines for MUMS/limited markets	Publish annual report on MUMS/limited market activities	100%	The MUMS/Limited market activities report has been endorsed by Management Board in March 2018 and subsequently published on the EMA website.
	Develop training material on the latest revision of MUMS guidelines on data requirements and other guidance	0%	Due to re-prioritisation of activities in line with the BCP this has not be further developed in 2018.
Promote innovation and the use of new	Promote access to the Agency's Innovation Task Force through	100%	The ITF was one of the topics presented at the Veterinary Innovation Day stakeholders' event

Objective	Activity	% complete	Achievements/results
approaches in the development of veterinary medicines	presentations to industry and as part of existing pre-authorisation procedures		held on 19 April 2018. Additionally, ITF briefing meetings have been promoted in all suitable early contacts with companies, either during meetings, or when answering written or telephone queries.
	Conduct (2018) and evaluate (2019) user surveys on improvements identified as a result of the measures recently put in place to support innovation and development of medicines (ADVENT, ITF, scientific advice)	100%	The survey to industry was launched in Q1 2018. Results analysis was initiated in Q2 2018 and finalised in Q4 2018.
	Organise exchange with stakeholders on innovation	100%	A half a day stakeholder event, the Veterinary Medicines Innovation Day, was held on 19 April 2018. The main topics presented were focussing on veterinary specific support for brining innovative products to the EU market. Feedback was collected from participants and will be taken into consideration for future events organisation.
	Develop and publish Q&A developed by ADVENT in priority areas for technologies that are new to veterinary medicine	80%	Due to its complexity the Q&A on target animal safety studies in stem cells is now foreseen to be finalised Q1-Q2 2019.
	Develop an action plan on specific regulatory approaches to facilitate authorisation of alternatives to antimicrobials, to control infectious diseases in animals	80%	An EMA discussion document on potential actions in the area of alternatives to antibiotics was adopted by CVMP in March 2018 and sent out for internal consultation within the Network in June 2018. CVMP will now review the comments received and decide on the need for a reflection paper on this topic in Q1-Q2 2019. Arising from the OIE meeting on alternatives to antibiotics in 2016, a paper on regulatory pathways was initiated in cooperation with FDA in Q1 2017 and completed in Q4 2017. The article was published in Biologics Journal after official review by both Agencies in Q1 2018.
Provide and further promote continuous and consistent pre-application support to applicants,	Explore ways to promote the uptake of parallel scientific advice with the FDA, as part of pre-submission advice	100%	Parallel scientific advice with the FDA continues to be actively promoted in early contacts, business meetings with companies, pre-submission meetings and ITF meetings.

Objective	Activity	% complete	Achievements/results
including through collaboration with international partners			
Support development and availability of veterinary medicines	Review recommendations from the CVMP ad hoc group on veterinary vaccine availability (CADVVA) and agree on CVMP and working party actions	50%	The mandate for the group was revised and continuation for further 2 years was agreed at HMA in March 2018 and by CVMP in May 2018. During 2018 CADVVA did not have any meetings and therefore no further recommendations were made requiring action. The activity was suspended in the second half of the year in line with the BCP.
	Develop a reflection paper on promoting availability of veterinary vaccines in emergency situations	50%	Activity suspended in line with the BCP.
	Follow up from the focus group on field efficacy trials, on how to improve predictability to applicants with respect to the requirements for field efficacy trials	100%	The CVMP finalised in May 2018 the analysis of centralised vaccine authorisations in relation to field efficacy trials, adopted a problem statement and requested IWP to proceed to necessary action.
	Provide advice and input to address gaps in availability identified in the FishMed Plus Coalition where relevant to CVMP activities	100%	The CVMP confirmed the agreement to follow up actions as needed. Clarification to the EMA/CVMP observer status has been obtained, allowing the continuation of the representation role as before.
	Revise guideline on anticoccidials used for the therapy of coccidiosis	75%	The draft revised guideline for the demonstration of efficacy for veterinary medicinal products containing anticoccidial substances has been adopted by CVMP in December 2018 and published for consultation until 31 August 2019.
	Revise guideline on data requirements regarding veterinary medicinal products for the prevention of transmission of canine and feline vector-borne diseases	75%	The draft guideline was discussed at CVMP in June 2018 and adopted in July 2018 for public consultation period until 31 August 2019.
	Revise Note for guidance on DNA vaccines non-amplifiable in eukaryotic cells for veterinary use	20%	A draft guideline was prepared, however this activity was suspended in line with the BCP.
	Develop a concept paper for revision of SmPC guideline for	100%	The concept paper was published in December 2017 for 3 months consultation that ended in

Objective	Activity	% complete	Achievements/results
	anthelmintics		March 2018. The guideline development was suspended in line with the BCP.
	Finalise an action plan for CVMP on how to follow up on the recommendations of the reflection paper on anthelmintic resistance	100%	An action plan was adopted by EWP-V in May 2018 and by CVMP in December 2018.

Initial evaluation activities

Workload indicators

Procedure	2015 result	2016 result	2017 result	2018 forecast	2018 result
Initial evaluation applications	10	21	17	18	15
New MRL applications	4	6	3	2	3
MRL extension and modification applications	3	1	3	2	2
MRL extrapolations	1	0	0	1	0
Art 10, Biocides	0	0	0	0	0
Review of draft Codex MRLs	0	5	0	5	5

Performance indicators

Performance indicators related to core business	2015 result	2016 result	2017 result	2018 forecast	2018 result
Procedures completed within legal timeframes	100%	100%	100%	100%	100%

Achievements

	Activity	% complete	Achievements/results
Provide high-quality and consistent scientific outputs of EMA	Finalise training material on revised guideline, procedures and templates for CVMP assessment reports, and provide training on these, with emphasis on benefit-risk	0%	Due to re-prioritisation of activities in line with the BCP this activity has not been further developed in 2018.

	Activity	% complete	Achievements/results
Ensure that the establishment of MRLs supports the safe use of veterinary medicines in regard to their impact on human health	Provide technical support to the European Commission in drafting implementing acts specified in Regulation 470/2009	100%	Technical support to the EC was provided and the implementing measures were published in January 2017, May 2017 and May 2018.
	Develop principles for the approach for MRL for biologicals	100%	The overriding principles have been established, accepted by EC, and published in Commission Regulation 2018/782 of 29 May 2018.
	Review MRL entries in the Annex of Regulation 37/2010 with regard to substances with restrictions of use and recommend on a risk assessment basis the ones to be maintained and the ones to be deleted	100%	In September 2017, EC requested EMA advice on the basis of existing 'other provisions' included in Reg 37/2010. The MRL entries in the Annex of Regulation 37/2010 were reviewed in Q1 2018 and recommendations based on risk assessment were provided to the EC for the ones to be maintained or deleted.
	Finalise, in collaboration with ECHA and EC, the procedure for the establishment of MRLs of biocidal substances used in animal husbandry included in the 10-year review programme (long-used substances)	0%	The European Commission has initiated a review of the procedure for the establishment of MRLs for biocides, with a particular focus on the workshare between EMA and ECHA within the procedure. The reflections/discussions continue at the EC level. The Agency will only progress on the issue once the EC has finalised its approach.
Promote uptake of harmonised standards at international level	Reflect on the need for increased international harmonisation in relation to the evaluation of consumer safety of veterinary medicines	0%	Due to re-prioritisation of CVMP activities in line with the BCP this has not been further developed in 2018. Input for this activity is mostly from the working parties, which are currently suspended under the Agency BCP.

Post-authorisation activities

Workload indicators

Procedure	2015 result	2016 result	2017 result	2018 forecast	2018 result
Variations applications, of which:	373	410	446	403	589
Type IA variations	196	243	238	220	330
Type IB variations	116	126	130	135	147
Type II variations	61	41	78	48	112

Procedure		2015 result	2016 result	2017 result	2018 forecast	2018 result
	Line extensions of marketing authorisations	3	3	5	3	1
	Transfers of marketing authorisations				20	17

Performance indicators

Performance indicators related to core business		2015 result	2016 result	2017 result	2018 forecast	2018 result
	Post-authorisation applications evaluated within legal timeframes	100%	100%	100%	100%	99.9%

Achievements

Objective	Activity	% complete	Achievements/results
Ensure efficient delivery of post-authorisation procedures	Revise and update post-authorisation procedural guidance	75%	Work has been progressing and is currently foreseen for completion by end of Q1 2019.

Referrals

Workload indicators

Procedure		2015 result	2016 result	2017 result	2018 forecast	2018 result
	Arbitrations and Community referral procedures initiated[1]	7	8	1	4	5

[1] A significant proportion of referrals provided substantial complexity and related to a large number of products (>100 products).

Performance indicators

Performance indicators related to core business		2015 result	2016 result	2017 result	2018 forecast	2018 result
	Arbitration and referral procedures managed within legal timelines	100%	100%	100%	100%	100%

Achievements

Objective	Activity	% complete	Achievements/results
Contribute to minimising the risk to man and animals from the	Provide the EC with CVMP recommendation on prioritisation developed in 2017, for the EC to consider the need	0%	Further to the referrals prioritisation concerning antimicrobials presented to the CVMP at the end of 2017 a second step concerning identification of possible specific referrals was planned for

Objective	Activity	% complete	Achievements/results
use of antibiotics in veterinary medicine	for further referrals		2018. However, in view on the direct link with the new veterinary legislation the activity was postponed until the relevant provisions of the new legislation were clarified.

Pharmacovigilance activities

Workload indicators

Procedure	2015 result	2016 result	2017 result	2018 forecast	2018 result
Periodic safety-update reports (PSURs)	159	175	161	160	158
Total adverse-event reports, of which:	31,467	38,162	50,885[1]	30,000	66,844[1]
Adverse-event reports (AERs) for CAPs	14,387	18,419	26,671	13,500	35,835
Adverse-event reports (AERs) for NAPs	17,080	15,257	24,214	16,500	31,009

[1] As in 2017, there has been a significant increase (30%) in the number of AERs received in EudraVigilance. An organic year-on-year growth is expected due to the increased number of centrally authorised VMPs. In addition, during the last two years, an increase of voluntary submission by MAHs of non-serious reports is noted and, particularly in 2018, voluntary electronic reporting of non-serious adverse events from some non-EU countries (50%) was determined by MAHs implementing the CVMP revised recommendation for the basic surveillance of EVVet data for CAPs.

Performance indicators

Performance indicators related to core business	2015 result	2016 result	2017 result	2018 forecast	2018 result
PSURs evaluated within the established timelines	99%	98%	98%	90%	99%
Adverse event reports for CAPs monitored within the established timelines	98%	96%	98%	95%	98%

Achievements

Objective	Activity	% complete	Achievements/results
Support efficient and effective conduct of pharmacovigilance, by providing the necessary guidance and systems and delivering high-quality processes	Support Member States in the upload and quality control of data into the European database of veterinary medicinal products, and link these data to adverse event reports for CAPs and non-CAPs to allow signal detection	100%	EMA involvement in product data submission was scaled back from pro-active organisation of meetings with MSs (2015 - February 2017) to on-request support by Member States (February 2017 - on-going). The updated mapping tool has now been deployed in production, and relevant data has been mapped and product data imported in EVVET.

Objective	Activity	% complete	Achievements/results
			A further update to the mapping tool was deployed in July 2018 to enable import of products with multiple packages.
	Evaluate pilot on safety surveillance and finalise the recommendation for basic surveillance	100%	A pilot exercise to test the recommendation started in July 2017 and ran until the end of February 2018. This included voluntary participation from 8 MAHs involving 26 centrally authorised products. The Recommendation for the basic surveillance of EudraVigilance Veterinary data was updated and published in May 2018 in consideration of the pilot outcome and comments received. All MAHs for centrally authorised products have been updated and asked for their intentions in terms of voluntarily applying the principles of the Recommendation. The conclusions of the pilot were presented at CVMP in December.
	Organise dedicated focus groups with specialised veterinarians/healthcare professionals to obtain further detailed insight on key aspects to improve pharmacovigilance reporting, and feedback for further development	20%	A focus group with specialised veterinarians/healthcare professionals in the field of poultry was scheduled for 28 November 2018; however the activity has been suspended in line with the BCP.
	Revise the process for incident management plans in light of the lessons-learned from a simulation exercise and a recent experience	100%	In order to take into account the lessons learned from the simulation exercises on the Incident management plan and four real cases, revision (Rev.2) of the Incident management plan was initiated in 2017 and presented to the European Surveillance Strategy group in June 2017. Agreement by European Surveillance Strategy group was granted in October 2017, followed by CVMP and HMA endorsement in November 2017. A foreseen second simulation exercise planned for 2018 was not considered a priority as the IMP was tested with real cases.
Provide consistent, high-quality information on pharmacovigilance topics to	Publish the veterinary pharmacovigilance annual bulletin	100%	The pharmacovigilance bulletin was published in March 2018.
	Develop and implement criteria for proactive risk	50%	A draft strategy document has been initiated in relation to communication and promotion which

Objective	Activity	% complete	Achievements/results
stakeholders and partners	communication concerning CAPs		includes a proposal regarding proactive risk communication and was discussed by PhVWP-V at its meeting in July 2018. This activity is now suspended in line with the BCP.

Other specialised areas and activities

Workload indicators

Procedure	2015 result	2016 result	2017 result	2018 forecast	2018 result
n/a					

Performance indicators

Performance indicators related to core business	2015 result	2016 result	2017 result	2018 forecast	2018 result
n/a					

Achievements

Objective	Activity	% complete	Achievements/results
Support increased availability of veterinary medicines	Conclude the report on the pilot project on harmonisation of old veterinary antimicrobials (PPHOVA) and consider follow up	90%	The group met in April 2018 to advance the report on the group's actions. The report has been presented to CVMP in May 2018 and adopted in July 2018 for public consultation. A dedicated Focus Group meeting of the group was held in October 2018, the deadline for comments on the report is end of January 2019.
	Develop a reflection paper on resistance in ectoparasites	50%	The draft reflection paper was adopted by EWP-V in May 2018 and adopted by CVMP in July 2018 for public consultation until 31 August 2019.
	Contribute to EU position for the revision of VICH guidelines on anthelmintics (GL7, 12-16 and 19-21)	50%	Work at the VICH Expert working group on the revision of 9 GLs will continue in 2019. The publication of the revised draft guidelines for consultation is expected for the end of 2019. Contribution by EWP-V to this activity is expected to be requested until finalisation.
	Provide necessary input to the European Commission during the ordinary legislative procedure for new veterinary	100%	Throughout the first part of 2018, EMA provided technical advice and support to the EC during the trialogue discussions on new veterinary legislation by providing comments to the draft

Objective	Activity	% complete	Achievements/results
	legislation		documents received. Following final comments on the linguistic/legal check EMA input is now complete.
	Set up and develop a work plan for an ad hoc expert group, to explore practical measures that could form the basis for harmonisation of the SmPCs of veterinary medicinal products in the context of the revision of the veterinary medicines legislation	5%	A mandate for the group was drafted in 2016. Following the adoption of the final text of the new veterinary legislation, which changed substantially the initial proposals for SmPC harmonisation, this activity is now superseded.
	Contribute to the EMA/HMA task force on availability of authorised human and veterinary medicines	100%	Comments have been provided on a range of documents produced by the Thematic Working Groups to ensure that the veterinary aspects of the work are taken into account.
	Contribute to the considerations of the proposals for the joint HMA task force on availability at the European Surveillance Strategy group for the perspective of CAPs, as part of developing systems to facilitate management of shortages and ensure the adequate supply of essential veterinary medicines	70%	The Task Force agreed on an EU-wide definition on medicine shortages and a guidance document on reporting medicine shortages for human and veterinary medicines in June 2018. These were presented at a workshop organised by EMA to stakeholders in November 2018. The Task Force will discuss the consultation process involving CMDh, CMDv, human and veterinary stakeholders in January 2019. A list of NCA's "Single Points of Contact on Availability" (SPOC) was set up in April 2018. This communication channel will become fully active in 2019 (there was a significant delay in receiving SPOCs from NCAs). The Task Force will discuss the further steps (possible pilot phase) and the consultation process involving CMDh and CMDv in January 2019.
Provide high quality and consistent scientific outputs of the EMA	Revise guideline on summary of product characteristics for antimicrobials	75%	The revised draft guideline was published for consultation in April 2018. This activity has now been suspended in line with the BCP and the deadline was extended until 31 August 2019.
	Consider and develop training in cooperation with EU NTC in areas identified by CVMP to build network assessment capacity	100%	In view of BPC resulting in the reduction of the number of working parties meetings, the delivery of training to the network by the working parties was significantly reduced and only two were foreseen for 2018. The J3Rs group contributed to the training organised in June 2018 by Denmark in cooperation with the EU NTC on "3Rs and immunological medicinal products. Their impact

Objective	Activity	% complete	Achievements/results
			on the regulatory field". In November 2018 the Agency contributed to the training organised by Germany in cooperation with the EU NTC on EVVet and pharmacovigilance signal detection.
Promote uptake of harmonised standards at international level	Contribute to training events that raise awareness and enhance uptake of VICH standards by non-VICH countries	100%	EMA participated in 10th VICH Outreach Forum (VOF) meetings in June 2018, in Bruges and provided one training session on Metabolism and residue kinetics. A training session on anthelmintics was provided by the EU expert on the topic. The 10th VOF meeting involved representatives from the seven VICH regions as well as nine non-VICH countries and one international organisation. Development of training material on VICH GL9 Good clinical practices has been suspended due to BCP. CVMP has commented on training slides relating to VICH quality, bioequivalence and target animal batch safety testing intended for publication on the VICH website and aimed at non-VICH countries.
	Continue dialogue with international risk assessment bodies with a view to increasing harmonisation of scientific approaches and methodologies for the establishment of MRLs	0%	Due to re-prioritisation of CVMP activities in line with the BCP this has not been further developed in 2018.
Contribute to minimising the risk to man and animals from the use of antibiotics in veterinary medicine in 2018-2019	Finalise the reflection paper on aminoglycosides and publish for consultation the reflection paper on extended-spectrum penicillins	80%	The consultation period for the 'Reflection paper on use of aminoglycosides in animals in the European Union: development of resistance and impact on human and animal health' ended in mid-October 2017. The revised reflection paper was finalised in Q2 2018, adopted by CVMP in June 2018 and subsequently published on the Agency website. The 'Reflection paper on the use of aminopenicillins and their beta-lactamase inhibitor combinations in animals in the European Union: development of resistance and impact on human and animal health' has been adopted by AWP and by CVMP at its July and September meeting respectively, for a consultation period of 3 months. The consultation period ended on 21 December 2018 however in line with the BCP, this activity was suspended and not proposed for priority in

Objective	Activity	% complete	Achievements/results
			2019 so will not be finalised until 2020 at the earliest.
	Finalise guidance on provision of data on antimicrobial use by animal species from national data collection systems	100%	The consultation period for the guidance on provision of data on antimicrobial use by animal species from national data collection systems ended in September 2017. The guidance was finalised taking into consideration the comments received and published in February 2018.
	Publish reports on existing systems within the EU for collection of data on use of antimicrobials in chickens and cattle	100%	A review of the existing antimicrobial data-collection systems in poultry started at the end of 2016 and continued throughout the first half of 2017. The review of the antimicrobial data-collection systems for cattle started in Q2 2017. Working documents have been completed for both species in 2018 and used internally as reference on the collection of antimicrobial use data. It has been decided not to publish the documents due to the lack of representativeness of the data collected.
	Set up a system for the stratification of sales data per species as part of the integrated analysis of the consumption of antimicrobial agents and occurrence of antimicrobial resistance in bacteria from humans and food-producing animals	75%	Six Member States have agreed to participate in the pilot project on stratification, providing data for 2016. All of them have already sent the raw data in 2018. The protocol has also been sent to the rest of the Member States to fill in the 2017 data. An expert meeting was held in September 2018, to evaluate the pilot project and a report will be prepared in 2019.
	Implement actions assigned to EMA as part of the third implementation period of the TATFAR initiative	100%	The Agency is leading on TATFAR Action 1.4 (methodologies for surveillance of consumption of antimicrobials per species) and until April 2018, has also lead task 3.7 (alternatives to antimicrobials). The leadership of task 3.7 has now been taken over by FDA (USA). During the first half 2018 two virtual meetings took place to discuss the activities of action 1.4 and 3.7, and the preparation of the "Reflection paper on the harmonisation of the reporting of consumption of antimicrobials" started. The Agency participated in the TATFAR meeting organised in Atlanta in March 2018 by CDC and in the teleconferences related to activities 1.5 (implementation of the Codex Alimentarius Guidelines for risk analysis of AMR) organised by Health Canada and 1.6 (promoting prudent use of antimicrobials) organised by USDA.

Objective	Activity	% complete	Achievements/results
	Contribute to implementation of the next phase of the EC action plan on antimicrobial resistance, the WHO global action plan, OIE strategy and other action plans (such as the G8)	100%	Contribution to different actions of the European One Health Action plan against AMR in relation to antimicrobials and veterinary medicinal products has been provided in the first half of 2018, such as participating in international meetings (OIE) and providing expert knowledge and technical support to the EC. During the second part of 2018, the Agency participated to the One Health Network meeting, and continued collaborating with EC on Codex activities.
	Refine and continue data collection on the consumption of antimicrobials in veterinary medicine and publish the outcome in the ESVAC annual report	100%	The draft of the 8th ESVAC report was circulated to the ESVAC experts' network for initial consultation on 19 June 2018. The final report was published on EMA web page and circulated to the EC, Member States and Stakeholders on 15 October 2018.
	Provide advice and input to the EC, in collaboration with ECDC and EFSA, on updating the previous advice on the impact on public health and animal health of the use of antibiotics in animals (categorisation of antimicrobials and early hazard characterisation)	50%	Due to the complexity of the revision, an extension has been requested to EC until Q2 2019. The updated advice is expected to be circulated for consultation in Q1 2019 and finalised in Q2 2019 by the Ad hoc Experts Group, the advice is foreseen to be adopted by CVMP and CHMP in Q2 2019.
Effectively manage risks to the environment arising from the use of veterinary medicines	Develop a guideline on risk assessment of veterinary medicinal products in groundwater	100%	The guideline "Assessing the toxicological risk to human health and groundwater communities from veterinary pharmaceuticals in groundwater" was published in April 2018.
	Provide advice to the European Commission to assist the preparation of their strategy on managing pharmaceuticals in environment	75%	After the public consultation finished and the Pharmaceuticals in the environment strategy approach updated considering the comments received from the public consultation in February 2018, in October 2018 DG ENVI launched an inter-service consultation (ISC) with a deadline of 7 November 2018. The latest version contained a number of policy and non-policy options for consideration. No feedback from the ISC has been received at this stage.
	Finalise the draft guideline on higher tier testing of the effects of veterinary medicinal products on dung fauna, taking into account the 2017 workshop outcome	0%	Activity suspended in line with the BCP.

Objective	Activity	% complete	Achievements/results
	Develop a reflection paper on the potential risks associated with the use of veterinary medicinal products in aquaculture	40%	In Q4 2018 a draft version of the document was presented to CVMP. As a result of the comments received, it was considered by CVMP that additional work is needed to the paper before its adoption. This activity has been temporarily suspended in line with the BCP.
	Reflect on a methodology that could be used to better characterise the exposure to the environment following the use of veterinary medicinal products containing PBTs	0%	Activity was suspended in line with the BCP.
Minimise the use of animals in medicines research and development activities	Finalise the draft reflection paper providing an overview of the current regulatory testing requirements for veterinary medicinal products and opportunities for implementation of 3Rs	100%	The reflection paper providing an overview of the current regulatory testing requirements for veterinary medicinal products was adopted by CVMP in June 2018 and published on the Agency's website. A reflection paper providing an overview of the current regulatory testing requirements for human medicinal products was adopted and published in Q4 2018.
Plan for and implement the revised veterinary legislation	Update the gap analysis and impact assessment of new veterinary regulation on existing procedures and technical requirements	30%	The gap analysis and the impact assessment of the new veterinary regulation are being reviewed taking into consideration the final text of the adopted regulation and finalisation is expected by end 2019.

Horizontal activities and other areas

Committees and working parties

Workload indicators

Procedure	2015 result	2016 result	2017 result	2018 forecast	2018 result
Number of reimbursed meetings	437[1]	441	529	738	408
Committee meetings	-[1]	71	71	89	71
Training[2]	-[1]	21	30[3]	46[3]	29[3]
Workshops	-[1]	66	32	33	33
Others (working groups, working parties, ad hoc expert meetings, SAG etc.)	-[1]	283	396	570	273
Number of teleconference meetings (audio,	4,273	4,969	4,802	7,375	4,793

Procedure		2015 result	2016 result	2017 result	2018 forecast	2018 result
	video and web)					
	Number of reimbursed delegates	8,226	7,972	8,743	10,481	7,214
	Number of non-reimbursed delegates			1,464	1,800	1,064

[1] Detailed split by types of meeting available from 2016. For previous years, all meetings counted under a single, overall entry.
[2] includes EU Network training centre meetings
[3] includes EU NTC events

Performance indicators

Performance indicators related to core business		2015 result	2016 result	2017 result	2018 forecast	2018 result
	Delegate satisfaction with the service level provided by the secretariat	93%	n/a	n/a[1]	n/a[1]	n/a[1]
	Up-to-date electronic declarations of interests submitted by committee members and experts, prior to participating in a committee, SAG or other meeting	99%	99%	100%	100%	99%
	First-stage evaluations of competing interests for committee members and experts completed prior to their participation in the first meeting after the submission of a new or updated declaration of interests	100%	100%	100%	100%	100%
	Ex-ante verifications of declarations of interests for new experts completed within two weeks after upload of the DoI in the experts' database	100%	100%	99%	100%	100%

[1] As of 2017, delegate survey is being aligned with the annual delegate survey conducted by the Scientific Committees Service of the Agency. However, as this service did not conduct a survey in 2017, no delegate satisfaction survey was conducted in 2017.

Achievements

Objective	Activity	% complete	Achievements/results
Optimise the current regulatory framework by ensuring efficiency of the existing regulatory operations	Explore opportunities for collaboration and work with HTA organisations by providing support to the development and revision of methodological and disease-specific guidelines	0%	This activity has been integrated into the EUnetHTA activities (European network for Health Technology Assessment) and has been closed.
	Support the activities of the HMA Regulatory Optimisation Group (ROG) to simplify and optimise the processing of Type IA variations	100%	The first business case on Type IA variations was approved by HMA in June 2018. The business case proposes a roadmap of solutions that can offer reductions in the time spent in handling Type IA Notifications and release

Objective	Activity	% complete	Achievements/results
			capacity for more value-adding activities for both authorities and industry. The recommendations include the use of IT enablers e.g. SPOR, electronic application form (eAF) to simplify submissions and to automate the process.
Improve collaboration and communication between committees, working groups and SAGs to increase quality, efficiency and consistency of outputs	Analyse involvement of scientific advisory groups in evaluation activities to identify gaps and improve guidance	10%	Due to the reprioritisation of this activity, the improvement of guidance has been put on hold.
Ensure 'fit-for-purpose' scientific capability of the network	Develop a regulatory science strategy, addressing evolution in science, technology and regulatory tools for human and veterinary medicines	100%	RSS launch workshops human and vet held in October and December respectively. Draft RS strategy document published by end of December together with reply survey and communication support.

Inspections and compliance

Workload indicators

Procedure	2015 result	2016 result	2017 result	2018 forecast	2018 result
GMP inspections	567[1]	672[1]	314	280	332
GLP inspections	1	0	0	1	1
GCP inspections	86	121	136	130	140
Pharmacovigilance inspections	14	8	15	18	20
PMF inspections	-[1]	-[1]	83	87	84
Notifications of suspected quality defects	164	181	161	200	147
Notifications of GMP non-compliances[2]	18	17	23	20	25
Number of medicinal products included in the sampling and testing programme	48	48	58	55	53
Standard certificate requests	3,221	3,787	4,023	3,750	3,703
Urgent certificate requests	785	487	531	670	1,069
Parallel distribution initial notifications	2,838	2,850	2,639	2,300	2,304

Procedure		2015 result	2016 result	2017 result	2018 forecast	2018 result
	received					
	Parallel distribution notifications of change received	2,096	1,847	1,975	2,300	2,184
	Parallel distribution notifications of bulk change received	13	8	6	11	11
	Parallel distribution annual updates received	3,959	3,815	3,798	5,750	6,000[3]

[1] PMF inspections included in GMP inspections results.
[2] Previously: 'Other GMP inspections related notifications'.
[3] Estimated final figure. Includes 3,890 notifications received but not processed in 2018.

Performance indicators

Performance indicators related to core business		2015 result	2016 result	2017 result	2018 target	2018 result
	Inspections conducted within established regulatory timeframes	100%	100%	100%	100%	100%
	Standard certificates issued within the established timelines	91%	91.6%	64.2%	90%	0%[2]
	Average days to issue standard certificate	7	7	10.3	10	27.3[2]
	Urgent certificates issued within the established timelines	100%	100%	100%	100%	99%
	Parallel distribution notifications checked for compliance within the established timeline	99%	99%	96%	90%	97%
	Additional GCP inspections addressed through information exchange on inspections carried out by international partners	46%	34%	39%	35%	38%
	Additional routine GMP re-inspections of manufacturing sites addressed through exchange of information with international partners	14%	19%	12%	n/a[1]	n/a[1]
	Outcome reports of the sampling and testing programme for centrally authorised products, followed up with the MAH within one month of receipt	100%	100%	100%	100%	100%

[1] Not included in 2018 due to implementation of MRA
[2] Average processing time increased from 10 to over 60 days during the second half of 2018 creating a backlog due to increased shortage of staff through long term leave and internal mobility to priority areas together with an increase in requests on Brexit related variations of the marketing authorisation

Achievements

Objective	Activity	% complete	Achievements/results
Increase efficiency, consistency, quality and coverage of inspections through	Strengthen collaboration with trusted international partners, in particular those with confidentiality agreements in	Continuous	Within the EMA-FDA GCP initiative, regular teleconferences and specific product-related teleconferences took place over the year, including three face-to-face meetings. The

Objective	Activity	% complete	Achievements/results
enhanced international cooperation and reliance on inspections by trusted authorities	place (e.g. FDA and Japan) on GCP and pharmacovigilance compliance, and inspections activities in areas of interest		Japanese Pharmaceuticals and Medical Devices Agency (PMDA) also participates in the regular teleconferences as an observer to the EMA/FDA GCP initiative. Five joint EMA-FDA GCP inspections and eight observational inspections were coordinated. FDA participated and presented during the GCP IWG Workshop in Bonn (Germany). Within the EMA-EU MSs -FDA GCP BE Inspections initiative, regular teleconferences took place over the year. Under the confidentiality agreement between EC-EMA-WHO, EMA and WHO had several teleconferences during 2018 in the area of GCP BE Inspections.
	Explore the possibility to set up a pilot phase with the FDA on sharing information on pharmacovigilance inspections	Continuous	Information on pharmacovigilance inspections is shared on an ad hoc basis.
	Monitor and review effect of implementing EudraGMDP rules for planning module on cooperation with Member States in coordinating third-country inspections	100%	The rules were implemented in 2017 and their effectiveness is being monitored in collaboration with the GMDP IWG.
Minimise risk and impact of shortages due to manufacturing problems and quality defects	Implement the new form for reporting quality defects/suspected falsified medicinal products and start compiling information received, to analyse root causes for quality defects	100%	The new form for reporting quality defects/suspected falsified medicinal products has been published in April 2018 on the external web site and will improve the analysis of the root causes of quality defects.
	Provide regulatory support to the work of the EU Observatory to facilitate the transition from high-enriched uranium to low-enriched uranium	Continuous	Continued regulatory support to the work of the European Observatory on the Supply of Medical Radioisotopes including participation in the bi-annual meeting to facilitate the transition from High Enriched Uranium (HEU) to Low Enriched Uranium (LEU) is being provided.
	Support and collaborate with HMA on the availability of medicines initiative	50%	Support has been provided to the HMA Task Force on Availability of Authorised Medicines for Human and Veterinary Use. Concerning the Thematic working group 2 - Supply chain disruptions, a definition of a shortage, reporting guidance and metrics have been developed. A stakeholder workshop was

Objective	Activity	% complete	Achievements/results
			held in November 2018.
Ensure quality of medicines wherever they are manufactured	Develop (2018-2019) and finalise (2020) a Union procedure for risk-based approach to GMP inspection for plasma master file inspections	100%	Union procedure on Application of Inspection and Control Measures to facilitate risk based inspection planning of sites within the Plasma Master Files (PMF) certification system has been published in the second half of 2018 as a voluntary procedure for GMP Inspectorates in EUDRAPORTAL.
Improve application of equivalent standards of good manufacturing and clinical practice throughout the world	Support training activities in India and China, including establish a panel of European inspectors available to participate in capacity-building workshops in these countries	Continuous	The Agency participated in three conferences/workshops in India, namely India Pharma, BioAsia 2018 and India Pharmaceutical Forum 2018 and one GMP workshop in China.
Improve knowledge and understanding of data integrity and implications for regulatory decision making	Develop further GxP guidance for industry on data integrity	5%	Work on Chapter 4 and Annex 11 of the GMP Guide to include additional elements relating to data integrity are underway but have been suspended in line with the BCP.
Address the threat posed by illegal supply chains of medicines	Review the practical use of the existing Rapid Alert mechanism for transmission of information related to stolen and falsified medicines	100%	EMA undertook a short pilot study in 2018 in order to evaluate the benefits of sharing information on thefts using a centralised Rapid Alert and common reporting template. The outcome of the pilot indicated that a formal channel for alerts in relation to stolen medicines would be beneficial for the whole network. Work on this activity has been temporarily suspended in line with the BCP. Work concluded on development of a specific template to be used by MAH's for reporting thefts to NCA's and EMA. Work on this activity has been temporarily suspended in line with the BCP.
Support capacity building of non-EU regulators	Deliver training and capacity-building for inspectors and assessors, including international regulators	Continuous	Online basic GCP (for EU and non-EU Regulators) and Bioequivalence (only EU Regulators) trainings for 2018 were carried out. GCP Inspectors training workshop was hosted by BfArM in Bonn, Germany in October 2018. Remote support was also provided to the USFDA–EMA–CDSCO–DIA GCP Multicentre Workshop in India (three events) in May 2018.

Objective	Activity	% complete	Achievements/results
			Two training courses for GMP inspectors were organised: one on Health Based Exposure Limits in July 2018 and one on GMP for ATMPs in conjunction with CAT assessors in September 2018.

Partners and stakeholders

Workload indicators

Procedure	2015 result	2016 result	2017 result	2018 forecast	2018 result
Requests for SME qualification	793	582	553	715	487[1]
SME status renewal requests	994	1,185	1,335	1,540	1,334
Number of cases of patient/consumer engagement[2] in EMA activities	743	750	916	700[3]	493
Number of cases of healthcare professionals engagement[2] in EMA activities	-[4]	-[4]	450	200	212
New scientific, regulatory and telematics curricula developed	1	8	0	1	2
Number of training events advertised to the EU Network	105	140	100	80	60
Number of reimbursed training events to the EU Network	7	25	20[5]	12	8
Number of messages circulated via 'Early Notification System'	310	380	383	400	440
Number of EMA communications pro-actively sent to stakeholders	138	172	144	150	175
Number of EPAR summaries and EPAR summaries updates published	340	283	299	300	343
Number of summaries of orphan designation published	230	240	168	200	169
Requests for access to documents	701	823	865	850	822
Documents released following requests for access to documents	2,972	2,876	2,807	2,700	2,422
Requests for information	4,573	4,843	6,735	5,500	7,554
Number of documents published on the EMA corporate website	7,154	7,369	6,736	8,056	4,840[6]
Number of pages published and updated on the EMA corporate website	2,911	4,790	3,754	5,071	6,307
Number of press releases and news items published	190	187	181	150	183
Requests for interviews and comments by media representatives	2,268	2,149	1,862	1,800	1,517

Procedure		2015 result	2016 result	2017 result	2018 forecast	2018 result
	Number of reports, brochures and leaflets produced	7	25[7]	60	30	85

[1] Lower figure likely due to UK entities no longer applying for EMA SME qualification
[2] These include any interactions that a patient, consumer, carer, or healthcare professional may have with the Agency, such as acting as a committee/working party member, reviewing a package leaflet, being invited to a SAG meeting, or any other activity which entails engagement from both sides.
[3] Due to change of methodology (due to BCP we are now counting only engagements related to products) the 2018 estimate has been revised to a lower figure of 400 in June 2018
[4] New indicator introduced in 2017
[5] Including 14 events by EU Network training centre
[6] Due to the relaunch of the corporate website on a new platform in Q3/2018, the statistics are still incomplete
[7] Sharp increase in 2016 due to high demand for graphic representation of reports, for posters and infographics

Performance indicators

Performance indicators related to core business		2015 result	2016 result	2017 result	2018 target	2018 result
	Satisfaction level of patient and consumer organisations	n/a	97%	n/a	n/a[1]	n/a[1]
	Satisfaction level of healthcare professionals organisations	n/a	n/a	n/a	n/a[1]	n/a[1]
	Satisfaction level of SMEs	92%	94%	93%	80%	95%
	Percentage of responses to ATD requests provided within set timelines	94%	97%	96%	90%	96%
	Percentage of responses to RFI requests provided within set timelines	97%	100%	98%	97%	97%
	Satisfaction level from patients and healthcare professionals who received a response from the Agency to their RFI	81.7%	77%	81%	75%	85%
	Number of NCAs that have opened their training for inclusion in EU NTC learning management system	6	14	8	10	7
	Number of users registered to the EU NTC Learning Management System	n/a	2,117	3,583	5,000	4,424
	Number of NCA experts registered to the EU NTC Learning Management System	n/a	1,225	2,668	4,000	3,480
	Satisfaction level of partners/stakeholders with EMA communications	80%	n/a	82%	n/a	n/a
Key messages included in media articles generated by EMA press releases:						
	At least one key message	100%	100%	100%	95%	100%[3]
	At least two key messages	100%	51%	57%	70%	66%[3]
	Quote included	60%	0%[3]	57%	60%	63%[3]
	Average rating of pages on EMA corporate website during the year	-[5]	3.6	3.3	3.5	3.1

[1] Due to BCP next survey due in 2020
[2] New indicator introduced in 2016 work programme
[3] Sample of press releases monitored due to BCP

Achievements

Objective	Activity	% complete	Achievements/results
Strengthen stakeholder relations, focusing on patients and consumers, healthcare professionals, industry associations and academia	Implement a framework for collaboration with academia with respect to human medicines, and consider the need for any specific adaptations to the framework with respect to veterinary medicines	60%	Implementation progress at reduced rate due to BCP, particularly focusing on strengthening the collaboration with the ERNs and supporting the development of the regulatory science strategy
	Publish an annual report on EMA's interaction with industry associations	100%	Report was published on the external website of 1 August 2018.
	Publish an annual report on EMA's interaction with patients, consumers, healthcare professionals and their organisations	100%	Report was published on the external website on 27 June 2018.
	Implement recommendations to promote GPs interactions with EMA and support regular engagement with GPs, including through written consultations, teleconferences, participation in dedicated meetings and other	95%	Joint position statement agreed by UEMO/EFPC/WONCA in December 2018. Publication suspended in line with the BCP.
Further develop support to and strengthen stakeholder relations with SMEs	Implement an action plan arising from the 10-year report on the implementation of the SME Regulation	88%	Implementation of SME action plan is progressing. Completion is expected in 2020. 87.5% (14/16) of actions initiated.
Further strengthen the Agency's transparency and open data commitments	Complete the reflection paper on providing access to individual patient data	0%	Temporarily suspended in line with the BCP
	Assess implementation of the policy on publication of clinical data and publish a report	0%	Temporarily suspended in line with the BCP
	Hold regular discussions in the technical group on anonymisation of clinical data	100%	5 subgroups have been set up and 4 to 5 teleconferences have been held for each of the 5 subgroups. Annual face-to-face meeting of the TAG on 23-24 October 2018. Draft Q&A developed by the TAG subgroups and agreed by the TAG in October 2018 due for publication in 2019.
	Publish the transparency road map following public consultation (2018). Agree	0%	Temporarily suspended in line with the BCP.

Objective	Activity	% complete	Achievements/results
	draft principles of transparency (2019)		
Ensure a more optimal organisation of the available expertise within the network for services provided to EMA	Monitor and improve implementation of the multinational assessment team (MNAT) approach pre-authorisation	0%	No progress has been made due to the need to prioritise the EMA Brexit preparedness project. As improvement of the MNAT approach could facilitate the organisation of work of NCAs post Brexit, this activity will be prioritised in 2019.
	Implement the second phase (2018) and launch the third phase (2019) of the multinational assessment team approach post-authorisation	0%	No progress has been made due to the need to prioritise the EMA Brexit preparedness project. As implementation of phase 2 could facilitate the organisation of work of NCAs post Brexit, this activity will be prioritised in 2019.
Ensure 'fit-for-purpose' scientific capability of the Network	Identify emerging topics and gaps in expertise which require action to increase capability of the EU Network	100%	Survey conducted with network regarding expertise gaps. The report has been prepared
	Develop in collaboration with the Network, the EU Medicines Agencies Network Strategy to 2025	100%	Draft Regulatory Science Strategy produced for public consultation published in December 2018. This will be an input to the Network Strategy 2025.
	Work with the Network to include training courses in NTC learning management system and to promote use of NTC courses, to maximise the use of the EU NTC learning management system	Continuous	In 2018 60 new courses have been made available through the EU NTC Learning Management System, including 35 online courses.
	Work with the Network to prioritise training needs	100%	Presentations on the work of the EU NTC have been given to the Agency's Scientific Committees to date. Feedback from the committees, together with the outcome of the survey (carried out in March / April 2018) of the training needs of the network will help to prioritise training in 2019/2020. A meeting of Curriculum Leads, focusing on identification of priority areas in 2019 – 2020 was held in December 2018.
	Review and update existing curricula to ensure provision of up-to-date training	90%	All curricula leads reviewed and provided a status report on the development of training in the areas outlined within the existing curricula, with some modifications proposed. The relevant curricula will be updated to introduce these new areas of planned training.
	Strengthen collaboration among the EU Innovation offices on	100%	The reviews have been conducted in depth - also at international level within ICMRA - for the

Objective	Activity	% complete	Achievements/results
	regulatory challenges identified to promote harmonisation and consistency		selected innovative topics which include: genome editing, 3Dprinting and additive manufacturing and borderline health products involving medicines and devices. Digital therapies and Artificial Intelligence (at EU-IN and ICMRA) are next topics planned for discussion.
	Foster the visibility and activities of the EU Innovation office network to ensure effective and harmonised support to early innovators at local and European level	100%	The EMRN engaged in the interaction with Academia to support innovation in particular via the CSA STARS (of which also EMA is partner). The visibility of the overall EU-IN as regulatory infrastructure supportive of innovators can improve. EMA so far did most of the work advertising the EU-IN and the workshop in November provides an additional opportunity of high visibility and usefulness.
Increase awareness on the evolution of the regulatory framework	Identify in cooperation with EU Innovation office network and scientific committees priority areas (therapeutic areas, technologies, other) for which there is a need to develop communication tools, such as regulatory guidelines, white papers, publications in peer review journals etc.	20%	Activity temporarily suspended from the inspectors' side in line with the BCP.
Provide stakeholders and partners with consistent, high-quality, timely, targeted and accessible information on the Agency's work, outputs and medicinal products	Review and improve the format and content of EMA information on medicines for patients and healthcare professionals (i.e. EMA summaries in lay language)	0%	Activity temporarily suspended in line with BCP and lack of resources.
	Run a pilot to test and improve the crisis communication plan	40%	Emerging health threat plan with specific reference for communication has been published. Further learnings for corporate communication crisis management were made during the communication around Brexit and will be implemented.
	Carry out an EMA perception survey to better understand communication opportunities and challenges, and review the Agency's communication products and tools as per the results of the survey	N/A	
	Improve the corporate website	100%	Website relaunched in new publishing platform

Objective	Activity	% complete	Achievements/results
	by adding new tools and features, such as tools to improve search, search-engine optimisation, accessibility, analytics and others		in September 2018, including more powerful search and analytics tools and utilising best practice in accessibility and search engine optimisation. In parallel, all necessary content was published on the EMA corporate website on time and with high quality, including new content (e.g. Regulatory Science Strategy) and revamped sections (e.g. annual report, medicines for use outside the European Union, quality defects, and emerging health threats).
	Develop and implement an annual communications plan, in line with the framework strategy for external communication	100%	Communication plan 2018 implemented.
	Continue development and implementation a social media strategy, including consolidate social media channels and grow followership	75%	Re-launch of EMA LinkedIn page - increase to over 56,200 followers; continued organic growth of Twitter followership (over 38,300); regular exchange with PCWP and HCPWP on social media is taking place; draft of social media strategy is currently being revisited.
	Develop new digital and multimedia communication tools	100%	A new digital tracking tool for EMA's relocation was developed.
	Support open access publication of scientific articles by staff	100%	All open access requests received (totalling 19) were processed.
EMA staff and delegates have access to relevant information resources in a timely manner to support their daily activities within the Agency	Proactive development and provision of InfoCentre collection and services including e.g. journals, eBooks and databases that address the changing needs of the Agency.	100%	All relevant subscriptions were renewed/reviewed in due course. Books have been purchased proactively. Access to online resources is monitored continuously.
	Implement Information Literacy Programme	60%	Information literacy activities have been reduced due to BCP. Only introductory trainings (total of 14) and on-demand information clinics (total of 3) have taken place.

International activities

Workload indicators

Procedure	2015 result	2016 result	2017 result	2018 forecast	2018 result
Interactions with FDA			654	500	584
Interactions with PMDA/MHLW			138	70	122
Interactions with Health Canada			91	90	175
Interactions with Membership organisations			104	90	118
Interactions with any other stakeholders			498	510	734
Answers to membership organisations' speaker requests			125	90	103
Number of information and/or document exchanges			929	800	920
Number of teleconferences organised			166	150	172

Performance indicators

Performance indicators related to core business	2015 result	2016 result	2017 result	2018 forecast	2018 result
n/a					

Achievements

Objective	Activity	% complete	Achievements/results
Ensure best use of resources through promoting mutual reliance and work-sharing	Optimise Article 58 scientific opinion activities, including by enhancing collaboration with WHO and concerned regulators and developing additional communication tools	80%	- CHMP gave positive opinion for one Article 58 application in November 2018, for fexinidazole (treatment of African sleeping sickness, mainly targeted at Western Africa). This was the tenth positive opinion under Article 58 ('EU-Medicines4all'). The CHMP also began assessment in 2018 of another medicine under Article 58, targeted for use mainly in Southern Africa. - At the end of 2018, there had been 138 national approvals granted in 90 countries based on CHMP positive opinions for Article 58 products. The majority of these countries are in Africa but approvals have also been granted in Latin and South America, Asia and non-EU Europe. - The CHMP gave a number of scientific advices on the development of two 'Article 58' products.

Objective	Activity	% complete	Achievements/results
			- There were 5 requests for eligibility for new medicines under Article 58 in 2018. There were informal and pre-submission discussions with sponsors of a further 4 potential Article 58 products. - EMA contributed to two joint assessment meetings with regulators from Southern African Development Community (SADC) in Lusaka, Zambia from 11-14 June 2018 and from the Economic Community of West African States (ECOWAS) in Dakar, Sénégal. This activity is part of the follow-up to the March 2017 'Malta meeting' between the CHMP and African regulators. The European teams were composed of CHMP members, European experts and EMA staff members. Outcomes of the activity include promotion of the Article 58 procedure, reliance on EMA scientific outputs, increased visibility of the European regulatory system, as well as technical capacity-building training for the regulators. - Article 58 guidance: The regulatory guidance pages on the EMA website were revised, including addition of some new content, and published in May 2018. - Article 58 communication and stakeholder engagement: International Affairs continued to engage with pharmaceutical industry, health NGOs and product development partnerships about the benefits of the procedure. This included engagement with target regulators at the WHO International Conference of Drug Regulatory Authorities (ICDRA) in September 2018 and at the WHO/PAHO Conference of the Pan American Network on Drug Regulatory Harmonization (CPANDRH) in October 2018. A new ‘info graphic’ on the Article 58 procedure and its achievements was published on the EMA website in November 2018. - EDCTP: International Affairs engaged with the European and Developing Countries Clinical Trials Partnership (EDCTP) to explore opportunities to leverage and support each other's activities. An initial meeting was held with the EDCTP Executive Director in June 2018, followed by International Affairs participation at the EDCTP Forum of European

Objective	Activity	% complete	Achievements/results
			and African regulators and other stakeholders. The Executive Directors of EDCTP and EMA met on 26 November 2018 to discuss areas of possible cooperation to be set up in 2019 and implemented in 2020. - IPRP: The newly-created International Pharmaceutical Regulators Programme (IPRP) met for the first time following the consolidation of the IPRF and IGDRP initiatives. EMA participated actively in the creation of the new body, which aims at improving regulatory dialogue, regulatory convergence, implementation of global harmonisation guidelines, promoting best practices and facilitating work-sharing. EMA did not participate in the second meeting due to resource limitations. - WHO-EMA Collaborative Registration Procedure Pilot: Begun in 2014, this is a trial pathway for approval of EU centrally-approved and Article 58 medicines in African countries. It was used for two centrally-approved medicines in 2018.
Promote convergence of global standards and contribution to international fora	Contribute to global dementia activities/programme in collaboration with other partner agencies, the EC and international organisations	100%	EMA actively contributed to international initiatives of global action against dementia in collaboration with international organisations, the EC and partner regulatory agencies. The final revision of the CHMP guideline on Alzheimer's disease was published in February 2018.
	Provide assistance to candidate countries, to align their standards and practices with those established in the European Union and to further foster their integration process	0%	Activity suspended in line with the BCP.
Improve application of equivalent standards of good manufacturing and clinical practices throughout the world	Enhance mechanisms to facilitate local observers' participation in inspections carried out in non-EU countries	80%	International Affairs provided EU trainers from the network (BfArM and ANSM) for trainings in China organised by DIA/EFPIA on ICH M4 and eCTD. International Affairs prepared a 3- year project plan to build capacity on GMP and GCP in India and China, which would have been funded by the Commission External Action Service. Unfortunately, the project had to be stopped due to Brexit.

Objective	Activity	% complete	Achievements/results
			A Russian Federation inspectorate delegation visited EMA to discuss harmonisation of practices related to GMP and GCP. Staff from Inspections participated in a meeting in Kazhan (Tatarstan, Russian Federation) in August 2018, on harmonisation of GMP. A quality issue related to valsartan then other sartans manufactured in China caused widespread recalls in the EU. The EU-China bilateral on cooperation mechanism was held in China in November 2018, and this was discussed to improve collaboration in case of crises. To follow on, the EMA organised a technical meeting between EU and Chinese inspectors to increase cooperation and mutual understanding on GMP of API and finished products; as well as encouraging China to participate in PIC/S. The global crisis on sartans produced in China and in India triggered a CHMP referral.
Assure product supply chain and data integrity	Promote increased international cooperation in the area of supply chain security, in particular through efforts to coordinate and integrate initiatives at the level of ICMRA	100%	In the context of the International Coalition of Medicines Regulatory Authorities (ICMRA) Supply-Chain Integrity project, EMA continued to lead the development of common standards for the interconnectivity of Track and Trace (T&T) systems globally. International Affairs has developed the rules of engagement of T&T experts. In the second part of the year, EMA established a group of experts from regulatory agencies and industry to continue to develop further and specific aspects of interoperability of T&T systems. EMA participated in a World Health Assembly (WHA) meeting on the fight against falsified medicinal products entering the legal supply chain. The EMA initiated a strategic international working group on nitrosamine-contaminated sartans. This group composed of representatives from EMA, FDA, HC, PMDA and Swissmedic was set up in August 2018 and meets twice a month to share risk assessments, information on planned inspections, inspection findings, planned regulatory actions, planned communication and messages to health care

Objective	Activity	% complete	Achievements/results
			providers & patients' representatives. Participation in bilateral EU/EC MRA meetings Active follow up of capability assessments and outstanding CAPAs for upcoming MS assessments A number of informal meetings were organised with FDA to gain intelligence and facilitate progress Communication activities to show progress and keep public informed.
Support training and capacity building of non-EU regulators	Increase the number of opportunities for non-EU regulators, in particular those of candidate and potential candidate countries, to participate in scientific and regulatory training activities	N/A	The 3rd Awareness session was not organised due to Brexit There was a total of 15 (including 4 fellows) FDA staff member visits during 2018, and 6 US Government Accountability Office staff visits. EMA did 3 fellowships to the US FDA (for a total of 4 fellows). Topics included: innovative veterinary medicinal products; generics and repurposing; and advanced therapy medicinal products. FDA did 4 fellowships to EMA. Topics included biomarker based drug development and pharmacogenomics; manufacturing and quality of medicines; scientific advice; and generics.
	Explore and foster opportunities for the EU Network to contribute to scientific and regulatory training events organised outside the EU	N/A	EU-NTC participation; draft vision prepared with initial expectation that the business would develop a domain for non-EEA. This was not further pursued due to WHO change in process for their training platform, and due to Brexit. The business agreed to develop an EMA training channel or landing page on our website, development pending. In November 2018 EMA participated, with the European Commission, to the bilateral meeting of ad-hoc cooperation with India. As a follow up, EMA HMPC is organising an expert group on AYURVEDIC medicines with EU and Indian experts to work on requirements for herbal products and traditional herbal products in the EU.
	In collaboration with the WHO, increase non-EU regulators' awareness of scientific and regulatory training opportunities offered by the EU Network	N/A	Discontinued

Objective	Activity	% complete	Achievements/results
	through the WHO training platform		
	[1]DIA, TOPRA, RAPS, BIO	100%	At the DIA Euromeeting 13 EMA colleagues participated in 21 sessions as chair, speaker or panellist, including 4 DIAmond sessions At the DIA US Annual meeting 11 EMA colleagues participated in 17 sessions as chair, speaker/ panellist, including 2 DIAmond sessions At the BIO Annual Convention 2 EMA colleagues supported the European Commission at their Pavilion, presented in 2 mini-sessions and participated in 4 plenary sessions as speaker/ panellist At the DIA China meeting 2 EMA colleagues participated in 10 sessions as speaker/ panellist At the DIA Japan meeting 2 EMA colleagues participated in 5 sessions as speaker/ panellist At the TOPRA symposium 4 EMA colleagues participated in 11 sessions as speaker/ panellist
Prepare regulators for innovative products and technologies	[1]ICMRA strategic priority on innovation	100%	ICMRA innovation project: reports for all three work streams have been finalised. Discussion on a global horizon scanning network has been started. Case study to explore regulatory pathways for innovative products has been initiated.

[1] New activity added to Work Programme 2018

Data-management support

Workload indicators

Procedure		2015 result	2016 result	2017 result	2018 forecast	2018 result
	Number of Telematics information services provided by EMA	20	22	23	21	25
	Number of ongoing Telematics IT projects where EMA is the delivery organisation	18	13	11	5	3[1]
	Number of ongoing non-Telematics IT projects where EMA is the delivery organisation	11	6	6	5	5

[1] The EudraCT Legacy project has been postponed to due to the delays in the Clinical Trials programme, and the Safety reporting and the EU portal and clinical trials database projects have been merged into one project: Clinical Trial Information System, thus the number of ongoing Telematics IT projects have been reduced of 2 projects.

Performance indicators

Performance indicators related to core business	2015 result	2016 result	2017 result	2018 forecast	2018 result
Satisfaction of EMA internal and external users [1]			94%	94%	91.92%
Availability of corporate/Telematics IT systems and corporate website[1]			100%	99%	98.11%

Achievements

Objective	Activity	% complete	Achievements/results
n/a			

Support and governance activities

Workload indicators

Procedure	2015 result	2016 result	2017 result	2018 forecast	2018 result
n/a					

Performance indicators

Performance indicators related to core business	2015 result	2016 result	2017 result	2018 forecast	2018 result
Posts on the Agency establishment plan filled	98%	98%	98%	98%	98.3%
Revenue appropriations implemented	98.7%	100%	96%	97%	93.88%
Expenditure appropriations implemented	95.8%	96%	93%	97%	90.76%
Payments against appropriations carried over from year N-1	94%	96%	89.9%	97%	90.57%
The maximum rate of carryover to year N+1, of total commitments within the title:					
Title 1	0.9%	0.9%	1%	1%	1.23%
Title 2	7.6%	7.9%	11.8%	15%	16.31%
Title 3	23.1%	25.9%	28.1%	25%	31.25%
Payments made within 30 days' time	99.7%	99%	97.3%	98%	90.57%
Availability of Telematics/corporate IT systems and corporate website (% of time)	99.4%	100%	99.3%	98%	98.11%
Change in energy consumption (per workstation)	+5.1%	-19.6%[2]	-5%	-1%	-3%
Change in water consumption (per workstation)	+2.9%	-52.8%[2]	+13%[3]	0%	-7%

Performance indicators related to core business	2015 result	2016 result	2017 result	2018 forecast	2018 result
Change in paper consumption (per workstation)	-38.2%	-22.7%[2]	-13%	-4%	-8%
Change in non-recyclable waste produced in restaurant and kitchenette (per workstation)	-12.9%	-46.0%[2]	+13%[4]	-5%	-5%
Change in recyclable waste produced (per workstation)	n/a	-26.3%[2]	+10%[4]	-2%	-22%
Change in recycling rate (per workstation)		-5.2%[2]	-4%	2%	3%
Change in carbon emissions from work-related travel (including delegates, missions, trainings and candidates)	+1.0%	+1.4%	n/a[5]	2%	-6%
Overall net CO_2 emissions (per workstation)	+0.2%	-10.2%[2]	n/a	1%	-14%

[1] New indicators introduced in 2017 work programme.
[2] In 2016 the number of workstations increased following the addition of the 10th floor.
[3] Fault in the grey water re-use system increased the need of fresh water.
[4] Increase in recyclable waste due to increase in Agency activity and disposal of equipment in preparation for the relocation.
[5] No data available in 2017 as data not provided by new travel agent.

Achievements

Objective	Activity	% complete	Achievements/results
Ensure and further improve efficiency and effectiveness of the Agency's corporate activities	Develop and implement a framework for integrated planning and monitoring activities	25%	The 2018 focus of this activity was on the more short-term urgent need to support management in planning for the business continuity planning (BCP) needs of the Agency in the context of EMA Brexit preparedness and implementation, in particular the regular monitoring and forecasting of the impact of staff losses. The process and analysis work carried out in 2018 will provide a useful basis for progressing the longer-term more strategic objective in 2019, as the Agency gradually exits from BCP mode.
	Implement a competency management framework	50%	The 2018 focus of this activity was on the more short-term urgent need to support management in planning for the business continuity planning (BCP) needs of the Agency in the context of EMA Brexit preparedness and implementation. In particular, a key competencies tool was implemented and used for drafting new job profiles, planning the selection procedures calendar 2018, and preparing the business continuity plans based on the potential skills' loss per division. Equally, a job grading framework was created to assess appropriate job responsibility levels and to identify potential synergies between jobs across the Agency to be used in the Business Continuity situation as well as

Objective	Activity	% complete	Achievements/results
			in the future. Further elements of a holistic competency development framework will be added on a modular basis in 2019 and 2020.
Maintain high level of independence, integrity and transparency in all aspects of Agency's work	Conduct the annual review of the Agency's handling of independence	100%	Annual reviews of independence 2016 and 2017 were noted and the recommendations endorsed by the Management Board at its March 2018 meeting and published on 13 April 2018.
Implementation of new GDPR legislation	Implement the new EU data protection legislation	Continuous	On the 11th December 2018, the new EU data protection legislation (Regulation (EU) 2018/1725, the "EU DPR") came into force for all EU institutions and bodies. Initial guidance has been released by the EDPB in December 2018 and further instructions and recommendations will be issued during 2019, with which all EU institutions and bodies will have to comply. The Head of the Legal Department has been appointed as the Agency's Acting Data Protection Officer in November 2018. In turn, DP coordinators (one per Division) have been appointed to facilitate the implementation of the new provisions within their respective Divisions. Whilst the bulk of DP work is performed by the Acting DPO and one LD administrator, regular meetings between the acting DPO and data protection coordinators are taking place to also address DPO issues collegially. An external contractor has been appointed after a tender to help during the implementation and assist in some delicate tasks such as, for instance, the preparation of general and specific impact assessments. It is anticipated that the initial implementation phase of the EU DPR may last until the end of the current year. The Acting DPO will organise specific trainings for all EMA staff to help them familiarise with the new provisions.

3. Organisational management and internal control

This section answers the question of how the achievements described in the previous section were delivered by the Agency and in which context the Agency had to operate.

3.1. Brexit preparations and consequences

On 29 March 2017, the United Kingdom invoked Article 50 of the Treaty on European Union. This step formally started a two-year countdown to the UK's departure from the EU (Brexit). On 20 November 2017, the General Affairs Council (Art. 50) decided on Amsterdam as EMA's new location. During 2018 the Agency has been planning the move to Amsterdam with the aim of ensuring a successful move and retention of its existing staff to the highest degree possible. Close cooperation with the Dutch authorities to prepare and organise the move took place throughout 2018.

The seat agreement between the Netherlands and EMA was signed on 1 July 2018. It ensures that EMA can function properly and independently in the Netherlands. The content of the seat agreement is similar to agreements that apply to other EU agencies established in the Netherlands such as Eurojust, Europol and the Galileo Reference Center.

EMA's priority in these circumstances is to ensure that the activities relating to the authorisation, supervision and maintenance of medicines is not disrupted and continues to be undertaken on time and to the same high level of quality the Agency's stakeholders have come to expect, and that patients in Europe continue to have access to high quality, safe and effective medicines.

To enable the Agency to prepare for the physical move to the new EMA premises in Amsterdam and its impact on the Agency's operations, the Agency implemented the first phase of its business continuity plan (BCP) in May 2017, ensuring delivery of its highest priority activities while temporarily scaling back or suspending lower priority activities. The second phase of the BCP was launched on 1 January 2018, affecting a further set of EMA activities, including medium priority activities.

On 1 October 2018 the Agency implemented phase 3 of the BCP, in order to safeguard core activities related to the evaluation and supervision of medicines, while intensifying the preparations for the Agency's physical move to Amsterdam in March 2019 and coping with an increased number of resignations (a total of 25 in 2018, corresponding to a 56% increase as compared to the average number of resignations over 2013-2017). Phase 4 of the BCP starts on 1 January 2019 to address further staff loss and to cope with the critical period relating to the physical move itself. The staff loss will be closely monitored and the situation will be reviewed in the second quarter of 2019 at which time the Agency will review the priorities, the measures and the work to be undertaken in the second half of 2019.

Operations and Relocation Preparedness task force

EMA internal Operations and Relocation Preparedness (ORP) task force, established in June 2016 to address the challenges presented by Brexit, continued its work to plan and prepare for the upcoming change and ensure all the necessary steps are taken to maintain continuity of the EMA business operations throughout this period. The work of the ORP task force is organised into 2 areas of activities:

- EMA Brexit preparedness and implementation, and
- EMA-Dutch Authorities' collaboration for relocation to Amsterdam.

Each area of activity is divided into various work streams.

EMA Brexit preparedness and implementation

Work streams include:

- Scientific committees procedures and inspections, which focus on the preparedness of the scientific committees and working parties, in particular with respect to how the scientific assessment and monitoring of medicines will be shared between the Member States in view of the UK's withdrawal from the EU. It also includes the necessary activities to be undertaken to enable as much as possible an undisrupted supply of medicines.
- Brexit preparedness business continuity plan (BCP) which has been developed to address a situation where a "business as usual" scenario is no longer possible. The BCP covers prioritisation of EMA activities in order to free-up the resources needed to prepare for Brexit, particularly the relocation, and to address potential staff loss which cannot be compensated through the recruitment of replacement resource.
- Staff relocation and support, which encompasses the work to address HR-related aspects of the EMA preparedness and its implementation.
- Communication activities, covering both internal and external communication to EMA's staff, its key stakeholders and the wider public.

EMA-Dutch Authorities' collaboration for relocation to Amsterdam

In January 2018 the Agency and the Dutch Authorities agreed and put in place a dedicated joint governance structure to steer and oversee the relocation to Amsterdam project, with plans to progress activities within the individual work streams dealing with:

- The new EMA permanent building.
- The temporary premises.
- Staff relocation.
- Financial and legal aspects.
- External communication.
- Removal and logistics.

Brexit preparedness and relocation activities carried out in 2018

During 2018, the Agency has undertaken considerable work to prepare for Brexit and the relocation, including but not limited to:

- Signing the seat agreement between the Netherlands and EMA on 1 July 2018;
- Launching a public relocation tracking tool which is updated regularly, giving a transparent overview of the main milestones and workstream deliverables for the Agency's move to Amsterdam;
- Implementing and monitoring a dedicated EMA Brexit preparedness BCP to allow the Agency to safeguard core activities related to the evaluation and supervision of medicines while the Agency prepares for the consequences of Brexit - both in terms of the impact on the Agency's operations, as well as its upcoming relocation to the Netherlands;
- Implementing a dedicated Brexit recruitment and selection strategy to address the potential staff loss;
- Finalising support measures to maximise staff retention;

- Implementing the relocation of the Agency's data centres;
- Reviewing current contracts for goods and services and preparing a procurement plan to ensure the necessary contracts are in place at the time of the Agency's move to the Netherlands;
- Working with the Member States to address the workload issues arising from the loss of UK expertise and completing the redistribution of the UK workload. Conducting surveys with the Member States to establish the capacity and training needs, and providing knowledge transfer.
- Processing of transfer, variation and notification applications submitted to make the necessary regulatory changes required due to Brexit;
- Undertaking, in collaboration with its Scientific Committees and the Member States' NCAs, a criticality assessment for those centrally authorised products for which the required regulatory changes will not be finalised before Brexit and therefore these products are at risk of supply shortage;
- Conducting a survey to gather information from pharmaceutical companies on their Brexit preparedness plans. This was followed by a monitoring of the submission of the required regulatory changes in order to identify any particular concerns with regard to medicines supply that may impact public or animal health;
- Issuing communications, preparing guidance and holding stakeholder meetings for pharmaceutical industry to ensure companies have the correct information and take the necessary steps to be able to operate in the EU27, ensuring continued availability of their medicines to EU citizens.

Resource management

The improved recruitment processes allowed the Agency to successfully replace almost all of the 160 staff who left EMA during 2018, thus maintaining the 98% occupancy rate. However, even with more efficient processes there still remains a gap between the staff member leaving and the new replacement starting. Also the temporary loss of productivity while the new employees acclimatise and learn their tasks must be taken into account, as well as the availability of staff for other tasks, as resources are spent on recruitment. Additionally, and especially considering the rapidly increasing rate of resignations among the staff who leave EMA, the potential continued attrition of staff in 2019 must be accounted for, including an anticipated loss of short term staff due to the specifics of the labour legislation in the Netherlands.

Although the overall number of staff at the Agency remained fairly stable (160 staff members left and 156 new staff members joined EMA in 2018), the impact of the work required to prepare for Brexit and relocation on the Agency's activities cannot be underestimated. The number of staff available to the Agency must be seen in conjunction with the fact that over 11% of staff (88.6 FTEs of 800 FTEs) were needed to carry out Brexit-and relocation-related activities rather than business-as-usual work and the continued workload increase across the core activities.

In order to maintain and continue the core activities relating to the authorisation, supervision and maintenance of medicines without disruption, the Agency has implemented a staged Business continuity plan, gradually reducing and suspending some of its activities, based on their impact on public health and the Agency's ability to function. These will be restored in a stepwise manner, once the Agency has the necessary capacity to restart the activities.

Impact of BCP on the Agency's activities

The tasks and activities temporarily reduced or suspended in 2018 include the following:

Temporarily suspended activities	Temporarily reduced activities
• EMA's contribution to the planning and preparation for the implementation of version 4.0 of the Electronic Common Technical Document (eCTD); • The development of a transparency roadmap that lays out future transparency measures of the Agency; • Participation in the benchmarking of medicines regulatory authorities in the EU; • IQM activities, except those related to core business processes; • Implementation of an environmental management system and registration to EMAS; • All missions relating to suspended activities. • Development of the European medicines web portal; • Development of extranet and intranet functionality; • Interaction with pre-accession countries to support the IPA programme; • Update of guidance on managing medication errors; • Significant benefit: no follow-up workshop; • Influenza pandemic project (unless new pandemic emerges); • No new consortium memberships for IMI projects; • Contribution to training of non-EU countries, except India and China; • Development of fellowship programmes with new partners; • Unplanned visits to EMA from non-EU delegations; • Exchange of non-safety information with international partners; • All missions relating to suspended activities.	• Interaction with patients, healthcare professionals and academia: – cancel 1 joint PCWP/HCP workshop (out of 2 planned) – cancel 1 stakeholder workshop (out of 2 planned) – topic group meetings put on hold – streamline and simplify reporting on stakeholder activities – reduce other meetings with patients, healthcare professionals and academia, like the Accelerate workshop (1 out of 2), Enpr-EMA working group meetings (1 out of 3) • Interaction with industry stakeholders: – cancel 1 SME info day (out of 2 planned), – bilaterals with trade associations put on hold (except for Brexit-related topics) – survey of industry stakeholders postponed to 2019 – EMA Veterinary Medicines Info Day reduced and refocused on innovation – cancel 1 platform meeting on the centralised procedure (out of 2 planned) and focus on Brexit preparedness • Transparency, information, and non-product related communication – reduce production of brochures / info-sheets / leaflets – reduce number of workshop reports, giving priority to category 1 and 2A activities – reduction in exhibition services – reduction in translations by 50%, prioritising those legally required • Maintain the proactive clinical data publications, albeit at a slower pace; • Training of stakeholders and NCAs that is not essential to support capacity building for Brexit, to maintain category 1 or 2A activities (including training on guidelines) or to enable newly rolled out systems (e.g. ADRs); • Product-specific focus of engagement on geriatrics, rather than general guidance; • Training in areas such as GxP, general pharmacovigilance and quality topics; • Guidelines' development, including consultative meetings with stakeholders, including GVPs where priority will be given to category 1 activities with an urgent public/animal health need, followed by those that can be finalised or released for public consultation in first half of 2018; • Reduction of a number of meetings of the working parties and of QRD working group, NRG and GXP IWGs; • International cooperation: – Decreased activities with countries with which no MRA nor CA exists, and with neighbouring and accession countries – Limited number of fellowships to the FDA, or from the FDA and PMDA

Temporarily suspended activities	Temporarily reduced activities
	– Activities related to international reliance – Activities at DIA, TOPRA, RAPS to be topic-driven and to focus on category 1, 2A and Brexit-related topics – Development of new international clusters • Ongoing IMI projects (IMI-Advance, IMI-Adapt Smart and IMI-FluCop) will continue in 2018 but follow-up on the outcome of the projects will be reviewed; • Engagement in advisory boards of new IMI projects and follow-up on existing IMI projects will be reviewed on a case-by-case basis and generally scaled back; • Engagement with learned societies relevant for therapeutic area activities; • Selective collaboration and engagement with public health authorities in the EU (e.g. ECDC, HSC, joint actions) and globally (e.g. WHO); • All missions relating to reduced activities. • Activities relating to IT maintenance will be reduced through a reduction in the number of change requests, to be decided on a risk-based approach.

The implications on some of the above activities are outlined below.

Guideline development

By November 2018, EMA had to restrict the development of new and revision of existing guidelines to those that address an urgent public or animal health need or are necessary to support and facilitate preparations for Brexit. This step became necessary to ensure that EMA's core activities in relation to the authorisation and supervision of medicines could continue.

Work on a total of 143 guidelines and other guidance documents had to be put on hold, of these 119 relating to public health and 24 relating to animal health. Non-product-related working parties were also reduced as a consequence of the scaling back of guideline development.

Strategic planning and training activities

The exercise to prioritise EMA activities during BCP acted as a key driver to prepare and release the regulatory science strategy for public consultation by the end of 2018. As it concerns the future planning of network resource distribution across the key regulatory challenges to be addressed through to 2025, the pressure on network resources represented yet another element of uncertainty to be factored into this reflection. In this regard there was a particular emphasis on turnover of existing expertise, consequent replacement opportunities and highlighting new expertise to address challenges identified.

The regulatory science strategy underlines the need for EMA experts and staff to keep up with technological and scientific developments in order to be able to assess innovative and increasingly complex medicines that are at the crossroads of many different technologies. Training will be key to make the Agency and the network fit for the future.

Brexit has meant that the Agency needed to focus its efforts on providing training that will ensure transfer of knowledge to deal with staff loss. However, other trainings had to be suspended, limiting the Agency's ability to keep its staff at the cutting edge.

Stakeholders, communication and transparency

The Agency implemented its frameworks for interaction with stakeholders at reduced levels in 2018. Throughout the year, the number of stakeholder meetings was reduced, annual bilateral meetings with industry stakeholders were temporarily suspended and a planned industry stakeholder survey was put on hold.

In addition, during the last quarter of 2018

- Face-to-face meetings of the patients and consumers and healthcare professionals' working parties and implementation of their work plans 2018-2019 were put on hold.
- Annual training session for patients and healthcare professionals for involvement in EMA did not take place.
- EMA participation in external stakeholder events was reduced.

Resources were redirected to focus on Brexit-related activities.

EMA and the European Commission continued to engage closely with stakeholders to prepare for the UK leaving the EU and becoming a third country. Dedicated webinars were set up to update stakeholders on Brexit-related activities.

In order to free up resources to focus on medicine evaluation and supervision, progress in implementing EMA's landmark policy on clinical data publication was halted in August 2018. Pending applications were completed and the publication of clinical data from new applications was suspended thereafter.

In regard to the action plan to improve medicines' product information, due to the BCP resource constraints, work started on only one of the six actions: the ePI for medicines across the EU. Work on the other areas (aimed at improving content and user-testing) will commence once resources are made available.

Management of the network information systems

EMA's ability to execute IT initiatives during 2018 in line with its Information Management strategy were significantly impacted by the Agency's preparation for Brexit and relocation. Resources normally used for innovative IT projects and change were channelled towards a number of critical projects including relocation of the EMA data centre outside of the UK and the introduction of a new offshore IT application maintenance model.

The reduction in the number of changes that could be introduced onto EMA's existing operational IT applications during 2018 created a significant backlog of requests subsequently impacting user efficiency and satisfaction across the Network. The response and resolution times for unplanned outages and other issues impacting IT systems and business applications fell 11%, therefore stayed below the target, due to activities related to the on-boarding of a new supplier such as knowledge transfer. Many IT upgrades were also postponed due to resource re-allocation onto Brexit-related projects.

Initiatives focusing on building EMA's IT capability were also impacted during 2018 in areas such as risk management, project management and data governance. Implementation of certain IT processes, including those related to information security, were slowed down.

Activities to improve global health

Collaboration at international level was scaled back in 2018, with activities cancelled or postponed to focus primarily on product-related requests, supply-chain integrity and procedures under Article 58. In

other areas, such as the international harmonisation of technical requirements and collaboration between regulatory authorities, EMA switched from an active or leadership role to a more reactive position.

EMA's engagement in other global public health issues such as antimicrobial resistance or vaccines was maintained when possible, and its involvement in international initiatives was reviewed on a case-by-case basis.

Trainings for international regulators were also affected; including the cancellation of the EU funded training project in Southeast Asia and a planned awareness session at EMA.

It will be important to reinstate these collaborative activities at the earliest opportunity to maintain Europe's voice in international cooperation on medicinal products and its contribution to raise global standards.

3.2. EMA governance

Management Board

The Management Board (MB) is the European Medicines Agency's integral governance body. It has a supervisory role with general responsibility for budgetary and planning matters, the appointment of the Executive Director and the monitoring of the Agency's performance.

The Board's operational tasks range from adopting legally binding implementing rules, to setting strategic directions for scientific networks, to reporting on the use of European Union (EU) contributions for the Agency's activities. The tasks and responsibilities of the Management Board are set out in the Agency's legal background.

EMA preparedness on Brexit

Throughout the year, the Board was updated on the Agency's preparations for 2019, a year of transition for EMA which included the preparations for EMA's move to Amsterdam in March 2019.

At its June meeting, the Board endorsed the principles and methodology for BCP Phase 3 which was launched on 1 October 2018. In December, the Board endorsed Phase 4 of the BCP to be launched as of 1 January 2019. Detailed status reports and implementation plans were provided to the Board throughout the year.

The Board regularly received forecasts of staff's intention to relocate to Amsterdam with forecasts projecting the Agency to lose approximately 25 per cent of its overall workforce. The Board was informed that these projections should allow the Agency to gradually resume temporarily suspended and reduced activities as of July 2019.

Reports on the preparation of the temporary premises in Amsterdam and progress on the work on the permanent premises were also provided to the Board at each meeting.

- Extraordinary Management Board meetings on 6 and 28 February 2018

Extraordinary Management Board meetings were held on 6 and 28 February 2018 to provide the Board with the opportunity to discuss thoroughly the Notification of the European Medicines Agency's intention to move to a new building in accordance with Article 88 of the Agency's Financial Regulation.

On 28 February, the Management Board endorsed the notification to the Budgetary Authority of the European Medicines Agency's intention to move to a new building. This marked an important milestone for EMA and the Netherlands. The notification to the EU's Budgetary Authority of EMA's intention to

move to a new headquarters is required by the Agency's Financial Regulation and is a key step in the building approval process.

- Seat Agreement signed between EMA and the Dutch Government

On 1 June, the Chair of the Management Board, the Executive Director and Ambassador Johan van der Werff (on behalf of the Dutch Government), signed the EMA's seat agreement with the Netherlands. The Seat Agreement ensures that EMA can function properly and independently in the Netherlands.

- EMA Management Board delegation visit to the future EMA premises

A delegation of the EMA Management Board was invited by the Dutch Authorities to visit the future EMA premises in Amsterdam. The aim of the visit, which took place on 7 November 2018, was to update the MB delegation on the current status of preparedness for both the temporary premises (i.e. the Spark building) and the final premises (i.e. the EMA building). The delegation consisted of the Management Board Chair, Vice-Chair and the topic coordinators for the EMA building.

Management Board highlights

- 100th meeting of the European Medicines Agency's Management Board

In June, the 100th meeting of the Board was held in London. To mark this important milestone for the Board and the Agency, former Chairs of the Board and Executive Directors were invited to the Agency to participate in the occasion.

- Update on the development of the Clinical Trials Information System for the EU Clinical Trial Regulation

The EU Clinical Trial Regulation (CTR) Coordination Group, which was established to monitor implementation activities in relation to the CTR, coordinate the activities of the various working groups and parties contributing to the preparation of implementation of the CTR, and to identify and propose solutions to critical issues and to coordinate communications in relation the CTR implementation, reports to the EMA MB and is responsible for providing oversight of the progress, and giving strategic advice and recommendations to the EMA MB.

Throughout the year, the Board was updated on the status of the ongoing development of the Clinical Trials Information System by means of monthly reports.

- EU Telematics Management Board (EU TMB)

A report on the activities of the EU Telematics is provided to the Board at each meeting by the EU TMB, a strategic governance body principally responsible for establishing the EU Telematics Strategy and providing strategic governance as to its implementation.

- Annual revision of the EMA Information Management Strategy and Information Management Strategic Plan

The Management Board endorsed the revised EMA Information Management Strategy 2019-2021 and the Information Management Strategic Plan 2019-2021. According to the EMA's IT governance, yearly review and endorsement by the board takes place as part of the annual planning cycle to take into account changes in the environment and priorities. The current proposal was based on a reflection on how the Agency has delivered on its strategy in the last year.

- Internal audit and advisory activities at the European Medicines Agency

In accordance with the Financial Regulation, and with the aim of ensuring effective co-ordination between various audit bodies, the Management Board received reports on audit activities, audit findings and monitoring of main audit recommendations from the European Court of Auditors (ECA),

the Internal Audit Service of the European Commission (IAS), as well as the Internal Audit capability of the Agency (IAC).

The Management Board endorsed in June the 2017 Annual Report of Internal Audit Capability and adopted in December the Audit Strategy 2019-2021 and the Annual Audit Plan for 2019.

- Periodic reports from Chairs of Scientific Committees and Working Parties

In order to ensure that members are kept informed of the work of the scientific committees and working parties, Chairs of these groups were invited to report to the Board whilst stimulating excellent discussions on aspects of their activities.

In March, the chair of EMA's Committee for Advanced Therapies (CAT) presented the achievements and ongoing challenges in the area of advanced therapies. This was followed by a report in October from the chair of the Scientific Advice Working Party (SAWP) briefing the Board on the activities of the working party, highlighting the constant increase in scientific advice procedures over the past ten years.

Executive Director

EMA is headed by the executive director, who is appointed by the Agency's Management Board. The executive director is the legal representative of the Agency. He is responsible for all operational matters.

Executive Board

The Executive Board (EXB) is the governing body of the Agency that considers both the strategic issues (including setting the Agency's long-term vision; deciding on strategy and implementing it; setting short-term priorities and goals; planning and allocating resources; preparing for new legislation; making high-level policy; and deciding on portfolios of programmes and projects), and high-level cross-Agency operational issues — including work programme monitoring; budget monitoring; programme and project monitoring; KPIs and risk monitoring; audit reporting; and staff-related matters.

The Executive Board is chaired by the executive director (deputy executive director in his absence). All heads of division, head of the portfolio board and international affairs, head of the legal department, and the senior medical officer sit on the EXB.

Other management bodies involved in the day-to-day administration of the Agency are:

Medicines Leadership Team

The Medicines Leadership Team (MLT) is the key governance and decision-making body of the scientific operations divisions. It considers product-related issues (pre-PRAC or pre-CHMP/CVMP), as well as organisational, procedural, and regulatory matters. The MLT is comprised of heads of human medicines, veterinary medicines, and communication divisions, and heads of departments within these divisions.

Portfolio Board

The Portfolio Board (PB) is the body in the Agency's internal programme governance structure that is responsible for the oversight and review of the Agency projects throughout all the phases. The PB has particular responsibility for improving quality, efficiency, and effectiveness of the Agency's procedures and processes, and ensures strategic alignment of projects. PB reports to the Executive Board, which

retains responsibility for the decisions about inclusion of initiatives (programmes or projects) in the portfolio, allocation of the portfolio budget at any time, and appoints the members of the Portfolio Board, based on the knowledge necessary to carry out the work of the Board.

The PB works closely with the EMA Portfolio Office, to ensure that programmes and projects in the Agency's portfolio are monitored and managed according to agreed standards, and within the governance arrangements.

Scientific Coordination Board

The Scientific Coordination Board (SciCoBo) is a high-profile management body, created to ensure the strategic coordination between the scientific committees of the Agency. It is chaired by EMA's Head of Scientific Committees Regulatory Science Strategy Support, and its members comprise the chairs of the seven Agency's committees.

3.3. Budgetary and financial management

Financial highlights of 2018

The financial consequences of Brexit, i.e. the Agency's departure from the UK and move to the Netherlands, began to be felt in 2018, with reported expenditure amounting to EUR 25.9 million. A reporting mechanism was put in place to enable close monitoring.

The budgetary outturn, a surplus of approx. EUR 13.80 million, was caused mainly by lower than budgeted staff expenditure (due to contract agent recruitments not materialising and over-estimated cost of national experts on secondment, interim services and relocation visits), reduced payments to national competent authorities (NCAs), reduced expenditure as a result of the business continuity plan (BCP) put in place to prepare for the Agency's departure from the UK, and some major IT projects being postponed or delayed.

In line with Art.69 and 70 of the Financial Regulation, the Agency commits operational expenditure (title III) fully at the point of entering into a legal commitment, even where the contract length extended beyond one year. Commitments made in 2017 totalling EUR 2.4 million expired in 2018 and had to be re-committed on new appropriations. It is expected that there could be a similar impact in the future years, increasing the amount of cancellation of carry-forward.

The Agency in general complied with the ceilings/KPIs for the amounts carried forward: title I (10%), title II (20%) and title III (30%), with the following percentages achieved for the automatic carry-forward: title I: 1.23%, title II: 16.31%, title III: 31.25%. The ceiling for title III was exceeded as a result of a non-automatic carry-forward.

Budget overview

Authorised appropriations in the European Medicines Agency's initial budget for 2018 totalled EUR 337,761,000, representing a 4.9% increase compared to the 2017 initial budget (EUR 322,103,000).

No amending budgets were processed in 2018, so the final budget remained at EUR 337,761,000.

Revenue (income from evaluation activities and EU contribution)

As stipulated in the Financial Regulation, budget revenue is based on cash received in terms of contributions from the European Union, fees for applications for marketing licenses for pharmaceutical products and for post-authorisation activities, as well as for various administrative activities.

Revenue entered in the accounts as at 31 December 2018 amounted to a total of EUR 317,081,125.07.

Of the total income, 89.69% derived from the evaluation of medicines and other business related activities; 10.28% from the European Union budget to fund various public health and harmonisation activities, including positive outturn of previous year; and 0.03% from external assigned revenue as described in the work programme (2017: 87.96%/8.99%/3.05%).

Expenditure (commitments and payments)

Commitments on fund source C1 totalled EUR 306,602,880.05 or 90.78% of final appropriations (2017: 92.92%). Payments totalled EUR 251,781,077.78 or 82.12% of commitments entered into (2017: 84.46%).

Appropriations carried forward from 2018 to 2019

Automatic carry-forward

Automatic carry-forward to financial year 2019 totalled EUR 53,321,802.27 or 17.39% of appropriations (total carried forward from 2017 to 2018: EUR 47,836,070.70 or 14.44%).

Non-automatic carry-forward

The Management Board was requested to approve a non-automatic carry-forward to 2019 of EUR 1,500,000.00 to cover the cost related to a key IT project, which saw delays in executing contract for reasons outside the Agency's control.

Implementation of appropriations carried forward from 2017 to 2018

Automatic carry-forward from financial year 2017 to 2018 (fund source C8), totalled EUR 47,836,070.70. Payments against these appropriations equalled EUR 43,322,944.21 or 90.57% of appropriations (2017: 89.89%) and EUR 4,513,126.49 were cancelled.

Non-automatic carry-forward (fund source C2) from financial year 2017 to 2018 amounted to EUR 6,181,000.00. Payments against the C2 appropriations amounted to EUR 5,712,041.60 or 92.41% of appropriations (there was no non-automatic carry-forward in 2017) and EUR 468,958.40 were cancelled; due to overall delays in the implementation of the Clinical Trial Information System programme, part of the work was not able to commence as planned. This resulted in underspending of the committed C2 funds.

Appropriations from external assigned revenue

The Agency's 2018 budget included no appropriations from external assigned revenue.

Budget transfers

In line with Article 27(1) of the Financial Regulation, the Executive Director may make unlimited transfers within a title and of up to 10% of appropriations from one title to another. Transfers *per se* are not an indicator of deficiencies in financial management but a necessary tool to adjust the budget in a changing environment, as illustrated, for example, by the use of interim staff instead of contract staff, increased expenditure due to exchange rate fluctuation, etc. Only if and when the changes also relate to changes in the work programme might they indicate shortcomings in the planning process.

During 2018 six transfers were made. They all involved adjustments within the limits of Article 27(1) of the Financial Regulation, i.e., transfers within titles, and were therefore approved by the Executive

Director. Five transfers involved expenditure appropriations and one involved both expenditure and revenue appropriations.

The transferred expenditure appropriations were primarily needed to cover increased expenditure on business IT development and to provide appropriations for re-commitment of expiring commitments on C8. Additional appropriations were also required to cover an increase in the Agency's social security contributions, as well as expenditure related to the Agency's departure from its Canary Wharf headquarters.

Cancellation of appropriations

Expenditure appropriations should be understood as estimates of requirements, and not as an entitlement to create the corresponding commitments. Being reliant on fee income, as the Agency is, means that the level of cancelled expenditure appropriations does not indicate delays in the implementation of the work programme but should be considered rather as the result of stringent monitoring of actual revenue and adjustments to the expenditure.

In budget 2018, expenditure appropriations, i.e. fund source C1, totalling EUR 31,158,119.96 remained unused, corresponding to 9.22% of final appropriations (2017: EUR 23,441,414.26, 7.08%).

The underuse of commitment appropriations can be explained by:

Title I

- lower expenditure on salaries, mainly due to delays in recruitment and staff attrition, in addition to uncertainty related to Brexit, which resulted in budget estimates intended to cover the 'worst case' scenario, i.e. the highest realistic level of expenditure;
- lower expenditure on national experts, trainees and interim staff, due to uncertainty related to Brexit.

Title II

- lower than estimated cost related to the relocation of the data centre;
- lower activities and revised priorities as a result of the implementation of the business continuity plan (BCP) imposed on the Agency's activities in preparation for its departure from the UK.

Title III

- lower expenditure on rapporteurs due to a decrease in the number of scientific applications received;
- lower IT development expenditure due to delays incurred in various projects.

This unused amount must be seen in conjunction with collected revenue being EUR 20,679,874.93 (6.12%) below budget revenue appropriations, while still resulting in a positive overall outturn balance (before adjustments for exchange rate, cancellations of carry-over, etc.) of EUR 8,978,245.03 or 2.66% of final appropriations (2017: 13,905,574.70, 4.20%).

Payment of interest on late payments

In compliance with the Agency's standard contract, established in accordance with Article 77 of the Financial Regulation, the terms of payment are 30 days upon receipt of a valid invoice. If these terms are not respected, from day 31 until the actual day of payment, the payment accrues default interest at the rate applied by the European Central Bank to its principal refinancing operations, as published in

the C series of the Official Journal of the European Union, increased by 8%[2]. The default interest accrued is paid automatically to the supplier/contractor if it amounts to more than EUR 200 at the time of payment of the valid invoice.

In 2018, 1,714 payments out of a total of 57,822, i.e. 2.96% of all payments, were made later than 30 days after receipt of a valid invoice (2017: 0.39% of all payments). This resulted in default interest of EUR 3,291.10 being paid to suppliers and contractors (2017: EUR 2,805.00).

Exchange rate impact on the budget

Whereas the revenue of the Agency is in Euro (EUR), administrative expenditure in 2018 was mainly paid in Pounds Sterling (GBP). Throughout 2018, there was an overall decrease in the value of Sterling expressed in Euro, compared to the exchange rate used for the establishment of the budget, resulting in a drop by 1.77% in Euro terms for expenditure incurred in Sterling, when comparing the average exchange rate for 2018 (0.885) against the rate applied for the establishment of the budget (0.87).

Brexit-related expenditure

Financial planning for 2018 included Brexit expenditure amounting to EUR 18,639,000, additional income amounting to EUR 1,215,000 and savings amounting to EUR 3,877,000, resulting in a nett cost of EUR 14,762,000. Key expenditure items include the cost of transferring the Agency's data centre to its new location in Hamburg and the cost related to staff's relocation to Amsterdam. At the end of the year, expenditure amounting to EUR 15.5 million had been incurred.

Planning for 2018 also included an estimated 82.4 FTEs (full-time equivalent) dedicated to Brexit-related activities. The hours recorded for these activities amounted to 88.6 FTEs.

3.4. Human resources management

The allocation and recruitment of staff is based on the Agency's objectives, priorities, and specifically for 2018 – business continuity needs. Throughout 2018, a number of senior management meetings were dedicated to resourcing, reporting and planning, in order to align the staff allocations with the planned activities, priorities and business continuity needs.

Taking into account EMA's future needs and the Business Continuity Plan applied in 2018, the Agency set and achieved three main objectives:

- Key competencies tool was implemented and applied. This tool was used for drafting new job profiles, planning the selection procedures calendar 2018, and preparing the business continuity plans based on the potential skills' loss per division.
- Job grading framework was created and endorsed by the EXB in October 2018. The purpose of this exercise was to assess the appropriate responsibility levels and to align job titles (Agency-wide), based on criteria such as autonomy, decision making, complexity and problem solving. One of the aims of this exercise was also to identify potential synergies between jobs across the Agency with the same competencies and responsibility level to be used in the Business Continuity situation as well as in the future.
- New e-recruitment tool was launched in January 2018 to support all the new selection procedures and recruitment plans.

[2] in accordance with Article 92 of the Financial Regulation applicable to the Budget of the Union and Articles 83(2) and 111 of its Rules of Application

The above tools enabled the Agency to meet its resource requirements, and will also aid the Agency in meeting the increased recruitment activities in 2019 due to relocation. In 2018, 5 generic and 20 specific selection procedures were initiated and as a result, a pool of 493 candidates was created that can be used for present and future recruitments, covering various work areas and divisions of the Agency. All specific selection procedures ran within the set target timelines of 3 months between the launch and completion of the reserve list, and the timelines for all selection procedures (i.e., from vacancy notice to establishment of reserve list) were shorter than in previous years.

In 2018 the Agency moved to paperless applications for most of HR related aspects, to improve efficiency, quality and customer experience of service. Dedicated points of contact were also introduced to support implementation.

Preparations for the Agency's relocation from London to Amsterdam and supporting management and staff for a smooth transition have been a main priority in 2018.

Dedicated communication provided up-to-date and transparent information to staff via e.g. the relocation microsite, regular updates in the General Assembly, regular staff relocation presentations as well as through constructive dialogue between management and the Staff Committee. Reassurance and support for staff included organisation and facilitation of housing in the Netherlands fairs, taxation seminars, school presentations, Dutch bank account opening possibilities for staff and partner career days. Close cooperation with the Dutch government counterparts through the dedicated ORP work stream ensured smooth staff support while flagging concerns on appropriate level, and supported implementation of the new seat agreement in the Netherlands.

Other key staff support measures introduced included teleworking options, financial support for staff via statutory allowances and the establishment of appropriate measures reassuring and supporting staff relocation decisions, e.g. case-by-case assessment of UK staff, early contract renewal decisions, social support measures for staff including childcare and children's education.

During 2018, the Agency recruited 65 statutory members of staff (23 temporary agents (TA), 42 contract agents (CA)), 8 national experts (END) were seconded to the Agency and 32 trainees participated in the Agency's traineeship programme. In addition, 51 new interim assignments provided services to the Agency. The total number of staff joining EMA therefore amounted to 156. During the same year, 42 statutory staff members (23 TA, 19 CA), 14 END and 48 trainees left the Agency. 56 interim assignments were also terminated. The total number of staff leaving the Agency amounted to 160.

Among the staff (temporary and contract agents) that have left the Agency, the rate of resignations continues to increase. While the average resignation rate for the previous five years was just below 40% of all those who left the Agency, in 2018 74% of the staff who left the Agency had done so by resigning (in 2017 – 60%).

The occupancy rate for temporary agents was 98.3%.

3.5. Assessment by management

Management supervision

Managers at all levels monitor and measure the Agency's performance on several dimensions.

Work programme implementation is monitored through mid-year and annual reports, which are reviewed at senior management level and at the Management Board. Project implementation against budget, timelines and delivery are monitored and reported on bi-monthly basis to the Portfolio Board and to senior management twice a year. Budget monitoring is conducted throughout the year, to

ensure timely response and adjustments (transfers, amending budgets or other) in case of significant deviations.

The status of implementation of the actions stemming from internal and external audit recommendations is continuously monitored by the division integrated quality management (IQM) coordinators and reported regularly to management.

Significant cross-agency issues identified through the supervisory activities are monitored and followed up by the Corporate Governance department; reports are presented regularly to the Executive Director and senior management, and where required, improvements are agreed.

In 2018, each Head of Division signed a Declaration of Assurance confirming that the resources made available to them had been used for their intended purpose, the activities had been delivered in line with the work programme 2018, and the internal control systems had been efficient and effective.

Business planning, budgeting and reporting

The Agency has implemented planning, monitoring, and reporting tools that provide the executive director with adequate information on the activities of EMA and, ultimately, serve as the key elements to underpin the director's annual declaration of assurance.

A longer-term (5-year) strategy for the Network was adopted in December 2015, and sets out the strategic objectives of EMA. These are translated into more specific objectives and implementation activities within the EMA's multiannual work programme. The annual work plans are derived from the multiannual work programme, and reflect key workload and performance indicators, as well as specific additional objectives and activities set in attaining the Agency's strategic objectives in the current year. Key risks identified and their mitigating actions are also included in the work programme. Forecasts of human and financial resources for given activity areas are included in the work programme.

Annual work programmes go through two iterations at the Management Board, with the final work programme adopted in December of the preceding year.

Starting with the 2017 planning cycle, and in accordance with the Financial Regulation requirements and Commission guidelines, multiannual and annual work programmes are combined into a single programming document, along with multiannual and annual budget and staff planning documents. Article 33 of the regulation requires the programming document to be sent to the budgetary authorities by 31 January each year.

Implementation of the strategy and work programme objectives and activities is tracked through mid-year reports and annual activity reports. Mid-year report is also used to identify and address any significant deviations from the work programme plans. These are reviewed at senior management level, and by the Management Board. Project implementation against budget, timelines, and delivery is reviewed on a regular basis at Portfolio Board and at senior management level. Budget monitoring is conducted throughout the year, to ensure timely response in case of significant deviations.

Planning timelines are developed at EMA, providing a comprehensive overview of the planning, monitoring, and reporting activities of the Agency, with deadlines for each of those, and the links between the different activities.

The 2018 planning cycle was conducted in line with the requirements of the regulation and considering the implications of BCP regarding the Agency’s relocation to the Netherlands.

Project management controls

In 2018 the project budget approval process remained unchanged. The Executive Board (EXB) has the overall responsibility for the portfolio of programmes and projects, deciding on the priorities and making available budget and resources; changes to the portfolio have to be approved by the EXB. The Agency's Portfolio Board (PB) has been delegated with the following competences: overall responsibility to oversee the Agency's programme and project portfolio, including proposals for portfolio re-prioritisation to the EXB; approving programmes and projects in the agreed portfolio; approving or declining requests for changes; monitoring progress and resolving issues that may compromise delivery or benefits realisation. The PB reports to the EXB, while the latter retains responsibility on taking decisions concerning initiatives (programmes or projects) to be included in the portfolio; the allocation of the portfolio budget at any time; the portfolio re-prioritisation and, in exceptional circumstances, propose solutions for unresolved issues. In the gated approval process the idea or concept for a project (i.e. Gate 1 request) has to be approved or declined by the PB, taking into account the portfolio, priorities and budget agreed by the EXB, before resources can be assigned to deliver the project business case. The preliminary business case with identified benefits and costs is subject to approval by the PB. Advice on technology and IT architecture matters is provided by the Enterprise Architecture Board (EAB), when relevant. Particular attention is given to the business need of the proposal, the related risks, business architecture fit, and the benefits that the proposal aims to achieve. Following this, a project is approved or declined by the PB at Gate 2. On approval, the project starts and is thereafter overseen by the PB. As soon as the analysis and design are completed, a final business case is presented for approval at Gate 3. Project progress past Gate 3 continues to be overseen by the PB. Gate 4 is an optional check-point for large projects and/or projects that introduce significant business changes, and aims to ensure completion of deliverables and business readiness prior to project closure. At the end of the project, a closure report is presented to the PB for assessment and approval.

Bi-monthly reports are presented to the PB to review the status of the portfolio, programmes and projects, and monitor the delivery of the portfolio as a whole during their entire lifetime. The same reports are presented to the EXB twice a year, in January and in July. Telematics IT Directors and IT Directors Executive Board receive a summary of the bi-monthly report for the Telematics projects only.

The PB ensures that all programmes and projects comply with the standards in the Agency's P3i methodology.

Ex-ante and ex-post evaluations are conducted by the Agency in line with 'EMA internal notice on project-related ex-post and ex-ante evaluations - Guiding principles in relation to programmes and projects'.

Ex-ante evaluations are conducted when projects are at Gate 2, on the basis of the preliminary business cases (including cost estimates), before the projects and budget expenditure are formally initiated. When the total project costs estimated at Gate 2 exceed EUR 1 million, an evaluation is conducted against the criteria established by Article 11(1) of the Implementing Rules. The follow-up actions (i.e. Gate 3 and project closure milestones) are also identified.

Ex-post evaluations are conducted at project closure when projects are being formally closed. When actual costs at project closure exceed EUR 3 million, the evaluation is carried out against the criteria established by Article 11(3) of the Implementing Rules.

By applying the safeguards foreseen in the EMA programme and project governance and gate procedure, EMA adopts a proportionate approach to evaluations, as required by Financial Implementing Rules Article 11(4).

The results of ex-ante and ex-post evaluations are tabled every 6 months in a Management Board meeting: in the March meeting, covering the period from 1 July to 31 December; and in the October meeting, covering the period from 1 January to 30 June.

3.6. Fraud prevention

All the actions mandated by the Anti-Fraud Strategy (AFS) Action Plan for 2018, approved by the Management Board at its December 2017 meeting, have been successfully implemented within the assigned deadlines, including development of a specific anti-fraud training instrument for the contractors working at EMA, creation of a register for internal whistleblowing and completion of impact assessment of possible revisions of EMA's policies on conflict of interest. Moreover, the implementation of the EMA's Document Classification Policy on the classification of information entered into its operative phase in December 2018, followed by the adoption of technical measures to enhance data security.

In addition, in 2018 regular actions of the AFS Action Plan were also performed, such as the annual fraud-specific risk assessments and continuous monitoring and assessment of the adequacy and effectiveness of the anti-fraud measures in place.

Finally, during 2018 Agency's Anti-Fraud Office continued its close and proactive cooperation with the European Anti-Fraud Office (OLAF), in relation to both spontaneous reporting, development of targeted anti-fraud training and exchange of best practices in relation to fraud matters.

Within the Inter Agency Legal Network (IALN) EMA continued to chair the Anti-Fraud Working Group that was created with the aim to harmonise the approaches to anti-fraud matters among EU agencies. A report on anti-fraud developments was presented by EMA at the IALN meeting in November 2018.

Handling external source cases

The Agency's main responsibility is the protection and promotion of public and animal health, through the evaluation and supervision of medicines for human and veterinary use. EMA is strongly committed to carry out all of its responsibilities and to adhere to the highest standards of professional and personal integrity. In this regard, receiving and considering information provided by external sources concerning EMA activities on the authorisation, supervision and maintenance of human and veterinary medicinal products is essential in safeguarding public interest and promoting a culture of public accountability and integrity.

A policy to handle allegations of improprieties submitted by external parties is in place since March 2017, complementing the policy on whistleblowing applying to the Agency's staff. The goal of the policy is to create an environment where individuals from outside the Agency feel confident to raise their concerns on improprieties.

This policy outlines EMA's approach to external sources of information disclosing allegations of improprieties relevant to EMA's competence. "Improprieties" are defined as irregularities concerning EMA activities on the authorisation, supervision and maintenance of human and veterinary medicinal products, i.e. any conduct or omission amounting to a violation of any legal provision governing the supervision, evaluation and maintenance of medicinal products for human and/or veterinary use.

The policy sets out the key principles underlying the handling of the information received from external sources and helps EMA assess these reports and co-ordinate any further investigation in a structured way, while protecting the identity of the reporter. The key principles relate to the confidentiality of the information received (including management and processing of personal data), acknowledgement of receipt, treatment of the information, interaction with EMA Anti-Fraud Strategy, analysis of the

competence, transfer of information to other authorities and the notification to the external source. A dedicated inbox has been created for external sources to report improprieties to the Agency (reporting@ema.europa.eu).

SOP on handling external source information is effective as of 1 August 2017 and establishes a procedure providing for uniform, structured and confidential handling of information from external sources disclosing allegations of improprieties reported to the Agency. The procedure can be divided into six main sub-processes: receipt of information, triage of the information, initial evaluation of the information, assessment of the allegations, closure of the case and information to the external source, and archiving.

In 2018, EMA received 21 reports from external sources. Majority of the cases regarded allegations of improprieties on GMP non-compliance or misconduct during manufacture of medicinal products (9 cases) and GCP non-compliance or misconduct during clinical trials (9 cases). In 6 cases, the external source remained anonymous. EMA followed-up on each of these cases in accordance with the Policy and SOP. 2 cases were closed due to insufficient information provided by the external sources in order to start investigating the case. In 14 cases, EMA coordinated the investigation with the involvement of the relevant National Competent Authority (NCA). For 5 cases, the EMA was not competent on the matter and handed the case over to the concerned NCA. None of the cases entailed the need for EMA or the NCA to take specific regulatory action. In total, 4 cases received in 2018 were closed and an additional case received in 2017 was closed.

3.7. Assessment of audit results during the reporting year

Internal Audit Service

In 2018, the Internal Audit Service (IAS) conducted an audit on the Signal Management procedures in the EMA. The objective of the audit was to assess the adequacy of the design and the effectiveness of the management and internal control systems regarding the management and processing of the safety signals on centrally authorised products (CAPs) detected and validated by the EMA Signal Management team, as well as the signals on nationally authorised products (NAPs) detected and validated by the NCAs.

The final report confirmed that the design and practical implementation of the management and internal control system in the EMA with regard to its mandate, role, responsibilities and tasks related to the process of signal management are effective and efficient.

During the field work the auditors identified the following strengths:

- Transparency, which has a significant positive impact on the effective and efficient functioning of the process;
- NCA and EMA collaboration at the level of the Signal Management Technical Working Group (SMART), with the aim of continuously improving the tools and methods for identification of safety signals, as well as the efficiency of the signal management process as a whole.

No critical or very important issues were identified in the audit.

Internal audit capability

In 2018, the Agency's audit function (Internal audit capability – IAC) carried out audits and other tasks as foreseen in the Annual audit plan approved by the EMA Management Board.

The audit engagements covered 'Human Pharmacovigilance Referrals', 'Incidents concerning disclosure of confidential information to unintended recipients' and 'Data Protection Clauses in Contracts'.

Some audits planned for 2018 were postponed due to the relocation of the Agency to the Netherlands and delays in development of the related software. The postponed audits were related to 'Fire Risk Assessment' and the 'EU Clinical Trials Portal and Database' audit as required by Article 82 of Regulation (EC) No. 536/2014.

Based on the results of the audits, the IAC is of the opinion that the internal control systems put in place by the Agency provide reasonable assurance regarding the achievement of the business objectives set up, with the exceptions of relevant findings of the above mentioned audits for which management has prepared the improvement action plan and monitors the implementation continuously.

European Court of Auditors

The European Court of Auditors (ECA) adopted its 'Annual report on EU agencies for the financial year 2017' on 9 October 2018.

The report provides a positive opinion with regards to the reliability of the accounts and legality and regularity of the transactions underlying the accounts. It includes no critical findings, only comments[3] that do not call the Court's opinion into question. The comments relate to:

- Accounting officer's hierarchical position;
- The need for re-evaluation of accounting system, following two significant reorganisations and addition of two major tasks assigned to the Agency;
- Agency's vacancy publication on European Personnel Selection (EPSO) website;
- Additional implementation of EC's public procurement (e-procurement) e-tools;
- Management of consultancy services and its implementation and control of two projects:
  - Implementation of the Regulations on Pharmacovigilance (1027/2012);
  - Clinical Trials (536/2014);

To address the comments above, the Agency has devised an action plan; all planned deliverables have been either completed or are ongoing.

3.8. Follow-up on recommendations and action plans for audits

Internal Audit Service

No critical recommendations were open as of 31 December 2018.

As of 31 December 2018, only one very important recommendation was open and under implementation; for this the action plan is still within the agreed timeline.

[3] For further details please refer to the European Court of Auditors Report on Annual report on EU agencies for the financial year 2017 [https://www.eca.europa.eu/Lists/ECADocuments/AGENCIES_2017/AGENCIES_2017_EN.pdf]

Internal audit capability

At the end of 2018, 13 very important recommendations stemming from audits carried out up to 31 December 2018 were under implementation; all of them were within the timeline agreed with IAC. No critical recommendations remained open.

3.9. Follow-up on observations from the discharge authority

EMA reported on the follow-up of the observations made by the discharge authority for 2016 in its annual report under Article 110(2) of the Framework Financial Regulation. The report is publicly available on the website of the Budgetary Control Committee of the European Parliament[4].

On 26 March, the European Parliament voted positively on the discharge for EMA's 2017 accounts. This is the final approval of the budget implementation for 2017, and the decision is based on a review of the annual accounts and the Court of Auditors' annual report.

3.10. Assessment of the effectiveness of internal control systems

Compliance and effectiveness of internal control standards

As in the previous years, the Agency reviewed the implementation of the internal control standards (ICS) in 2018. This was done via an internal questionnaire addressed to the Agency's management. In 2018, the review assessed the effectiveness and efficiency of all internal control standards.

The assessment concluded that the system in place is generally compliant with the standards, thus providing the Agency with reasonable assurance on the reliability of the internal control environment, even though one area for improvement were highlighted, namely, objectives and performance indicators (ICS5), particularly in regards to the introduction of more qualitative indicators and establishing clearer link between performance indicators and objectives that could improve the ability to monitor progress and achievement of the set objectives. An action plan to rectify the above area has been drafted and will be implemented in 2019.

The reliability of the information contained in this report is also supported by a number of building blocks of assurance described below:

Risk management

The European Medicines Agency operates in an environment of growing uncertainty. To assist the Agency in visualising, assessing, and mitigating the risks that threaten the delivery of its mission, the Agency has developed a sustainable process to identify, assess, and manage risks across the organisation, to ensure attainment of key organisational objectives and avoid surprises. This process is aligned with the principles of the Information Resource Manager (IRM) standard and the Agency-wide risk management manual, and consists of identifying, assessing, and mitigating enterprise risks.

Considering the business continuity environment that the Agency is currently operating in, the most significant risks that could potentially impact the Agency’s activities and achievement of its objectives in 2018 were related to Brexit. A high level risk management review was conducted in 2018, focusing on the Brexit implications. The results of the exercise, including the respective mitigating actions and controls are outlined in Annex 8.

[4] http://www.europarl.europa.eu/cmsdata/152089/EMA%20report%20on%20follow%20up%20to%20EP%20discharge%202016.pdf

Ex-ante control system and register of exceptions

The day-to-day ex-ante verification is the financial control, based on the subjective evaluation of risks where sound judgment applies. The Agency has decentralised the verification for standardised transactions requiring either an operational expertise or specific controls, such as fee revenue and expenditure. The aim of the financial ex-ante verification is to assure the authorising officer that the budget implementation does respect the budgetary principles, of which sound financial management and transparency are the two main principles on which attention is focused on.

The Verifying Office, as a general policy, performs checks focusing on medium/high-value commitments, sensitive contracts, or complex procurement procedures where higher risks have been identified. The SAP accounting system is an effective tool for mitigating financial risks associated with the payment processing.

In 2018, the Verifying Office performed its duties and achieved all objectives. No delays had to be reported. All transactions without exception were checked by applying appropriate checklists in line with the EMA's internal control standards, the Financial Regulation, and the Charter of the Verifying Officer.

During the 2018 budget year, 361 (455 in 2017) rejections were recorded, of which 123 (34%; 159 and 35% in 2017) were related to manual adjustments, technical rejections, or interface issues following the decentralised verification. The balance of 238 (65%) reflects the effective rejection rate for less than 0.1% (when taking into account 'sales' figures as well) of the total transactions being checked.

Out of the 238 rejected payments, 15% did not present a materiality, and 85% did not show a noticeable individual financial risk.

Two commitments were rejected following initiating agents' request and a technical issue. The balance of transactions was rejected for various financial reasons (incorrect currency, calculation errors, wrong allocation, etc.) or procedural issue (missing document, change of requirement, wrong cost centre, etc.). However, none of them showed a breach of contract provisions. All rejections were later corrected, amended and validated with due respect to budgetary principles and procedures in force.

During 2018 no financial exceptions were recorded into the register of exceptions.

Ex-post control system

Ex-post controls are part of the management and internal control procedures; they are required under the Financial Regulation Article 46. The purpose of the ex-post controls is to ascertain that the processes and procedures are correctly implemented, and that they comply with the applicable provisions.

In 2018, with the launch of phase 2 of the EMA Brexit preparedness' business continuity plan, focus remained on releasing additional resources for ensuring continuation of core business/high priority activities and EMA preparedness for relocation. Therefore, the same approach used in ex-post exercise for 2017 was applied to ex-post control plan for 2018, namely, temporary reduction of ex-post control activities for 2018 applying a risk-based approach to the selection of financial and non-financial processes.

As a result, in 2018 the Agency completed 3 ex-post controls, of which two were financial and one was non-financial.

The areas subjected to financial ex-post controls were Initial Marketing Authorisations for human and veterinary medicinal products (two ex-post controls). The area subjected to non-financial ex-post controls was handling of declaration of interest of experts.

Overall, the ex-post controls highlighted no significant weaknesses of the processes analysed, although a few areas with potential for improvement were identified. These are being addressed by specific improvement action plans.

Annual review of sensitive functions

In line with the EMA 'Guidance on sensitive functions' and in accordance with the Agency's standards for internal control standard (ICS) No. 7 – 'Operational structure', a risk assessment to identify the Agency's sensitive functions was carried out in 2018. A regular review and monitoring of the process of identification and management of the sensitive functions is mandated by the above guidance. The annual re-assessment of sensitive functions carried out at the Agency aims at preventing fraud and corruption at EMA and at protecting its financial interests. This aim is achieved by ensuring that EMA has control measures in place and by establishing an organisational approach and methodology to identify and manage the risks associated with sensitive functions at the Agency.

In 2018, the review was coordinated by the Quality and Risk Management Office in cooperation with the Anti-Fraud Office.

The functions considered sensitive were recorded in the Sensitive functions register 2018. For each function, the register describes the main activities of that function, the potential risk areas, the inherent risk rating, the mitigating controls in place and the residual risk rating together with its significance.

The annual report on sensitive functions 2018 was endorsed in December 2018.

Advisory Committee on Procurement and Contracts and procurement management

The Advisory Committee on Procurement and Contracts (ACPC) is an advisory body to the Executive Director on the compliance of procurement and contracts with the Agency's financial rules. The ACPC has been set up to examine procurement contracts prior to signature, on behalf of the Agency.

In 2017, a new procedure to streamline the processing of legal and financial commitment was introduced and, as a consequence, the ACPC rules and membership were updated, leading to a drop in draft contracts submitted for ACPC consultation in 2018.

Due to this revised mandate, the ACPC meeting frequency was reduced from two meetings per month to six meetings per year, with ad-hoc meetings to be organised as and when requested. However, in 2018 five of the six scheduled meetings had to be cancelled as no dossiers were submitted for the respective deadlines. At the same time, the number of ACPC opinions decreased further by 39%, as compared to 2017. This was due to the change in scope whereby framework contracts below the value of EUR 1.0 million and specific contracts, irrespective of the value, no longer require an ACPC opinion.

Reconciliation of information in financial systems

The Agency's operational systems are interfaced with the SAP system. During 2018, reconciliations for 100% of the data between the product- and procedure-tracking systems and SAP (the budgetary system) were carried out on a regular basis. Findings were detected in the Parallel Distribution area and rectified with no financial impact.

Data protection

EMA processes personal data in accordance with the rules laid down in Regulation (EU) 2018/1725 and is subject to the supervision of the European Data Protection Supervisor (EDPS). In the area of data protection, this regulation has replaced the previously applicable Regulation (EC) No 45/2001. An acting Data Protection Officer (DPO) was appointed in November 2018 after the departure of the previous DPO in September.

Regulation (EU) 2018/1725 entered into force on 11 December 2018 and introduced some innovations regarding the personal data processing activities of the Agency, amongst which:

- Pursuant to Article 31 of Regulation (EU) 2018/1725, each data controller shall maintain a record of processing activities under its responsibility; the Agency shall keep the records in a central register. These Article 31 records replace the previous notifications made under Article 25 of Regulation (EC) No 45/2001 which were stored in a central register held by the DPO. By the end of 2018, the central register contained 83 processing operations. Work on the adaptation of the central register to the new legislation is in progress.
- In line with Articles 34-35 of Regulation (EU) 2018/1725, the Agency has established a Personal Data Breach Management Procedure, following closely the EDPS Guidelines on Personal Data Breach Notifications.[5]
- The accountability of the data controllers processing personal data has been strengthened. According to Article 66 of Regulation (EU) 2018/1725, the EDPS may impose administrative fines on Union institutions and bodies for serious violations of the Regulation where they fail to comply with an order by the EDPS. In some cases, such administrative fines may amount to EUR 500,000 per year.
- New rules have been introduced on the joint controllers and joint controllership arrangements. With regard to the EMA, the EDPS has informed the Agency that in the context of the Clinical Trials Portal and Database the Agency, the European Commission, the Member States and clinical trial sponsors have to be seen as joint controllers, although with different roles and responsibilities.

Whilst the implementation of the new data protection legislation remains high on the Agency's agenda, the increased amount of workload in the area of data protection and the lack of additional resources assigned to the Agency constitutes a serious issue which has to be addressed in 2019.

To mitigate the impact of this extra workload on the organisation and to ensure a quality check of the work done in-house, some specialised Data Protection Consultants were recently hired to provide advice on the most complex matters, e.g. to carry out Data Protection Impact Assessments, where applicable. Internally, each division has appointed a Data Protection Coordinator to facilitate the implementation of the new rules.

The acting DPO has been deeply engaged in the on-going debate among the EDPS, the European Commission and national Data Protection Authorities on the interplay between the Clinical Trial Regulation[6] and the General Data Protection Regulation[7]. A number of suggestions were sent to the European Commission who endorsed nearly all of them and thus shaped the answers recently given by the European Data Protection Board (EDPB) on this matter. This interaction is likely to continue in 2019, also in light of the progress made with the recent EDPB's opinion[8] on some topical issues such as the secondary uses of clinical trial data outside the clinical trial protocol for scientific purposes.

3.11. Management of competing interests

As of 2015, EMA reviews all of its policies on independence and rules for handling competing interests and their implementation on an annual basis, and publishes an annual report. This report includes results of breach-of-trust procedures, any *ex-ante* and *ex-post* controls carried out, initiatives planned for the following year, and recommendations for improvement. The 2016 and 2017 European

[5] https://edps.europa.eu/data-protection/our-work/publications/guidelines/guidelines-personal-data-breach-notification_en
[6] Regulation (EU) No 536/2014 on clinical trials on medicinal products for human use, and repealing Directive 2001/20/EC.
[7] Regulation (EU) 2016/679 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation).
[8] Opinion 3/2019 concerning the Questions and Answers on the interplay between the Clinical Trials Regulation (CTR) and the General Data Protection regulation (GDPR)

Medicines Agency Annual Report on Independence were published in 2018. The 2018 Annual Report will be prepared in 2019.

Management Board

The policy on the handling of competing interests of the Management Board remains unchanged, following a revision in October 2016. This revision addressed an observed inconsistency between the policy for Scientific Committees' members and experts and this policy, as regards restrictions for grants/other funding to an organisation/institution, as well as for close family members. The restrictions for grants/other funding were therefore aligned with those in policy for Scientific Committees' members and experts, whilst maintaining the restrictions for close family members as stated in the policy for Management Board.

The involvement of members and alternates in Management Board activities takes into account several factors: the nature of the declared interest, the timeframe of the interest, the type of Management Board activity/topic, and the likelihood of impact on the industry (the pharmaceutical industry or any other industry related to any declared personal interests), as well as the action requested from the Management Board.

Since 2016, the revised policy includes an ex-ante evaluation which is performed to compare the details contained in each new declaration with those of the previous declaration, and with the CV provided. Members are required to undergo training, before their declaration of interest can be submitted. In addition, the names of members having declared competing interests, which could affect their impartiality with regard to specific items on the agenda, are identified and communicated to the Chair and the Board (together with applicable restrictions), and noted in the minutes. Members are informed in writing and ahead of the meeting, of the perceived conflict of interest which has been identified, and the applicable restriction to their involvement at the meeting. At the start of each meeting, members are further asked to declare any specific interests which could be prejudicial to their independence with respect to the items on the agenda.

Declarations of interests of all Management Board members are published on the Agency's website.

No breach of trust procedures were initiated for Management Board members in 2018. A revision of the breach of trust procedure on declarations of competing interests for Management Board members is envisaged in 2019 to align the policy with the Breach of trust procedure for competing interests of, and disclosure of confidential information by scientific committees' members and experts.

Scientific committee members and experts

The policy on the handling of competing interests of scientific committees' members and experts was last updated in October 2016 and is in force since 1 December 2016.

The Agency takes a proactive approach to identifying cases where the potential involvement of an expert as a member of a committee, working party, or other group, or in any other Agency activity in the context of the authorisation, supervision and maintenance of medicinal products for human or veterinary use, needs to be restricted or excluded, due to interests in the pharmaceutical industry.

The Agency requires experts to sign an electronic declaration of interests (e-DoI) every year, or when a change in their interests occurs, to ensure that they do not have any financial or other interests in the pharmaceutical industry that could affect their impartiality. The Agency also requires the experts to submit an up-to-date electronic curriculum vitae (e-CV) when signing the e-DoI.

The Agency screens each expert's e-DoI and assigns each DoI an interest level, based on whether the expert has any declared interests, and whether these are direct or indirect.

After the system assigns an interest level, the Agency uses the information provided to determine if an expert's involvement should be restricted or excluded in the specific activities of the Agency. It bases these decisions on:

- the nature of the declared interests;
- the timeframe during which such interest occurred;
- the type of activity that the expert will be undertaking.

The policy reflects a balanced approach to handling competing interests that aims to effectively restrict the involvement of experts with possible competing interests in the Agency's work, while maintaining EMA's ability to access the best available expertise. It includes a number of measures which take into account the nature of the declared interest, before determining the length of time any restrictions may apply:

- An executive role, or a lead role in the development of a medicine during previous employment with a pharmaceutical company, results in non-involvement in EMA activities that include the concerned company or product during the term of the mandate.
- For the majority of declared interests, a three-year cooling-off period is foreseen. Restrictions to involvement decrease over time, and make a distinction between current interests and interests within the last three years.
- For some interests, such as financial interests, there is no cooling-off period required when the interest is no longer present.

Requirements for experts who are members of scientific committees are stricter than for those participating in advisory bodies and ad-hoc expert groups and hence more restrictions apply when the expert declares an interest. Similarly, requirements for chairs and members in a lead role, e.g. rapporteurs, are stricter than those for the other committee members.

All members proposed for the Agency's scientific committees have their e-DoI screened before their formal nomination. In case that the nominating authority appoints a member or alternate to a scientific committee or other forum, or an expert for participation in an Agency's activity where the expert has declared interests incompatible with involvement in Agency's activities in accordance with the policy, the Agency would not allow this expert to participate and inform the nominating authority accordingly.

Pre-meeting, meeting, and post-meeting arrangements are applied to ensure application of the policy, and to provide documented evidence. The outcomes of the evaluation of e-DoIs, and restrictions applicable to meeting participation, are included in the meeting minutes. The meeting minutes of all scientific committees are published on the Agency's website.

Completed e-DoIs, their interest levels, and the e-CVs of scientific committee members and experts, are published on the Agency's external website for transparency purposes. The European experts' list on the Agency's website includes only those experts who have a valid e-DoI and e-CV. The Agency removes from the list the experts whose e-DoI is older than a year or unsigned, until they submit an updated and signed e-DoI.

EMA has in place a breach-of-trust procedure, which sets out how the Agency deals with incorrect or incomplete e-DoIs by experts and committee members. In 2018, 2 breach-of-trust procedures were initiated as a committee member provided training to a pharmaceutical company which is considered as a consultancy, and another committee member accepted a lecture fee from a pharmaceutical company for a presentation at a scientific conference, which is considered as a financial interest. After assessment of additional information provided by the committee members, they were invited to a hearing at the Agency in order to gather their views on the facts and to provide replies to remaining

questions. The outcome of these breach-of-trust procedures was that the acceptance of the interest was negligence on the part of the member to comply with the EMA policy, but was not done intentionally and not through gross negligence. The procedure was closed with a request to the committee members to study the policy and to attend training on the policy.

The Agency updated the procedure in October 2018 to include disclosure of confidential information. A working party member disclosed confidential information from an ongoing procedure in a presentation at a public scientific conference. As the disclosure occurred through gross negligence, in line with the breach-of-trust procedure after requesting clarifications and inviting the member to a hearing, the Agency has taken appropriate measures against this working party member, i.e. a 12-month exclusion from involvement in any EMA activity.

The Agency immediately restricts scientific committee members, as well as any other experts, from any further involvement in the Agency's activities, from the date they inform the Agency that they intend to take up employment in a pharmaceutical company. In 2018, 5 experts informed the Agency of such intention and the restriction was immediately applied.

In 2018, 756 e-DoIs were checked before new experts were uploaded in the EMA Experts database as an *ex-ante* control. The 2018 *ex-post* control focused on scientific advisory groups (SAG) and Ad Hoc Expert Groups participants as a follow-up to findings from previous *ex-post* controls. Overall, the control showed that the system for handling declarations of interests for meeting participation works well. No major problems with the e-DoI completion by the experts or the e-DoI evaluation by EMA staff were identified.

Agency staff

The Agency's Code of Conduct extends the requirements for impartiality and the submission of annual declarations of interests to all staff members working at the Agency, including temporary agents, contract agents, seconded national experts, interims, visiting experts, and trainees.

The decision on rules relating to Art.11, 11a and 13 of the Staff Regulations concerning the handling of declared interests of staff members of the EMA and candidates before recruitment was last updated in October 2016 and is effective since 1 January 2017.

Following the completion of a declaration of interests, and depending on the nature of the declared interests, if any, an interest level (1-3) is assigned to the staff member and/or candidate by the reporting officer evaluating the declaration. Staff members and/or candidates with interest level 2 or 3 are subject to a documented risk-based assessment, which includes mitigating actions to reduce the risk. The decision is based on:

- the nature of the declared interests;
- the timeframe during which such interest occurred;
- the staff member’s specific role and responsibilities (this includes the following aspects: the nature of the staff member’s duties, the nature of the staff member’s input to the Agency’s activities and the degree of influence that may be exerted on the final administrative or technical proposal, opinion or decision).

Staff declarations are available internally in SAP HR and for consultation by external persons on request. CVs and DoIs of the Executive Director and all EMA managers are published on the Agency's corporate website.

An impact assessment performed on the possible revisions of EMA’s policies on conflict of interest in 2018 revealed that it was appropriate to focus on the declaration by EMA staff of past intellectual

property rights related to medicinal products or uses of such products, including patent ownership and patent applications, along the lines of one of the European Ombudsman's recommendations from the 2016 and 2017 review of independence. Therefore, an amendment to the "*Decision on rules relating to Articles 11, 11a and 13 of the Staff Regulations concerning the handling of declared interests of staff members of the European Medicines Agency and candidates before recruitment*" was adopted by the Management Board on 13 December 2018. A survey requesting staff to declare all intellectual property rights related to medicinal products was carried out in 2018. Changes to the declaration of interests form to include this declaration will be fully implemented in 2019.

As regards to selection procedures and procurement, any competing interests must be declared by selection committee members and procurement evaluation committee members, and action taken accordingly.

Post-employment

Staff members are required to seek permission to engage in an occupation within a period of two years of leaving the Agency, in accordance with Article 16 of the Staff Regulations. National experts are also required to seek permission, although the period is restricted to the equivalent duration of the secondment or two years, whichever is the shorter period. In all cases, applications are reviewed to establish any potential conflict of interests to the Agency, and if so required, on the basis of an opinion of the Agency's Joint Committee, the Executive Director will issue a decision, which may impose restrictions on the staff member to mitigate against any potential conflict of interests.

On 4 October 2018 the Agency adopted the Commission decision on outside activities and assignments and on occupational activities after leaving the service. Under the new rules, taking up employment at a European Union institution does not trigger the obligation to inform the Agency as working for another EU institution does not lead to leaving the service of the Union for the purpose of applying Article 16 of the Staff Regulations. Therefore, any staff member leaving the European Medicines Agency to take up employment with another EU institution is not required to seek prior authorisation.

For the period from 1 January 2018 to 31 December 2018, a total of 23 applications were made, resulting in 10 authorisations without restrictions, 12 authorisations with restrictions and 1 request for reconsideration on taking up a new job. Examples of restrictions imposed include: a distance clause, whereby the former staff member may not contact individual Agency staff for a period of time, e.g. 6-12 months; all decisions include a reminder of the binding obligation of confidentiality after leaving; and a requirement that opinions given in public presentations must be stated to be the former staff member's own and not linked to their former employment at the Agency.

Information on restrictions applied to applications in 2018 is given in Annex 7.

External consultants and contractors

Competing interests for external consultants and contractors are covered by the standard framework contract provisions[9] which state that:

- The contractor shall take all necessary measures to prevent any situation that could compromise the impartial and objective performance of the contract. Such conflicts of interest or professional conflicting interest could arise, in particular, as a result of economic interest, political or national affinity, family or emotional ties, or any other relevant connection or shared interest. Any conflicts of interest or professional conflicting interest which could arise during performance of the contract

[9] Article II.3

must be notified to the Agency in writing, without delay. In the event of any such conflict, the contractor shall immediately take all necessary steps to resolve it.

- The Agency reserves the right to verify that such measures are reasonable, and may require additional measures to be taken, if necessary, within a time limit which it shall set. The contractor shall ensure that the contractor's staff are not placed in a situation that could give rise to conflicts of interest. Without prejudice to Article II.1, the contractor shall replace, immediately and without compensation from the Agency, any member of the contractor's staff exposed to such a situation.
- The contractor shall abstain from entering into any contract likely to compromise its independence.
- The contractor declares:
  - that it has not made, and will not make, any offer or agreement with any third party of any type whatsoever, from which an advantage can be derived under the Contract;
  - that it has not granted, and will not grant; has not sought, and will not seek; has not attempted, and will not attempt to obtain; and has not accepted, and will not accept any advantage, financial or in kind, to or from any third party whatsoever, where such advantage constitutes an illegal practice or involves corruption, either directly or indirectly, in as much as it is an incentive or reward relating to performance of the Contract.
- The contractor shall pass on all the relevant obligations in writing to the contractor's staff and to any natural person with the power to represent it or take decisions on its behalf, as well as to third parties involved in performance of the contract, including subcontractors. A copy of the instructions given, and the undertakings made in this respect, shall be sent to the Agency should it so request.

In addition, the Agency requests all IT consultants to sign individual declarations of interest and confidentiality undertaking at the beginning of their assignment, which is stored centrally by the Central sourcing office.

The Agency has measures in place to mitigate the risk of project-related, commercially confidential information (CCI) being disclosed to non-EMA staff, such as consultants and contractors. CCI includes rates for payment of contracted services, quotations for delivery of contracted goods or services, and services and goods quoted in tender procedures. An internal guidance document was developed by the Portfolio office that provides information on how project-related CCI should be handled, as well as practical measures that should be taken to avoid disclosure.

3.12. Telematics strategy implementation

During 2018, the Network continued implementation of the Telematics strategy. Planned major milestones were achieved, but some activities (e.g., implementation of changes to existing systems requested by users) were reduced, considering preparations for the EMA relocation in early 2019 and the consequent increased consumption of resources in other areas of IT. Common Repository (User Interface and Application Programming Interface) was extended in 2018 to include new types of submissions related to procedures for human medicinal products: Signal Detection, PASS 107 NAPs, Work-share NAPs and Ancillary products. Separate cabinets for Active Substance Master File and Plasma Master File submissions were added, where all the existing submissions were migrated respectively. An updated version of the PSUR Repository interface was released that allows searching for all versions of the Assessment Report. EudraVigiliance system was integrated with EMA Account Management platform and Organisations Management System.

EU Telematics strategy and implementation roadmap 2015-2017 were extended to cover the period up to 2019. The extended roadmap was developed to guide the ongoing Telematics developments until

the new EU Telematics strategy 2020-2025 and its implementation roadmap will be developed. The IT Directors' Executive Committee worked on this topic throughout 2018 and with an input from IT Directors (during a meeting in April) drafted a concept paper that describes the main elements to be included in the final strategy. HMA endorsed the concept paper for consultation at the July 2018 meeting. During the consultation process EMA received a range of comments from partners and stakeholders, including industry (during joint industry-EU Telematics Management Board (TMB) meeting on 8 November 2018). At the end of 2018, EU TMB agreed that further development of the new Telematics strategy will be put on hold because of EMA relocation, clarity required from the HMA on the Telematics projects' funding and governance, and the need to align with the Network strategy 2020-2025. Comments received on the concept paper will be considered when the process restarts. Existing Telematics implementation plan should be extended into 2020.

3.13. Information security strategy

The Information Security strategy 2017-2018 is in place and its aim is to enhance the Agency's activities in domains such as security governance and awareness, information security, technology security and risk management. In 2018, the main focus was to support the relocation activities in terms of IT security, and the following activities were completed:

- Security requirements and design for the Spark building were validated;
- Data migration from London to Hamburg was validated, according to security best practices;
- Several audit recommendations related to IT security were successfully implemented;
- Online training on IT security essentials was rolled out and made mandatory for all staff;
- Several simulation campaigns were performed to reinforce staff awareness about IT security;
- Cloud security service was enhanced;
- Continuous monitoring of IT risk management process and regular review of IT risks was conducted.

4. Management assurance

4.1. Review of the elements supporting assurance

Assurance from the authorising officers by delegation

In accordance with the charter of tasks and responsibilities of authorising officer by delegation, and in support of the annual activity report, all authorising officers were asked to confirm their reasonable assurance for their areas of responsibility that, on the basis of the facts in their possession, that the information contained in the report gives a true and fair view, except as otherwise specified in any reservations related to defined areas of revenue and expenditure, and that the resources assigned have been used for their intended purpose and in accordance with the principle of sound financial management.

The authorising officers by delegation confirmed their reasonable assurance that, overall, suitable controls are in place and are working as intended; identified risks are being appropriately monitored and mitigated, and necessary improvements highlighted in the reports are being implemented

Conclusions

Taking into account the review of the elements supporting assurance, the Executive Director is of the opinion that the management and control systems in place at the Agency are working as intended, risks are being appropriately monitored and mitigated, and necessary improvements and reinforcements are being implemented.

4.2. Reservations

Based on the assurance provided by the control system results, the Executive Director sees no reason that would justify or require a reservation.

Materiality criteria used

In line with the suggestion of the guidelines on the preparation of the annual activity report, the Agency used the qualitative and quantitative materiality criteria described below to assess if issues identified merit a reservation.

Qualitative criteria used

The Agency would consider significant the weaknesses in the internal control system that fall under the following qualitative criteria:

- significant errors detected during the control or supervision exercises;
- significant weakness in one of the control systems;
- situations where the Agency does not have sufficient evidence from internal control systems or audit coverage to be confident of providing the necessary assurance;
- situations where a major issue has been outlined by the European Court of Auditors or the Internal Audit Service of the Commission (critical audit recommendations for underlying weaknesses relevant to the area covered by the declaration of assurance that are not adequately addressed by other internal controls and where the materiality threshold is exceeded);

- situations revealed through own control work or audits where significant risks remain unmitigated;
- significant reputational risk.

Quantitative criterion used

According to the Commission guideline on preparation of annual activity reports, the Court of Auditors uses a 2% materiality threshold. The Agency has therefore set the quantitative criterion of materiality at 2% of its total budget, as the Agency's tasks can be considered a policy area. This enables the Agency to apply the materiality criteria to the data and results of various control activities.

4.3. Overall conclusions on assurance

Based on all the facts presented in the report, including the management of the control system, and in light of the opinions expressed by the Court of Auditors on the reliability of the accounts and on the legality and regularity of the transactions underlying the accounts, the Agency can conclude that the systems in place provide reasonable assurance that the resources under the responsibility of the Executive Director were used for their intended purposes and in accordance with the principles of sound financial management.

EMPHASIS OF MATTER

Without calling into question the overall conclusions on 2018 assurance, the Agency, as highlighted in previous years, draws attention to the imposed reduction of 10% of the Agency’s establishment plan since 2014, during the same period that fee-related workload (as reflected by increased fee income from like-to-like tasks) has grown by 31%.

Furthermore, significant new tasks such as the implementation of the Veterinary Regulation, GDPR, Medical Device regulation, Clinical trial regulation, were also assigned to the Agency during this period without any increase in the establishment plan staff.

This, combined with the permanent loss of short term contract staff following the relocation to the Netherlands, could result in risks to delivering on future public health and legislative responsibilities, especially once the Agency re-introduces the activities currently reduced or suspended to cope with the Brexit situation. Among others, these include updating of key IT systems underpinning authorisation of products, training and coaching of personnel to maintain EU expertise in scientific and technological developments, responding to a backlog of access to documents requests, resuming clinical trial data publication, addressing a backlog in certificates of pharmaceutical products.

Declaration of assurance

I, the undersigned, Guido Rasi, Executive Director of the European Medicines Agency, in my capacity as authorising officer:

Declare that the information contained in this report gives a true and fair view.

State that I have reasonable assurance that the resources assigned to the activities described in this report have been used for their intended purpose and in accordance with the principles of sound financial management, and that the control procedures put in place give the necessary guarantees concerning the legality and regularity of the underlying transactions.

This reasonable assurance is based on my own judgement and on the information at my disposal, such as the results of the self-assessments, ex-post controls, the work of the internal audit capability, the

observations of the Internal Audit Service, and the lessons learned from the reports of the Court of Auditors for years prior to the year of this declaration.

Confirm that I am not aware of anything not reported here which could harm the interests of the institution.

London, 14 May 2019

[Signature on file]

Guido Rasi

(Executive Director)

Annexes

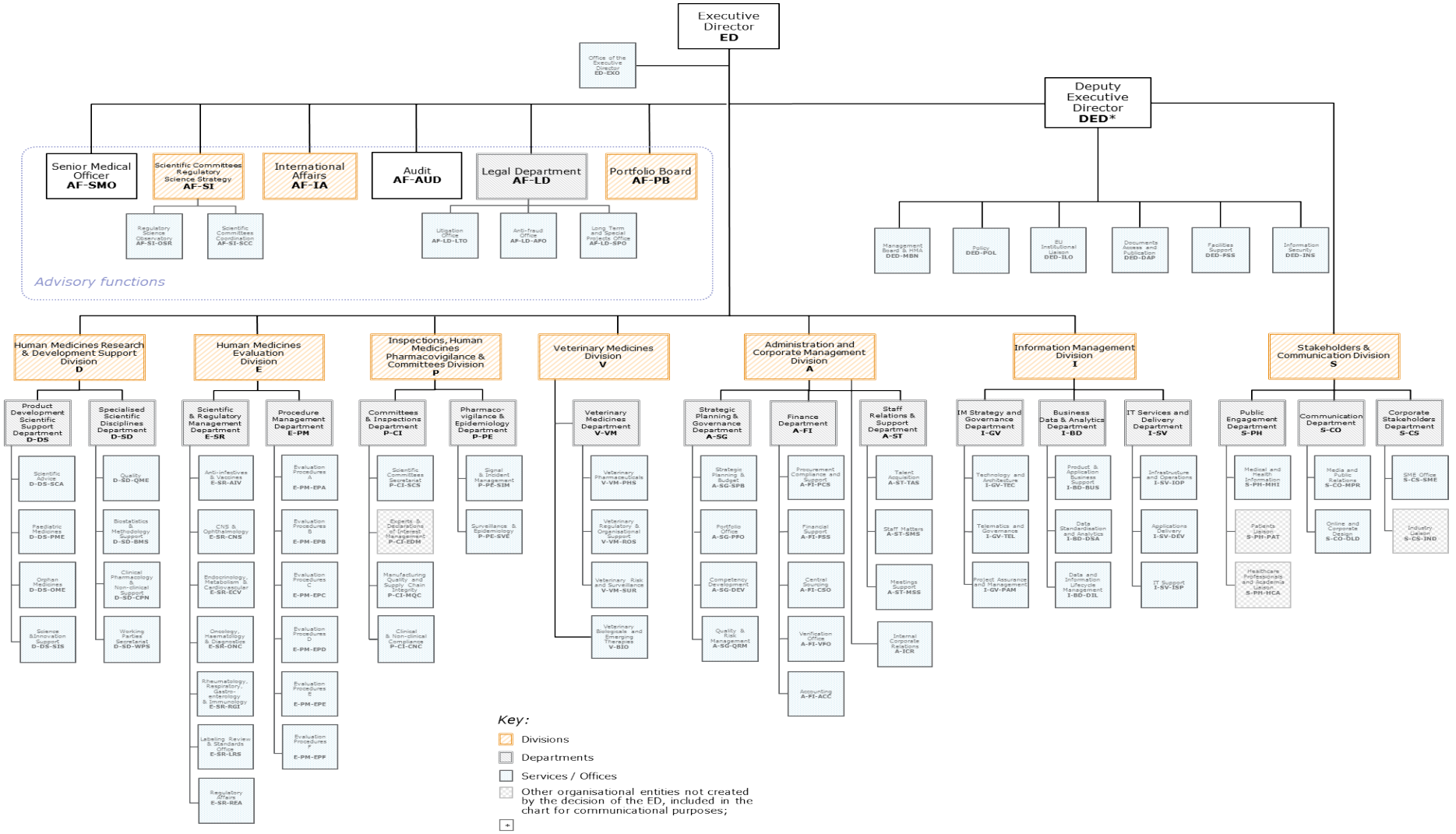
Annex 1. Core business statistics

Business statistics can be found in Part 1.

Annex 2. Statistics on financial management

Annual accounts and a financial report will be made available following their adoption by the Management Board.

Annex 3. Organisation chart as at 31 December 2018



Annex 4. Establishment plan

Category and grade	Authorised for 2017		Occupied as of 31/12/2017			Authorised for 2018		Occupied as of 31/12/2018			Authorised for 2019	
	Permanent posts	Temporary posts	Permanent posts	Temporary posts		Permanent posts	Temporary posts	Permanent posts	Temporary posts		Permanent posts	Temporary posts
				Grade filled	Actual grade				Grade filled	Actual grade		
AD 16	-	0	-	0	0	-	0	-	0	0	-	0
AD 15	-	4	-	3	1	-	3	-	3	1	-	3
AD 14	-	6	-	6	2	-	7	-	6	3	-	7
AD 13	-	11	-	11	10	-	11	-	11	10	-	11
AD 12	-	40	-	35	24	-	43	-	42	26	-	43
AD 11	-	40	-	40	29	-	43	-	43	33	-	43
AD 10	-	43	-	43	25	-	41	-	41	26	-	43
AD 9	-	42	-	42	38	-	45	-	45	35	-	43
AD 8	-	53	-	53	59	-	59	-	59	72	-	59
AD 7	-	61	-	61	54	-	65	-	65	52	-	65
AD 6	-	37	-	37	70	-	23	-	23	60	-	37
AD 5	-	3	-	3	18	-	0	-	0	18	-	11
Total AD	0	340	0	334	330	0	340	0	338	336	0	365
AST 11	-	2	-	2	0	-	2	-	2	0	-	2
AST 10	-	6	-	6	3	-	7	-	7	3	-	7
AST 9	-	7	-	7	4	-	6	-	5	4	-	7
AST 8	-	16	-	16	4	-	16	-	16	4	-	16
AST 7	-	19	-	18	13	-	22	-	22	16	-	22
AST 6	-	43	-	43	19	-	42	-	39	22	-	27
AST 5	-	43	-	39	36	-	46	-	43	38	-	35
AST 4	-	52	-	52	45	-	57	-	57	45	-	57
AST 3	-	45	-	44	65	-	46	-	46	62	-	46
AST 2	-	23	-	22	33	-	7	-	6	28	-	7
AST 1	-	0	-	0	31	-	0	-	0	23	-	0
Total AST	0	256	0	249	253	0	251	0	243	245	0	226
AST/SC1	-	0	-	-	0	-	0	-	-	0	-	0
AST/SC2	-	0	-	-	0	-	0	-	-	0	-	0
AST/SC3	-	0	-	-	0	-	0	-	-	0	-	0
AST/SC4	-	0	-	-	0	-	0	-	-	0	-	0
AST/SC5	-	0	-	-	0	-	0	-	-	0	-	0
AST/SC6	-	0	-	-	0	-	0	-	-	0	-	0
Total AST/SC	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	596	0	583	583	0	591	0	581	581	0	591

Information on the entry level for each type of post

Interims: from 1 January 2018 to 31 December 2018, there have been 125 interims, and the average length of an interim assignment during 2018 was 6.74 months.

The entry grades for recruitment of temporary agents are AST 1, AST 3, AD 5, AD 6, AD7, AD 8 (Senior Scientist/Administrator), AD 6 or 8 (Service Head), AD 9/10 (Head of Department) and AD 12 (Head of Division) in line with the functions of the post advertised.

Annex 5. Results of the screening exercise as of December 2018

EMA Results of the screening exercise as of December 2018 for the Annual Activity Report

Job Type (sub) category	2017 (%)	2018 (%)
Administrative support and Coordination	18%	18%
Administrative Support	17%	17%
Coordination	1%	1%
Operational	78%	78%
Top Level Operational Coordination	1%	1%
Programme Management & Implementation	23%	23%
Evaluation & Impact Assessment	40%	39%
General Operational	14%	15%
Neutral	4%	4%
Finance / Control	4%	4%
Linguistics	0%	0%
Total	100%	100%

Article 29(3) of the Framework Financial Regulation sets the obligation for all European Union institutions and agencies to carry out a benchmarking exercise, with the aim of justifying administrative expenditure in a structured way, using a common methodology.

Jobs are grouped according to the Commission Screening methodology under three main types: Administrative support and coordination, Operational and Neutral.

The jobs screened include all establishment plan posts (TA) occupied full time, part time, or vacant, and all other types of contracts occupied by a jobholder (CA, SNE, INT, TR, long term contractors/consultants, external service providers) fulfilling all or most of these criteria: minimum three month contract, have a badge, occupy an office space, have a phone (personal number), have a computer (personal ID, e-mail).

Annex 6. Human and financial resources by activity

Activities	Full Time Equivalence (Temporary and Contract Agents & Seconded National Experts)			Staff exp.	Infrastructure, IT and project exp.	Meeting exp. (incl. overhead)	Evaluation Service (NCAs)	Other operational expenditure	TOTAL
	Business as usual	Brexit preparedness	Total FTEs	€'000	€'000	€'000	€'000	€'000	
1 Evaluation activities for human medicines	387	1	388	51,395	28,131	11,655	109,658	6,983	207,822
1.1 Pre-authorisation activities	84	0	85	11,406	3,233	5,573	18,625	11	38,849
1.2 Initial evaluation activities	87	0	87	12,043	2,806	1,920	11,701	844	29,313
1.3 Post-authorisation activities	92	1	93	10,889	5,283	972	67,372	1,340	85,855
1.4 Referrals	9	0	9	983	272	196	180	190	1,822
1.5 Pharmacovigilance activities	80	0	80	10,356	5,388	1,737	11,780	3,367	32,629
1.6 Other specialized areas and activities	34	0	34	5,718	11,148	1,257	0	1,230	19,354
2 Evaluation activities for veterinary medicines	40	0	40	5,232	2,230	2,038	0	403	9,903
2.1 Pre-authorisation activities	2	0	2	316	84	375	0	0	775
2.2 Initial evaluation activities	14	0	14	1,873	503	748	0	154	3,277
2.3 Post-authorisation activities	22	0	22	2,933	1,616	432	0	199	5,181
2.4 Arbitrations and referrals	1	0	1	109	27	186	0	50	373
2.5 Pharmacovigilance activities	0	0	0	0	0	0	0	0	0
2.6 Other specialized areas and activities	0	0	0	0	0	297	0	0	298
3 Horizontal activities and other areas	149	2	151	19,537	6,223	4,129	4,486	1,723	36,096
3.1 Committee coordination	22	0	22	2,380	759	1,371	0	0	4,511
3.2 Inspection and Compliance	39	0	39	3,573	1,591	781	4,486	1	10,432
3.3 Partners and Stakeholders	30	2	32	5,335	1,316	1,828	0	801	9,280
3.3a Transparency and access to documents	20	0	20	2,653	1,040	0	0	0	3,693
3.3b Information	23	0	23	2,878	929	31	0	920	4,758
3.4 International activities	14	0	14	2,717	587	117	0	0	3,422
4 Corporate governance and support activities	139	81	220	34,086	9,768	377	0	837	45,068
4.1 Governance, Quality management and Internal aud	17	40	57	9,779	2,305	377	0	139	12,601
4.2 Finance	30	3	33	4,133	1,345	0	0	151	5,629
4.3 Information technology	38	13	51	10,370	2,719	0	0	0	13,089
4.4 Human resources	38	13	51	6,142	2,047	0	0	327	8,515
4.5 Infrastructure services	4	4	8	906	390	0	0	0	1,296
4.6 Communication (corporate)	12	9	21	2,756	962	0	0	220	3,938
Total	715	85	800	110,250	46,351	18,198	114,144	9,945	298,889

Brexit related exp:	13,426
Exp. (C1+C2) 2018:	312,315

Annex 7. Report for 2018 on staff engaging in an occupational activity within two years of leaving the service (Article 16 of the Staff Regulations)

Engaging in an occupational activity within two years of leaving the service - restrictions applied to applications in 2018:

Case No	Job Title / Function at EMA	Length of Service	Date of application	Date of JC opinion	Decision of the Head of Administration and Corporate Management	Date of ED decision
1	TA	7 years 3 months	15/02/2018	19/02/2018	Holds that during a period of six months to be counted as of the date s/he leaves service, the staff member should refrain from individually liaising with any member of staff of the European Medicines Agency with regard to any professional activity s/he may have dealt with in the performance of his/her responsibilities at the Agency during his/her 7 years and 3 months at the Agency. The six month 'distance clause' provision is extended to a further six months with respect to interactions on the specific products s/he has worked on within the last three years.	3/04/2018
2	SNE	4 years 5 months	26/03/2018	27/04/2018	The activities related to his/her engagement may lead to perceptions of conflict of interest with his/her previous activities at the European Medicines Agency, which might affect the reputation of the Agency. In line with the Joint Committee opinion and in view of the fact that the staff member was a former Seconded National Expert, it was strongly recommended to reconsider this engagement.	27/04/2018
3	TA	3 years 1 month	11/04/2018	12/04/2018	Holds that during a period of six months to be counted as of the date s/he leaves service, the staff member should refrain from individually liaising with any member of staff of the European Medicines Agency with regard to any professional activity s/he may have dealt with in the performance of his/her responsibilities at the Agency during his/her 3 years and 1 month at the Agency. The six month 'distance clause' provision is extended to a further six	07/05/2018

Case No	Job Title / Function at EMA	Length of Service	Date of application	Date of JC opinion	Decision of the Head of Administration and Corporate Management	Date of ED decision
					months with respect to interactions on the specific products s/he has worked on within the last three years.	
4	CA	3 years	5/02/2018	14/02/2018	During a period of six months to be counted as of the end of contract date, the former staff member should refrain from individually liaising with any member of staff of the European Medicines Agency with regard to any professional activity s/he may have dealt with in the performance of his/her responsibilities at the Agency.	7/03/2018
5	TA	14 years 4 months	14/05/2018	29/05/2018	During a period of twelve months to be counted as of the end of contract date, the former staff member should refrain from individually liaising with any member of staff of the European Medicines Agency with regard to any professional activity s/he may have dealt with in the performance of his/her duties at the Agency during his/her 14 years and 4 months at the Agency.	14/06/2018
6	CA and TA	11 years and 7 months	28/05/2018	29/05/2018	During a period of twelve months to be counted as of the end of contract date, the former staff member should refrain from individually liaising with any member of staff of the European Medicines Agency with regard to any professional activity s/he may have dealt with in the performance of his/her responsibilities at the Agency during his/her 11 years and 7 months at the Agency.	14/06/2018
7	CA	3 years 5 months	20/04/2018	4/05/2018	During a six months clause to be counted as of the end of employment the former staff member should refrain from individually liaising with any member of staff of the Agency with regard to any professional activity s/he dealt with in the performance of his/her responsibilities at the Agency in the 3 years and 5 months of service.	30/05/2018

Case No	Job Title / Function at EMA	Length of Service	Date of application	Date of JC opinion	Decision of the Head of Administration and Corporate Management	Date of ED decision
8	CA	3 years 1 month	7/06/2018	21/06/2018	During a twelve month clause to be counted from the end of employment the former staff member should refrain from individually liaising with any member of staff of the Agency with regard to any professional activity s/he may have dealt with in the performance of his/her responsibilities at the Agency in the 3 years and 1 month of service.	20/08/2018
9	CA and TA	11 years 1 month	29/06/2018	19/07/2018	Twelve-month 'distance clause' provision with respect to interactions on the specific products s/he has worked on within the last three years; Holds that, during a period of six months to be counted as of the date s/he leaves service, the former staff member should also refrain from individually liaising with any member of staff of the European Medicines Agency with regard to any professional activity s/he may have dealt with in the performance of his/her responsibilities at the Agency during his/her 11 years and 1 month at the Agency.	20/08/2018 and amended on 12/10/2018
10	TA	4 years 6 months	14/06/2018	21/06/2018	Holds that the former staff member, in the course of his/her professional activities, may not engage in any activity, whether gainful or not, which concerns any legal case involving the EMA, or any case connected to the EMA, and in which s/he was previously involved directly or indirectly. This restriction shall apply indefinitely; Holds that during a period of twelve months to be counted as of the date s/he leaves the service, s/he should also refrain from individually liaising with any member of staff of the EMA with regard to any professional activity and legal cases s/he may have dealt with in the performance of his/her responsibilities at the Agency during his/her 4 years and 6 months of service at the Agency, This is	26/07/2018

Case No	Job Title / Function at EMA	Length of Service	Date of application	Date of JC opinion	Decision of the Head of Administration and Corporate Management	Date of ED decision
					without prejudice to the possibility of the former staff member to liaise or attend meetings through the standard channels available to all members of the public, including standard procedural services and meetings offered by the Agency to the different stakeholders	
11	TA	12 years 3 months	3/08/2018	6/09/2018	12-month 'distance clause' provision with respect to all interactions on the specific products or EMA Regulatory Science strategy s/he has worked on within the last three years; Holds that during a period of 6 months to be counted as of the date s/he leaves the service, the former staff member should refrain from individually liaising with any member of staff of the Agency with regard to any professional activity s/he may have dealt with in the performance of his/her responsibilities at the Agency during his/her 12 years and 3 months of service	17/09/2018
12	TA	10 years 8 months	5/09/2018	26/09/2018	Twelve-month `distance clause' provision with respect to all interactions on the specific products s/he has worked on within the last three years; Holds that during a period of 6 months to be counted as of the date s/he leaves the service, the former staff member should refrain from individually liaising with any member of staff of the Agency with regard to any professional activity /he may have dealt with in the performance of his/her responsibilities at the Agency during his/her 10 years and 8 months of service	17/10/2018
13	TR, CA and TA	7 years 7 months	28/09/2018	18/10/2018	In the course of his/her professional activities s/he may not engage in any activity, whether gainful or not, which concerns any legal case involving or connected to the Agency in which s/he was previously involved directly or indirectly. This restriction shall apply	8/11/2018

Case No	Job Title / Function at EMA	Length of Service	Date of application	Date of JC opinion	Decision of the Head of Administration and Corporate Management	Date of ED decision
					permanently; During a period of 12 months to be counted as of the date /she leaves the service, the former staff member should also refrain from individually liaising with any member of staff of the Agency with regard to any professional activity s/he may have dealt with in the performance of his/her responsibilities at the Agency during his/her 7 years and 7 months of service. This is without prejudice to the possibility to liaise or attend meetings through the standard channels available to all members of the public, including standard procedural services and meetings offered by the Agency to the different stakeholders	

Annex 8. Risks

In 2018 the most significant risks that could potentially impact the Agency's activities and achievement of its objectives were related to Brexit. The Agency has been continuously assessing these risks since the result of the UK referendum and designed a risk mitigation strategy.

The significant risks and respective mitigating actions are outlined in the table below. These risks, should they materialise and the consequences not be appropriately managed, would result in operational, reputational, legal or financial implications for the Agency.

Brexit

Risk	Mitigating actions and controls
Loss of existing staff resulting in loss of professional competencies and knowledge	The Agency has implemented staff support measures aiming to make the transition to our new location as smooth as possible for colleagues who relocate with the Agency. These include entitlements and allowances available in the Staff Regulations or already in place at the Agency, as well as additional provisions put in place for a transitional period. Several new recruitment procedures have been launched in 2018 to compensate for the possible loss of staff.
Loss of UK expertise in the scientific work	UK experts constitute 15% of the Agency's expert base and conduct around 20% of the scientific work. Losing these resources will lead to: • significant increase in workload for EU experts; • potential loss of specific expertise. A dedicated ORP subgroup has been set up to assess the impact of Brexit on the Agency's core activities and propose remedial actions. The group has been focussing on the following remedial actions: • Redistribution of UK product portfolio. • Distribution of workload for initial marketing-authorisation applications, including reassignment of procedures not yet started but currently assigned to the UK. • Distribution of workload for scientific-advice procedures. • Distribution of workload for PRAC procedures, for which the contribution of the CMDh is required concerning nationally authorised medicinal products. • Distribution of workload for initial marketing-authorisation applications and maximum residue limits (MRLs), including reassignment of procedures not yet started but currently assigned to the UK (veterinary medicines). • Distribution of workload for pharmacovigilance procedures for centrally authorised products (veterinary medicines). • Operational adjustments.
Inability to relocate the Agency new headquarters in the Netherlands by the 29 March 2019	A joint governance structure between EMA and government authorities in the Netherlands has been set up to enable close collaboration between our Agency and the Dutch authorities at national and local levels, and to monitor progress of the relocation.

Fraud

Risk	Mitigating actions and controls
Intentional leak of confidential information to external parties by internal employees, interims, trainees or contractors who have	• Data access management in place • Firewall system in place to protect the information systems • Antivirus system in place

Risk	Mitigating actions and controls
access to EMA's information systems with the purpose of personal gain	• Datacentre access limited to relevant resource • Checklist in place to manage Contractors access to IT systems that has not been added to the SAP HR system. • Tools to encrypt Data are in place to allow the transfer between the parties outside of the EMA network, for example via an encrypted USB stick • Contractor rates data access is restricted using access control lists • Passwords are required to be updated regularly • USB restriction on EMA laptops. • EMA Security Policy adopted (Policy 0076) • (11) Internal guidance on access control to Agency premises approved on 27/09/2017 (doc ref EMA/276354/2017)
Sensitive and/or confidential data is intentionally accessed or removed from EMA network for personal gain through a cyber-attack	• Monitoring of traffic across EMA firewalls is undertaken by IT • Penetration test and vulnerability assessment performed regularly • Intrusion Prevention and Detection system systems in place • Security policy in place detailing how employees can protect data
The NCA experts participating in EMA assessment work at national level (not included in the EMA Experts database) are not independent	• Legal requirements for independence (Article 63(2) of Regulation (EC) No 726/2004.). • Contractual arrangements and memorandum of understanding with NCAs
Incorrect scientific opinion because of infringement of compliance involving data fraud by applicant or third party supplying data =>> public, animal health, legal and reputational risk	• Cross-Agency infringement action group established • Increased transparency to third parties through access to documents encouraging reporting of infringements • EMA Policy 0072 on handling of information from external sources disclosing alleged improprieties concerning EMA activities related to the authorisation, supervision and maintenance of human and veterinary medicinal products was adopted on 17/03/2017 • EMA Policy 0070 on publication of clinical data for medicinal products for human use was adopted on 02/10/2014

Annex 9. Consolidated list of new public procurement contracts > €15,000 concluded by the Agency during 2018

(Those contracts signed during reference period 01/01/2018-31/12/2018)

Contract no.	Type of contract	Name of Contractor	Subject	Value (or estimated value, where applicable)	Procurement procedure and justification if negotiated procedure	Organisational entity / Authorising Officer
EMA/2017/27/ST	Framework contract	Roodlane Medical Ltd	Medical services	£2,130,000.00	Negotiated Art. 134 1(a)	Administration Division
EMA/2018/12/LD	Framework contract	DLA Piper UK LLP	Legal services	GBP 250,000	Negotiated Art. 134 1(h)(i)	Legal Department / Deputy Executive Director Office
EMA/2018/16/PE	Framework contract	Hasselt University / Katholieke Universiteit Leuven (I-Biostat)	Safety and efficacy studies on medicines: Lot 1 - re-opening of competition	EUR 400,000	Open	Inspections, Human Med. Phv. & Committees Division / Deputy Executive Director Office
EMA/2018/17/PE	Framework contract	The University of Dundee	Safety and efficacy studies on medicines: Lot 1 - re-opening of competition	See EMA/2018/16/PE	Open	Inspections, Human Med. Phv. & Committees Division / Deputy Executive Director Office
EMA/2018/19/PE	Framework contract	IQVIA Ltd	Safety and efficacy studies on medicines: Lot 2 - re-opening of competition	EUR 600,000	Open	Inspections, Human Med. Phv. & Committees Division / Deputy Executive Director Office
EMA/2018/18/PE	Framework contract	EU PEandPV Research Network	Safety and efficacy studies on medicines: Lot 2 - re-opening of competition	See EMA/2018/19/PE	Open	Inspections, Human Med. Phv. & Committees Division / Deputy Executive Director Office
EMA/2018/20/PE	Framework contract	ICON Clinical Research Ltd	Safety and efficacy studies on medicines: Lot 2 - re-opening of competition	See EMA/2018/19/PE	Open	Inspections, Human Med. Phv. & Committees Division / Deputy Executive Director Office
EMA/2018/22/PE	Framework contract	IQVIA Ltd	Safety and efficacy studies on medicines: Lot 3 - re-	EUR 1,000,000	Open	Inspections, Human Med. Phv. & Committees Division /

			opening of competition			Deputy Executive Director Office
EMA/2018/21/PE	Framework contract	Erasmus University Medical Center Rotterdam	Safety and efficacy studies on medicines: Lot 3 - re-opening of competition	See EMA/2018/22/PE	Open	Inspections, Human Med. Phv. & Committees Division / Deputy Executive Director Office
EMA/2018/23/PE	Framework contract	EU PEandPV Research Network	Safety and efficacy studies on medicines: Lot 3 - re-opening of competition	See EMA/2018/22/PE	Open	Inspections, Human Med. Phv. & Committees Division / Deputy Executive Director Office
EMA/2018/29/PE	Framework contract	IQVIA Ltd	Safety and efficacy studies on medicines: Lot 4 - re-opening of competition	EUR 3,000,000	Open	Inspections, Human Med. Phv. & Committees Division / Deputy Executive Director Office
EMA/2018/25/PE	Framework contract	The University of Dundee	Safety and efficacy studies on medicines: Lot 4 - re-opening of competition	See EMA/2018/29/PE	Open	Inspections, Human Med. Phv. & Committees Division / Deputy Executive Director Office
EMA/2018/24/PE	Framework contract	Aarhus University Hospital	Safety and efficacy studies on medicines: Lot 4 - re-opening of competition	See EMA/2018/29/PE	Open	Inspections, Human Med. Phv. & Committees Division / Deputy Executive Director Office
EMA/2018/26/PE	Framework contract	RTI Health Solutions	Safety and efficacy studies on medicines: Lot 4 - re-opening of competition	See EMA/2018/29/PE	Open	Inspections, Human Med. Phv. & Committees Division / Deputy Executive Director Office
EMA/2018/28/PE	Framework contract	EU PE and PV Research Network	Safety and efficacy studies on medicines: Lot 4 - re-opening of competition	See EMA/2018/29/PE	Open	Inspections, Human Med. Phv. & Committees Division / Deputy Executive Director Office
EMA/2017/38/ST	Framework contract	Language Recruitment Services Ltd	Interims services - Lots 1,2,4	GBP 21,200,000.00	Open	Administration Division
EMA/2017/45/ST	Framework contract	Mikro IT Global Ltd	Interims services - Lots 1,2	GBP 12,100,000.00	Open	Administration Division
EMA/2017/17/ST	Framework contract	Language Matters Recruitment Consultants Ltd	Interim services - Lots 1, 2, 4, 5, 6	GBP 24,800,000.00	Open	Administration Division

EMA/2017/42/ST	Framework contract	Castlerock Recruitment Group Ltd	Interims services - Lot 3	GBP 5,000,00.00	Open	Administration Division
EMA/2017/41/ST	Framework contract	GLOBAL Technologies	Interims services - Lot 3	GBP 5,000,00.00	Open	Administration Division
EMA/2017/44/ST	Framework contract	LA International Computer Consultants Ltd	Interims services - Lot 3	GBP 5,000,00.00	Open	Administration Division
EMA/2017/40/ST	Framework contract	P.S.Computer Services Ltd	Interims services - Lot 3	GBP 5,000,00.00	Open	Administration Division
EMA/2017/39/ST	Framework contract	Haybury Ltd	Interims services - Lot 1,2,3,4,5,6	GBP 29,800,000.00	Open	Administration Division
EMA/2018/11/LD	Framework contract	Boontje B.V.	Legal services - Dutch employment law	EUR 135,000.00	Negotiated procedure - Middle value	Inspections, Human Med. Phv. & Committees Division / Deputy Executive Director Office
EMA/2017/20/ST	Framework contract	MovePlan Limited	Move management services	EUR 945,600	Open	Deputy Executive Director Office
EMA/2018/33/SV	Framework contract	AXIN+ Consortium	IT service desk (1st priority)	EUR 6,200,000	Open	Information management Division
EMA/2018/34/SV	Framework contract	Cronos International SA	IT service desk (2nd priority)	See EMA/2018/33/SV	Open	Information management Division
EMA/2018/08/LD	Framework contract	Daldewolf	Legal advice (staff matters) - 1st priority	EUR 120,000	Open	Legal Department
EMA/2018/39/LD	Framework contract	Ashurst	Legal advice (staff matters) - 2nd priority	See EMA/2018/08/LD	Open	Legal Department
EMA/2017/29/ST	Framework contract	Harrow Green Ltd	Removal services - 1st priority	EUR 1,407,000	Open	Deputy Executive Director Office
EMA/2017/23/ST	Framework contract	Oasis Data & Document Management NL BV	Offsite document storage and ancillary services	EUR 3,100,000	Open	Deputy Executive Director Office
EMA/2017/15/ST	Direct service contract	Business Travel Turism	Travel and hotel booking services	EUR 28,000,000	Open	Administration Division

EMA/2018/38/LD	Framework contract	DLA Piper UK LLP	Provision of litigation and conciliation services in relation to English property law	GBP 1,200,000	Negotiated Article 134(1)(h)(i) RAP	Deputy Executive Director Office
EMA/2018/10/DED	Framework contract	Twynstra Gudde Holding BV	Provision of property development and property management consultancy and advisory services for EMA in NL	EUR 1,393,910	Open	Deputy Executive Director Office
EMA/2019/04/DED	Framework contract	APC Verhuizen BV	Removal services - 2nd priority	See EMA/2017/29/ST	Open	Deputy Executive Director Office
DI-07660	Framework contract	Microsoft	Provision of support and consultancy services	EUR 4,293,162.00	Negotiated procedures without prior publication of a contract notice in accordance with Art. 134(1)(b)(ii)/(iii) RAP	Information Management Division
DI-07721	Framework contract	Comparex Belgium BVBA/SPRL	User rights of non-exclusive and non-transferable licences of a large range of computer software products, the provision of maintenance, support and informatics services and documentation.	EUR 50,84,2000.00	Open	Information Management Division
DI-07722	Framework contract	Insight Technology Solutions Belgium Inc	User rights of non-exclusive and non-transferable licences of a large range of computer software products, the	EUR 50,84,2000.00	Open	Information Management Division

			provision of maintenance, support and informatics services and documentation.			
DI-07723	Framework contract	SoftwareONE Belgium BVBA/SPRL	User rights of non-exclusive and non-transferable licences of a large range of computer software products, the provision of maintenance, support and informatics services and documentation.	EUR 50,84,2000.00	Open	Information Management Division
DI-07720	Framework contract	Bechtle Brussels NV-SA	User rights of non-exclusive and non-transferable licences of a large range of computer software products, the provision of maintenance, support and informatics services and documentation.	EUR 50,84,2000.00	Open	Information Management Division
EMA/2018/28/PE SC01	ROC from FWC	EU PE and PV Research Network	Scientific study (Lot 4)	EUR 249,600	Re-opening of competition	Deputy Executive Director Office
EMA/2018/28/PE SC02	ROC from FWC	EU PE and PV Research Network	Scientific study (Lot 4)	EUR 249,500	Re-opening of competition	Deputy Executive Director Office
EMA/2018/18/PE SC01	ROC from FWC	EU PE and PV Research Network	Scientific study (Lot 2)	EUR 150,000	Re-opening of competition	Deputy Executive Director Office
EMA/2018/18/PE SC02	ROC from FWC	EU PE and PV Research Network	Scientific study (Lot 2)	EUR 150,000	Re-opening of competition	Deputy Executive Director Office
EMA/2015/26/PH SC02	Specific contract	University of Dundee	Study of the impact of EU label changes for hydroxyzine products: post-referral prescribing trends.	EUR 199,384.00		Inspections, Human Med. Phv. & Committees Division / Deputy Executive Director Office

Annex 10. Annual report 2018

Please see the Agency's 'Annual report 2018', publicly available on the EMA corporate website.

Annex 11. Administrative appropriations – Building policy

Financial Regulation, Article 87(3.a) Building(s) covered by the appropriation of the financial year

Name, location and type of building	30 Churchill Place, London, E14 5EU
	The building is a multi-tenanted office premises and EMA occupies parts of the basement, ground and promenade levels, and levels 1 through 10
Surface area (in square meters)	30,340
• of which office space	• 17,946
• of which non-office space	• 12,394
Annual rent	GBP 15.54 million : • Rent - EUR 13.5 million • Building maintenance – EUR 2.04 million Rent for level 10 is payable from 2018
Type and duration of rental contract	Rental lease of 25 years duration with no break clause; term commenced on 1 July 2014
Host country grant or support	Reduction in business rates
Present value of the building	Not applicable

Financial Regulation, Article 87 (3.b) Evolution of surface area and locations and building projects in planning phase

Evolution of surface area for Agency	2018	2019	2020 – 2039
30 Churchill Place, London, E14 5EU, UK			
Surface area (in square meters)	30,340	30,340	To be sublet
• of which office space	• 17,946	• 17,946	
• of which non-office space	• 12,394	• 12,394	
Domenico Scarlattilaan 6, 1083 HS, Amsterdam, The Netherlands			
Surface area (in square meters)	n/a	n/a	31,496
• of which office space			• 21,282
• of which non-office space			• 10,214

The Agency does not have any further building projects in planning phase.

Financial Regulation, Article 87 (3.c) Building projects submitted to the European Parliament and the Council

In accordance with European Parliament and Council Regulation (EU) 2018/1718 the Agency's seat will move to Amsterdam from 30 March 2019. As a consequence EMA has submitted the following building project to the Budgetary Authority:

- Lease of a building in Amsterdam/NL offered by the Dutch Government; positive opinion by the Budgetary Authority in March 2018:

- The Dutch government offered the Agency a fully fitted and furnished premises (EMA Building) to be constructed (charged at rent of EUR 280/m^2 plus 40 m^2 for maintenance) as well as an incentive of EUR 18 million for fit-out enhancements of the future permanent building and/or an overall reduction of the annual lease. The Agency agreed with the Dutch government to use this incentive to contribute EUR 15 million to fit-out costs and EUR 3.0 million to obtain yearly rent reductions of EUR 150,000 over the 20-year duration of the lease (January 2020 – December 2039);
- In addition the Dutch government will provide a temporary building (SPARK Building) at no rental cost to the Agency for the interim period from 1 January 2019, whilst the final premises are being constructed and fitted out.

In addition in regard to the Sub-letting of premises in London/UK the Agency has identified a potential tenant for to sub-letting its premises in 30 Churchill Place, Canary Wharf, London/UK and negotiations are ongoing.

Annex 12. Environmental performance

Environmental management at the Agency

As a result of the UK decision to leave the EU and the subsequent business continuity situation at the Agency, the upcoming relocation to the Netherlands in early 2019 and the fact that the European Commission's Eco-Management and Audit Scheme (EMAS) is site-based, the registration to EMAS to receive certification that was previously planned for 2017-2018 was put on hold.

The Agency aims to use the prepared framework and adjust it to the Agency's new premises in Amsterdam once relocated and will pursue the EMAS registration once located in the final premises. EMAS is site-based and an updated EMAS version will be prepared with the environmental statement for the new permanent EMA offices in Amsterdam. The programme requirements include an aim for BREEAM Excellent.

The environmental footprint continues to be monitored with the main impact coming from running the Agency offices with resource consumption, waste, carbon emissions, and staff engagement and behaviour. The Agency aims to pursue setting objectives and targets for the new final premises to be monitored and achieved over the course of 2020 onwards.

Overview of EMA performance in 2018

The following table shows an overview of consumption, expressed also per workstation. The office space accounted for approximately 80% of the total space occupied, with capacity of 1,359 workstations; the remainder being delegate and visitor, common and storage areas.

Indicator	Units	2016		2017		2018	
		Overall	Per work-station	Overall	Per work-station	Overall	Per work-station
Energy consumption	kWh	3,266,036	2,686	3,087,933	2,272	2,998,597	2,206
Water consumption	m^3	1,345	1,11	1,525	1.12	1,413	1.04
Paper consumption	kg	22,953	18.88	19,951	14.68	18,369	13.52
Waste (incl. non-recyclable, recyclable, food and confidential)	kg	176,676	145.3	182,277	134.1	165,387	121.7
Work related travel[1]	miles	8,848,604	7,277	9,035,488	6,645	9,665,241	7,112
Overall net CO_2e[1]	kg CO_2e	2,854,120	2,347	2,902,786	2,136	2,551,465	1,877

[1] incl. delegates, missions, training and candidates

Annex 13. Project implementation

Project progress and delivery as of 31 December 2018 is reported using the following traffic-light system:

Time / budget	
	Project within +/-10% of the plan
	Project 10%~25% behind timelines or above budget
	Project more than 25% behind timelines or above budget

Scope	
	No change to project scope
	Minor changes (expansion or reduction) to project scope (i.e. no significant effect on budget and/or timelines)
	Significant change (expansion or reduction) to project scope (i.e. impacting project budget and/or timelines)

The traffic lights reflect the change to the overall project timeline, budget and scope that has taken place during 2018 in comparison to what was planned and approved at the end of 2017 (i.e. as noted in the work programme 2018). Notes explaining the changes are added.

In certain cases where the project start or end dates foreseen in the work programme 2018 were revised during the 2018 execution, the current dates are added in the relevant cells, with the original date from the work programme 2018 shown as crossed out.

Projects in human medicines evaluation activities

Programme / project	Project start	Project delivery target	Project delivery against			Results 2018
			Time	Budget	Scope	
Pharmacovigilance programme						
EudraVigilance auditable requirements (completed)	Q4 2013	Q2 2018				Solution delivered in Q3 2018 The post go-live enhancements and the project lessons learned were delivered in Q1 2018. In Q2 2018 only warranty and hypercare services were provided. The project closure finalised in July 2018.
Clinical trials programme						
Clinical Trials Information Systems (CTIS)	Q3 2014	2020				Progress on the development of Release 0.7 (auditable release) and Release 0.9 (safety reporting) and following a decision of the management board in December 2018, we are restructuring the contract based on a new delivery model for the Agency and for the Stakeholders.

Projects in veterinary medicines evaluation activities

Programme / project	Project start	Project delivery target	Project delivery against Time	Budget	Scope	Results 2018
Veterinary change programme						
Eudravigilance veterinary v3.0	Q3 2017	2021				Analysis and design completed in 2018. Detailed implementation planning and feasibility study delivered in Q3 2018. Transitional work to deliver proof of concept and feasibility studies initiated, as well as planning for implementation of the new system.

Projects in horizontal activity areas

Programme / project	Project start	Project delivery target	Project delivery against Time	Budget	Scope	Results 2018
Data-integration programme						
Substance & Product Management Services	Q2 2017	Q1 2024				Delivery of Phase 1a: Migration of the art57 into the new Master Data management system. Re-scoping of S&PMS next Phase to support the IRIS programme Start of development of the re-scoped S&PMs next Phase.
Referentials management service (completed)	Q4 2015	Q1 2018				Solution delivered in Q1 2018.
Organisations management services (completed)	Q4 2015	Q2 2018				Solution delivered in Q2 2018.
Identity and access management 2 (completed)	Q1 2017	Q4 2018				Solution delivered in Q4 2018.
ISO IDMP (completed)	Q4 2013	Q4 2018				Solution delivered in Q3 2018.
Online programme						
Corporate website (completed)	Q1 2014	Q1 2019				Solution delivered in Q4 2018 (project closed in Q1 2019).
Standalone projects						
IT application maintenance transition and transformation (completed)	Q4 2017	Q4 2018				Solution delivered in Q4 2018 (project closed in Q1 2019).
Data centre relocation preparedness	Q4 2017	Q1 2019				EMA production and non-production systems operating from DC3, meaning EMA became largely decoupled from London data centres. Data synchronisation and preparations for

Programme / project	Project start	Project delivery target	Project delivery against Time	Budget	Scope	Results 2018
						DC2 physical relocation in January 2019.
Data centre strategy phase 1 (completed)	Q1 2017	Q2 2018				Solution delivered in Q2 2018.
S-REPS (formerly SIAMED systems integration phase 1)	Q3 2017	Q4 2019				S-REPS system go-live (IRIS platform). Scope extended to include the delivery of Parallel Distribution and SIAMED.

Projects in corporate support and governance activities

Programme / project	Project start	Project delivery target	Project delivery against Time	Budget	Scope	Results 2018
Recruitment tool (Completed)	Q2 2017	Q1 2018				Solution delivered in Q1 2018.

Deprioritised projects

The list below presents projects that were de-prioritised from the 2018 portfolio.

Due to the Agency's relocation and consequent business continuity planning, projects prioritisation for 2018 was brought to a minimal scope. As a consequence, a number of projects are classified as 'on hold' until further notice.

A number of projects were also cancelled as their remit was overtaken by events or absorbed by other projects' scope or by business activities.

Programme / project	Status on 31 December 2017
Pharmacovigilance programme	
EudraVigilance signal management critical requirements	Project on hold
EudraVigilance Fixes	Project cancelled
Clinical trials programme	
EudraCT and EU Portal Legacy	Project on hold
eCollaboration programme	
New delivery dates for the delivery of the single submission portal and implementation of eCTD4 were adopted by the Telematics Board (EU TMB) and endorsed by the HMA on the 28 February 2018. New timelines are reflected in the final updated version of the eSubmission Roadmap (version 2.1)	
eCTD 4 pre-project activities	Project on hold (the timeline has been further postponed, now proposing optional use of eCTD v.4.0 from Q3 of 2020 for CP submissions)

Programme / project	Status on 31 December 2017
Single submission portal (internal and external project activities)	Project on hold (the stepwise deliveries towards the mandatory, fully integrated, single submission portal have been updated. The date for preparation of mandatory use of an EU single submission portal is set to Q1 2021 which will also include a stepwise implementation of a common telematics service desk)
Veterinary Change programme	
Implementation of veterinary legislation	Project cancelled (undertaken as part of the programmes' remit; not a project)
Union database	Project on hold
Governance / potential centralisation of functions	Project cancelled
Online programme	
European Medicines Web Portal	Project on hold
Intranet Interface Design	Project on hold
Extranet Interface Design	Project on hold
Standalone projects	
IT Delivery Lifecycle	Project cancelled (progressing as business as usual)
Building EU network capacity to gather and analyse information on clinical use	Project cancelled (absorbed by business activities)
Single Submission Portal and integration	Project cancelled
Single Submission Portal and integration (external project activities)	Project cancelled

Annex 14. Pharmacovigilance Fee Regulation: Key Performance Indicators and performance information for the calendar year 2018

Context

The Pharmacovigilance Fee regulation (Regulation (EU) No 658/2014) was adopted on 15 May 2014. The first procedural fees were charged as of 26 August 2014 and the first annual fees in July 2015.

The aim of the regulation is to enable the Agency to charge fees for the pharmacovigilance tasks introduced by the pharmacovigilance legislation i.e. Union pharmacovigilance procedures (PSURs, PASS, pharmacovigilance referrals), literature monitoring and improved use of information technology tools. Financing the activities contributes to "*achieving an internal market as regards medicinal products, taking as a basis a high level of protection of health"* and inseparable from this is the aim *"to ensure financial resources to support the activities addressing common safety concerns, in order to maintain high standards of quality, safety and efficacy of medicinal products".*

Article 15 of the regulation, dealing with transparency and monitoring, states that the Executive Director of the Agency shall provide the Commission and the Management Board once per year with the performance information set out in part V of the annex to the regulation, based on a set of performance indicators adopted by the Agency.

Part 1 of this report presents these key performance indicators (KPIs) for the calendar year 2018, and part 2 presents the more detailed performance information required by the regulation.

Part 1: Key Performance Indicators

KPI 1: Procedures started within the year for which a fee has been charged

Pharmacovigilance activities financed by PhV fees	2018 actual
Number of PSURs and PSUSAs procedures started	874
Number of imposed PASS protocol procedures started	16
Number of imposed PASS report procedures started	8
Number of pharmacovigilance referral procedures started	2
Number of pharmacovigilance annual fee chargeable units invoiced	158,603

KPI 2: Percentage of marketing authorisation holders eligible for fee exemption or fee reductions within a given year for procedures carried out at Union level

Pharmacovigilance activities financed by PhV fees	2018 estimated %	2018 actual procedures	2018 actual %
MAHs invoiced for PSURs and PSUSAs procedures started involving CAPs only:		564	
· Micro sized enterprises	2.25%	4	0.71%
· Small and medium sized enterprises	7.50%	33	5.85%
MAHs invoiced for PSURs and PSUSAs procedures started involving NAPs or CAPs/NAPs:		5,603	
· Micro sized enterprises	2.50%	51	0.91%
· Small and medium sized enterprises	7.50%	232	4.14%
MAHs invoiced for Imposed PASS protocol procedures started for CAPs only:		8	
· Micro sized enterprises	2.25%	0	0.00%
· Small and medium sized enterprises	0.75%	1	12.50%
MAHs invoiced for Imposed PASS protocol procedures started for NAPs or CAPs/NAPs:		108	
· Micro sized enterprises	2.50%	0	0.00%
· Small and medium sized enterprises	7.50%	7	6.48%
MAHs invoiced for Imposed PASS report procedures started for CAPs only:		4	
· Micro sized enterprises	2.25%	0	0.00%
· Small and medium sized enterprises	0.75%	1	25.00%
MAHs invoiced for Imposed PASS report procedures started for NAPs or CAPs/NAPs:		39	
· Micro sized enterprises	2.5	0	0.00%
· Small and medium sized enterprises	7.50%	0	0.00%
MAHs invoiced for Pharmacovigilance referral procedures started for CAPs only:		1	
· Micro sized enterprises	2.25%	0	0.00%
· Small and medium sized enterprises	0.75%	0	0.00%
MAHs invoiced for Pharmacovigilance referral procedures started for NAPs or CAPs/NAPs:		78	
· Micro sized enterprises	2.50%	1	1.28%
· Small and medium sized enterprises	7.50%	3	3.85%

KPI 3: Percentage of chargeable units eligible for fee exemption or fee reductions within a given year for annual fees for information technology systems and literature monitoring

Pharmacovigilance activities financed by PhV fees	2018 estimated %	2018 actual	2018 percentage
Pharmacovigilance annual fee chargeable units invoiced		158,603	
· Micro sized enterprises	2.50%	1,280	0.81%
· Small and medium sized enterprises	7.50%	9,182	5.79%
· Generics (non-SME)	36.00%	68,045	42.90%
· Authorised homeopathic, authorised herbal, and well-established use products	0.00%	26,369	16.63%

KPI 4: Percentage of fees which has been recovered for the procedures invoiced within a given year and committed/paid to NCAs

Pharmacovigilance activities financed by PhV fees	Invoiced in 2018 [10]	Cash collected in 2018	Percentage [11]	Remuneration to NCAs for assessment performed
	€ '000	€ '000		€ '000
Income recovered for PSURs and PSUSAs procedures started	16,711	14,880	89% (88% in 2017)	11,250
Income recovered for imposed PASS protocol procedures started	185	117	63% (89% in 2017)	78
Income recovered for imposed PASS report procedures started	224	208	93% (74% in 2017)	95
Income recovered for pharmacovigilance referral procedures started	534	534	100% (71% in 2017)	357
Income recovered for pharmacovigilance annual fee chargeable units invoiced	9,212	9,147	99% (100% in 2017)	n/a

Part2: Performance information criteria defined in Part V of the Annex to the Regulation

Fees payable to the European Medicines Agency for the conduct of pharmacovigilance activities in respect of medicinal products for human use - Regulation (EU) No 658/2014: Performance Information

Reporting period: 1st January - 31st December 2018

Table	Performance Information (Part V of the Annex)
1	Number of Agency staff involved in pharmacovigilance activities pursuant to Union legal acts applicable during the reference period, specifying staff allocated to activities corresponding to each of the fees referred to in Article 4 to 7
2	Number of hours outsourced to third parties with specification of the activities concerned and costs incurred
3	Overall pharmacovigilance costs and a breakdown of staff and non-staff costs relating to activities corresponding to each of the fees referred to in Article 4 to 7
4	Performance information relating to periodic update safety reports (PSURs)
5	Performance information relating to post-authorisation safety studies (PASS)
6	Performance information relating to referrals initiated as result of the evaluation of pharmacovigilance data
7	Information on marketing authorisation holders that have claimed a small and medium-sized enterprise or micro enterprise status
8	Information on marketing authorisation holders of medicinal products referred to in Article 7(4) that have benefitted from reduced annual fees
9	Performance information relating to the annual fees
10	Attribution of rapporteurships and co-rapporteurships per Member State per type of procedure
11	Number of working hours spent by the rapporteur and the co-rapporteur(s) per procedure on the basis of information provided to the Agency by the national competent authorities concerned

[10] The figures in this table differ slightly from the one in tables 4,5,6 and 9 below because they also include adjustments and corrections related to 2018 and processed in 2019, whereas the amounts shown in the tables below show only the value of the invoices related to the applications started between January and December 2018.
[11] Invoices are issued with 30 days credit which means that the payment of the invoices issued in November and December 2018 were paid for in 2019. The final 2018 cash recovery rate as of April 2019 is 100% for PSURs and PSUSAs, PASS, Referrals and Annual fees.

Note: the Agency has made every effort to complete the detailed reporting requirements of the following tables but in a small number of cases some data has not been available for the full calendar year 2018, pending the development of additional IT reporting functionality. In these cases the relevant fields are left blank.

1) Number of Agency staff (FTEs) involved in pharmacovigilance activities pursuant to Union legal acts applicable during the reference period, specifying staff allocated to activities corresponding to each of the fees	Full Time Equivalence (FTEs)
Periodic safety update reports	15
Post-authorisation safety studies	2
Referrals initiated as a result of the evaluation of pharmacovigilance data	5
TOTAL	22

2) Number of hours outsourced to third parties with specification of the activities concerned and costs incurred		2018	
		Units	Cost €'000
Identifying and managing duplicates	Number of duplicate couples assessed	177,811 (275,020 in 2017)	1,503
	Number of 'master' reports generated based on duplicated data	121,929 (133,635 in 2017)	
Coding of reported medicines and active substances	Number of reported medicinal products/active substance terms recoded	61,202 (35,727 in 2017)	
	Number of adverse reaction reports recoded	56,756 (41,124 in 2017)	
Providing feedback on data quality	Total number of organisations subject to ICSR data quality review	237 (125 in 2017)	
	Number of medicinal products in the xEVMPD quality reviewed and, where necessary, corrected	292,367 (369,073 in 2017)	
Monitoring of substance groups and selected medical literature[1]	Number of literature references screened and reviewed (July-December)	521,495	970
	Number of individual case safety reports (ICSR) entered into Eudravigilance database and made available to NCAs and MAHs (July-December)	13,275	

[1] EMA is responsible monitoring 400 substance groups (300 chemical & 100 herbal) and selected medical literature to identify suspected adverse reactions with medicines authorised in the European Union, and for entering the relevant information into the EudraVigilance database.

3) Overall pharmacovigilance costs and a breakdown of staff and non-staff costs relating to activities corresponding to each of the fees	Staff costs €'000	Non-staff costs €'000
Cost for assessment of periodic safety update reports	1,327	11,831
Cost for assessment of post-authorisation safety studies	176	250
Cost for assessments in the context of referrals initiated as a result of the evaluation of pharmacovigilance data	512	580
Annual cost for information technology systems and literature monitoring		10,298
Overall pharmacovigilance costs	24,974	

4) Performance information relating to the assessment of periodic safety update reports (PSURs)											
Number of procedures started	Number of reports received	Number of MAHs expected to submit	Number of MAHs who submitted	Number of CUs[12]	Number of joint submissions[13]	Number of MAHs who submitted joint report[14]	Number of SMEs Claimed	Number of SMEs Denied	Number of Micro Claimed	Number of Micro Denied	Total Amount Invoiced (€)
874	n/a	1,769	n/a	41,988	322	5,165	170	3	39	1	16,733,039

5) Performance information relating to the assessment of draft protocols and of final reports of post-authorisation safety studies (PASS)											
Number of procedures started	Number of protocols and reports submitted	Number of (parent) MAHs[15]	Total number of MAHs[15]	Number of joint submissions	Number of (parent) MAHs in case of joint submission[16]	Total number of MAHs in case of joint submission[16]	Number of SMEs Claimed	Number of SMEs Denied	Number of Micro Claimed	Number of Micro Denied	Total Amount Invoiced (€)
16	n/a	116	296	105	270	8	1	0	0	0	296,035
8	n/a	43	100	36	93	1	3	0	0	0	198,000

[12] Total number of CU generated for the products falling into the scope of the procedure - total number of CU (to be) invoiced
[13] Number of received joint submissions
[14] Total number of MAHs in received joint submissions
[15] Number of (parent) MAHs and total number of MAHs
[16] In case of joint submission:
• number of (parent) MAHs = number of (parent) MAHs in case of joint submission
• total number of MAHs = total number of MAHs in case of joint submission

6) Performance information relating to referrals initiated as a result of the evaluation of pharmacovigilance data							
Number of procedures started	Number of MAHs	Number of CUs	Number of SMEs Claimed	Number of SMEs Denied	Number of Micro Claimed	Number of Micro Denied	Total Amount Invoiced (€)
2	79	482	3	0	1	0	296,413

7) Number of marketing authorisation holders involved in each procedure, that have claimed a small and medium-sized enterprise status or micro enterprise status	SME status		Micro status	
	Claimed	Denied	Claimed	Denied
Fee for assessment of periodic safety update reports	170	3	39	1
Fee for assessment of post-authorisation safety studies	9	0	0	0
Fee for assessments in the context of referrals initiated as a result of the evaluation of pharmacovigilance data	3	0	1	0
Annual fee for information technology systems and literature monitoring	476	11	203	6

8) Number of marketing authorisation holders of medicinal products referred to in Article 7(4) that have benefitted from reduced annual fees	2018
Generic application (Article 10(1) of Directive No 2001/83/EC)	2,037
Well-established use application (Article 10a of Directive No 2001/83/EC)	1,820
Authorised homeopathic medicinal product	83
Authorised herbal medicinal product	269

9) Performance information relating to the annual fees											
Number of marketing authorisation holders invoiced for annual fees	Number of CUs	SME status claimed	SME status denied	Micro status claimed	Micro status denied	Number of CUs: Generic Application	Number of CUs: Well-established Use Application	Number of CUs: Authorised Homeopathic	Number of CUs: Authorised herbal	Total Amount Invoiced (€)	Average Amount Invoiced (€)
3,830	158,603	476	11	203	6	73,563	25,697	2,859	1,832	9,212,125	58.08

10) Attribution of rapporteurships and co-rapporteurships per Member State per type of procedure started			
Member State	PSUR	PASS	Referral
Austria	26	1	
Belgium	13		
Bulgaria	2		
Czech Republic	11	1	
Germany (PEI)	68	2	
Germany (BfArm)	41	2	1
Denmark	54		
Estonia	5		
Spain	40	2	1
Finland	17		
France	66	5	
Greece	4		
Croatia	11		1
Hungary	11		
Ireland	29		
Italy	46		
Lithuania	10		
Latvia	10		
Malta	3		
Netherlands	86	6	
Norway	11		
Poland	28		
Portugal	38	1	1
Romania	5		
Sweden	77	3	
Slovenia	2		
Slovakia	5		
United Kingdom	155	1	
Total	874	24	4

11) Number of working hours spent by the rapporteur and the co-rapporteur(s) per procedure on the basis of information provided to the Agency by the national competent authorities concerned							
NCAs	PSUR and PSUSA			PASS		Referrals	
	No. of proc.	Total hours	Average per proc.	No. of proc.	Total hours	No. of proc.	Total hours
Austria	22	1,846	84	1	36		
Belgium	13	982	76				
Bulgaria	2	140	70				
Croatia	6	471	79			1	460
Denmark	30	3,184	106				
Estonia	4	297	74				
Finland	21	1,345	64				
France	56	6,485	116				
Germany (BfArM)	19	2,800	147			2	1,801
Germany (PEI)	31	2,082	67	1	53		
Hungary	4	642	161				
Ireland	23	1,766	77				
Italy	44	4,006	91				
Latvia	6	575	96				
Lithuania	1	125	125				
Netherlands	84	4,281	51	1	34	1	927
Norway	12	1,022	85				
Portugal	28	1,029	37			2	282
Romania	4	233	58				
Slovakia	2	256	128				
Slovenia	5	459	92				
Spain	45	3,334	74	2	116	1	651
Sweden	105	4,850	46	3	125		
United Kingdom	106	2,635	25			2	455
Grand Total	673	44,842	67	8	364	9	4,576

The data in the above table was provided by each NCA in line with the reporting requirements of the relevant cooperation agreement and include only finalised procedures. On-going procedure will be reported in the next reporting period.

Not all NCAs were in a position to provide data for 2018.

Terms and abbreviations

Term / abbreviation	Definition
3Rs	'3R' principles in testing of medicines for regulatory purposes: replacement, reduction and refinement
AA	Accelerated assessment
AAR	Annual Activity Report
ABB	Activity Based Budget
ABC	Activity Based Costing
ABM	Activity Based Management
ACCELERATE	A multi-stakeholder Paediatric Oncology platform to improve drug development for children and adolescents with cancer
ACPC	Advisory Committee on Procurement and Contracts
AD	Administrators function group
ADAPT-SMART	Accelerated development of appropriate patient therapies – a sustainable, multi-stakeholder approach from research to treatment outcomes; IMI-funded project
ADI	Acceptable daily intake
ADR	Adverse drug reaction
ADVANCE	Accelerated development of vaccine benefit-risk collaboration in Europe project
ADVENT	Ad hoc Expert Group on Veterinary Novel Therapies
AEMPS	Spanish Agency for Medicines and Medical Devices
AER	Adverse event reports
AFS	Anti-Fraud Strategy
Agency	European Medicines Agency
AMR	Antimicrobial Resistance
ANSM	Agence Nationale de Sécurité du Médicament et des Produits de Santé
API	Active pharmaceutical ingredient
AR	Annual Report
Art.	Article
AST	Assistants function group
ASTERIX	Advances in Small Trials dEsign for Regulatory Innovation and eXcellence project
ATA	Advanced Threat Analytics
ATD	Access to documents
ATMP	Advanced-therapy medicinal product
AWP	Antimicrobials Working Party
BAF	Business Analysis and Forecasting
BCP	Business Continuity Plan
BfArM	Federal Institute for Drugs and Medical Devices, Germany (Bundesinstitut für Arzneimittel und Medizinprodukte)
BI	Business Intelligence
BIO	Biotechnology Innovation Organization
BNP Paribas	Banque Nationale de Paris and Paribas
BREEAM	Building Research Establishment Environmental Assessment Method
Brexit	Commonly used term for the United Kingdom's planned withdrawal from the European Union
BWP	Biologics Working Party
CA	Contract Agent

Term / abbreviation	Definition
CADVVA	CVMP Ad hoc Group on Veterinary Vaccine Availability
CAP	Centrally Authorised Product
CAT	Committee for Advanced Therapies
CCI	Commercially confidential information
CCTV	Closed-circuit television, video surveillance system
CDP	Clinical Data Publication website
CDSCO	Central Drugs Standard Control Organization
CERT-EU	The Computer Emergency Response Team for the EU Institutions, bodies and agencies
CHMP	Committee for Medicinal Products for Human Use
CMA	Conditional Marketing Authorisation
CMB	Telematics Change Management Board
CMC	Focus on chemistry, manufacturing and controls
CMDh	Coordination Group for Mutual Recognition and Decentralised Procedures - Human
CMDh WP	Coordination Group for Mutual Recognition and Decentralised Procedures Working Party
CMDv	Coordination Group for Mutual Recognition and Decentralised Procedures - Veterinary
CNSWP	Central Nervous System Working Party
CO2e	Carbon dioxide equivalent
COBIT	Control Objectives for Information and Related Technologies, a good-practice framework for information technology management and IT governance
Commission	European Commission
Committee(s)	Scientific committee(s) of the Agency
COMP	Committee for Orphan Medicinal Products
Council	European Council
Court of Auditors	European Court of Auditors
CPAPE	China Pharmaceutical Association of Plant Engineering
CRISPR	Gene editing technique
CSA	Clinical skills assessment
CTIS	Clinical Trials Information Systems
CV	Curriculum vitae
CVMP	Committee for Medicinal Products for Veterinary Use
CxMP	Generic abbreviation for EMA scientific committees
DCRP	Data centre relocation project
DED-PCM	Policy and Crisis Management Office at the EMA
DG	Directorate-General of the European Commission
DG Growth	European Commission Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs
DG Research	European Commission Directorate-General for Research and Innovation
DG Sante	European Commission Directorate-General for Health and Food Safety
DIA	Drug Information Association
Division	Organisational entity of EMA
DNA	Deoxyribonucleic acid
DoI	Declaration of interests
DPO	Data Protection Officer at the Agency
e.g.	Exempli gratia, for example
EAB	Enterprise Architecture Board
EAC	East African Community

Term / abbreviation	Definition
eAF	Electronic application form
EC	European Commission
ECA	European Court of Auditors
ECDC	European Centre for Disease Prevention and Control
ECHA	European Chemicals Agency
ECOWAS	Economic Community of West African States
eCTD	Electronic common technical document
ED	Executive Director
e-DoI	Electronic declaration of interests
EDPS	European Data Protection Supervisor
EDQM	European Directorate for the Quality of Medicines and Healthcare
EEA	European Economic Area
EFPC	European Forum For Primary Care
EFPIA	European Federation of Pharmaceutical Industries and Associations
EFSA	European Food Safety Authority
EMA	European Medicines Agency
EMAS	European Commission's Eco-Management and Audit Scheme
ENCePP	European Network of Centres for Pharmacoepidemiology and Pharmacovigilance
Enpr-EMA	European Network of Paediatric Research at the European Medicines Agency
EP	European Parliament
EPAR	European public assessment report
ePI	Implementing electronic product
EPITT	European pharmacovigilance issues tracking tool
EPL	EMA product lead
eRMR	Electronic reaction-monitoring report
e-SME	Electronic SME application
ESS	The European Surveillance Strategy
ESVAC	European Surveillance of Veterinary Antimicrobial Consumption
etc.	Et cetera, and so forth
EU	European Union
EU contribution	EU special contribution for orphan medicines
EU IG	European union Implementation Guide
EU NTC	EU network training centre
EU TCT	EU Telematics Controlled Terms
EU TMB	EU Telematics Management Board
EU-DIGIT	European Commission Directorate General for Informatics
EudraCT	European Union Drug Regulating Authorities Clinical Trials
EudraGMDP	European Union Drug Regulating Authorities good manufacturing and distribution practice database
EudraLex	EU legislation; collection of rules and regulations governing medicinal products in the European Union
EudraLink	European Union Drug Regulating Authorities secure file sharing
EudraSmPC	European Union Drug Regulatory Authorities & Summary of Product Characteristics Database
EudraVigilance	European Union Drug Regulating Authorities Pharmacovigilance
EU-IN	EU innovation office network

Term / abbreviation	Definition
EUnetHTA	European network for health technology assessment
EUPAS Register	The European Union electronic Register of Post-Authorisation Studies
EUR	Euro
EURD list	EU reference dates and frequency of submission of periodic safety update reports (PSUR)
Euro DIA	Drug Information Association meeting taking place in Europe
EUTCT	EU Telematics Controlled Terms
EV	EudraVigilance
EVDAS	EudraVigilance Data Analysis System
EVMPD	Eudravigilance Medicinal Product Dictionary
EVVet	EudraVigilance veterinary
EWG	Expert Working Groups
EWP	Efficacy Working Party
EXB	EMA Executive Board
Executive Board	EMA Executive Board
FAQs	Frequently Asked Questions
FDA	United States Food and Drug Administration
FP7	Seventh Framework Programme
GBP	Pound sterling
GCP	Good Clinical Practice
GCP IWG	Good Clinical Practice Inspectors Working Group
GDP	Good Distribution Practices
GDPR	General Data Protection Regulation
GL	Guideline
GLP	Good laboratory practice
GMDP	Good manufacturing and distribution practice
GMDP IWG	Good Manufacturing and Distribution Practice Inspectors Working Group
GMP	Good Manufacturing Practice
GP	General practitioner
GRP	Good regulatory practice
GVP	Good pharmacovigilance practice
GxP	Good practice (e.g. laboratory, clinical, manufacturing)
HC	Health Canada
HCP	Health Care Professionals
HCPWP	Healthcare Professionals Working Party
HIV	Human immunodeficiency virus
HL7	Health Level seven international
HL7 FHIR	Health Level 7 Fast Healthcare Interoperability Resources
HL7 V3	Health Level seven international version 3
HMA	Heads of Medicines Agencies
HMPC	Committee on Herbal Medicinal Products
Horizon 2020	EU Research and Innovation programme
HR	Human Resources
HTA	Health technology assessment
i.e.	Id est, that is
IAC	Internal audit capability of EMA

Term / abbreviation	Definition
IALN	Inter-Agency Legal Network
IAS	Internal Audit Service of the EC
ICDRA	International Conference of Drug Regulatory Authorities, a forum of WHO Member State drug regulatory authorities
ICH	International Conference on Harmonisation of Technical Requirements for Registration of Pharmaceuticals for Human Use
ICMRA	International Coalition of Medicines Regulatory Authorities
ICMRA GMP	International Coalition of Medicines Regulatory Authorities on good manufacturing practice
ICS	Internal control standards
ICSR	Individual case-safety report
ICT	Information and communication technology
ID	Identification
IDeAL	Integrated Design and Analysis of small population group trials project
IDMP	Identification of medicinal products
IDWP	Infectious Diseases Working Party
IFPMA	International Federation of Pharmaceutical Manufacturers & Associations
IGDRP	International Generic Drug Regulators Programme
IIA standards	Internationally accepted audit standards
IMI	Innovative Medicines Initiative
IMP	Incident Management Plan
Implementing Rules	Implementing rules of the EMA Financial regulation
IMS database	Databases of electronic health care claims data
INC	International Neonatal Consortium
InSPIRe	Innovative methodology for Small Populations Research project
INT	Interim
IPA	Informal network of EU agencies working with pre-accession
IPRF	International Pharmaceutical Regulators Forum
IQM	Integrated Management
IRIS	Regulatory and Scientific Information Management platform
IRM	Institute of Risk Management
ISC	Interservice consultation
ISO	International Organisation for Standardisation
ISO IDMP	International standards for the identification of medicinal products
ISOP	The International Society of Pharmacovigilance
IT	Information technology
ITF	EMA Innovation Task Force
IWG	Inspectors Working Group
JA3	Joint Action 3
JC	Joint Committee
JECFA	Joint Expert Group on Food Additives
JIACRA	Joint Interagency Antimicrobial Consumption and Resistance Analysis report
JIRA	Software application that provides tracking and management functionalities (e.g. bug-tracking, issue-tracking, project-management)
kg	Kilogram

Term / abbreviation	Definition
KPI	Key performance indicator
kWh	Kilowatt-hour
LMICs	Low- and middle-income countries
LMS	EU NTC Learning Management System
LSD	Lumpy skin disease
m3	Cubic metre
MA	Marketing authorisation
MAA	Marketing-authorisation application
MAH	Marketing-authorisation holder
Management Board	EMA Management Board
MAWP	Multiannual work programme
MB	EMA Management Board
MedDRA	Medical Dictionary for Regulatory Activities
Member State	Member state of the European Union
MHLW	Ministry of Health, Labour and Welfare, Japan
MHRA	Medicines and Healthcare products Regulatory Agency, UK
MLM	Medical literature monitoring
MLT	Medicines Leadership Team
MNAT	Multinational assessment team
MRA	Mutual-recognition agreement
MRL	Maximum residue limit
MRP	Mutual-recognition procedure
MS	Member state of the European Union
MUMS	Minor use, Minor species
NAP	Nationally authorised product
NCA	National competent authority
Network	European medicines regulatory network
NIPH	National Institute of Public Health
NL	Netherlands
OBIEE	Oracle Business Intelligence Enterprise Edition – a comprehensive business intelligence and analytics platform
OECD	Organisation for Economic Cooperation and Development
OIE	World Organisation for Animal Health
OJEU	Official Journal of the European Union
OLAF	European Anti-Fraud Office
OMAR	Orphan maintenance assessment report
OMS	Organisations management service
ORP Task Force	Operations and Relocation Preparedness Task Force of the Agency, set up to ensure EMA preparedness for various development scenarios following Brexit
P3i	EMA's methodology for portfolio, programme, project management and IT delivery lifecycle
PAES	Post-authorisation efficacy study
PAM	Post-authorisation Measure
PAS	Post-authorisation Studies Register
PASIB	Public assessment summary information biosimilars
PASS	Post-authorisation safety study

Term / abbreviation	Definition
PAW	Privilege Access Workstation
PB	EMA Portfolio Board
PBT	Persistent bioaccumulative and toxic substance
PCWP	Patients' and Consumers' Working Party
PDCO	Paediatric Committee
PDF	Portable document format, a file format used to present and exchange documents reliably, independent of software, hardware or operating system
PEI	The Paul-Ehrlich-Institute
PGWP	Pharmacogenomics Working Party
PhV	Pharmacovigilance
PIC/s	The Pharmaceutical Inspection Co-operation Scheme
PIP	Paediatric investigation plan
PK/PD	Pharmacokinetic/pharmacodynamic
PLC	Public Limited Company
PMDA	Pharmaceuticals and Medical Devices Agency, Japan
PMF	Plasma Master file
PPD	Protection of Personal Data
PPHOVA	The expert group working on the pilot project on harmonisation of old veterinary antimicrobials
PRAC	Pharmacovigilance Risk Assessment Committee
PREDICT-TB	Model-based preclinical development of anti-tuberculosis drug combinations, IMI project
PRIME	PRIority Medicines – a scheme to foster the development of medicines with high public-health potential
PSUR	Periodic safety-update report
PSUSA	PSUR single assessment
Q (1, 2, 3, 4)	Quarter (1, 2, 3, 4)
Q&A	Questions and answers
QWP	Quality Working Party
R&D	Research and development
Rev. (1,2,…)	Revision
RFI	Request for information
RMP	Risk-management plan
RMS	Referentials management service
ROP	Rules of procedure
RSO	Regulatory Science Observatory
RWD	Real world data
RWE	Real world evidence
SA	Scientific advice
SADC	Southern African Development Community
SAG	Scientific advisory group
SAP	Systems, Applications & Products (budgetary system)
SAP HR	Human resources module of SAP
SAWP	Scientific Advice Working Party
SciCoBo	The Scientific Coordination Board
SE	Sweden
SG	Steering Group

Term / abbreviation	Definition
SIAMED	Sistema de Información Automatizada sobre Medicamentos (Medicines Information System)
SLA	Service-level agreement
SME	Small or medium-sized enterprise
SmPC	Summary of product characteristics
SmPC AG	Summary of product characteristics Advisory Group
SNE	Seconded national expert
SOP	Standard operating procedure
SPOR	Substances, Products, Organisations, Referentials – and EMA programme
SWAP	Scientific Advice Working Party
TA	Temporary Agent
TAG	Technical Anonymization Group
TATFAR	The Transatlantic Taskforce on Antimicrobial Resistance
TGA	Therapeutic Goods Administration, Australia
THIN	A medical research database of anonymised patient records from information entered by general practices
TOPRA	The Organisation for Professionals in Regulatory Affairs
TOPRA/RAPs	Inter regulatory and stakeholder workshop
TR	Trainee
TTIP	Transatlantic Trade and Investment Protocol
TWGs	Thematic Working Groups
Type IA	A minimal variation/change to the terms of a marketing authorisation with impact or no impact at all, on the quality, safety or efficacy of the medicinal product
Type IB	A minor variation that is neither a Type IA variation nor Type II variation nor an Extension
Type II	A variation/change to the terms of a marketing authorisation with significant impact on product quality, safety & efficacy
UAT	User Acceptance Test
UEMO	European Union of General Practitioners
UK	United Kingdom
Union	European Union
US	United States
USB	Universal Serial Bus
VICH	International Cooperation on Harmonisation of Technical Requirements for Registration of Veterinary Medicinal Products
VMP	veterinary medicinal product
vPvB	Very persistent and very bioaccumulative substances
Web-RADR	Recognising Adverse Drug Reactions – IMI project exploring use of social media and new technologies for pharmacovigilance purposes
WHO	World Health Organization
WHO-UMC	World Health Organization's Uppsala Monitoring Centre – collaborating centre for international drug monitoring
WIN	Work instruction
WONCA	World Organization of Family Doctors
xEVMPD	Extended Eudravigilance Medicinal Product Dictionary