

2019-122 REV. 1

Adopted on 26 June 2019

eu-LISA Consolidated Annual Activity Report 2018

Contents

Lists of figures and tables	3
Abbreviations and acronyms	4
Legal background	6
Assessment by the Management Board	7
Introduction	12
Executive summary	14
Part I. Achievements of the year	21
Part II. (a) Management	45
2.1 Management Board	45
2.2 Major developments	47
2.3 Budgetary and financial management	50
2.4 Human resources management	56
2.5 Assessment by management	64
2.6 Budget implementation tasks entrusted to other services and entities	65
2.7 Assessment of audit results during the reporting year	66
2.8 Follow-up of recommendations and action plans from audits	68
2.9 Follow-up of observations by the discharge authority	69
Part II. (b). External evaluations	78
Part III. Assessment of the effectiveness of the internal control system	80
3.1 Risk management	80
3.2 Compliance with and effectiveness of internal control standards	80
Part IV. Management assurance	82
4.1 Review of elements supporting assurance	82
4.2 Reservations (if applicable)	84
4.3 Overall conclusion on assurance	85
ANNEXES	86
Annex I. Corporate key performance indicators	86
Annex II. Statistics on financial management	88
Annex III. Organisational chart	94
Annex IV. Establishment plan	95
Annex V. Human and financial resources by activity	98
Annex VI. List of training sessions delivered to Member States	100
Annex VII. Specific annex related to Part II	102
Annex VIII. Specific annex related to Part III	103
Annex IX. Financial accounts	107
Annex X. Annual activities and indicators	109
Annex XI. Report on public access to documents	133

Lists of figures and tables

List of figures

Figure 1: Eurodac key figures	22
Figure 2: Total number of data sets successfully transmitted to Eurodac in 2018, and shares of the five main categories	22
Figure 3: SIS II key figures	22
Figure 4: VIS/BMS key figures	23
Figure 5: Consumption of C1 commitments	53
Figure 6: Trends in consumption of funds committed and budgeted	53
Figure 7: Title 3 executed commitment appropriations (EUR million)	53
Figure 8: Trends in consumption of funds paid and budgeted	54
Figure 9: Consumption of C1 payment appropriations	54
Figure 10: Title 3 executed payment appropriations (EUR million).....	54
Figure 11: Trend in number of contracts signed (2014-2018)	55
Figure 12: Categories of eu-LISA staff on 31.12.2018	57
Figure 13: Number of days and percentage of compensatory leave for overtime and work during stand-by duty for temporary agents by grade.....	61
Figure 14: Number of days and percentage of flexitime compensation for temporary agents by grade in 2018	61

List of tables

Table 1: Commitment appropriations	50
Table 2: Commitment appropriations for new tasks	51
Table 3: Breakdown of 2018 amending budget	52
Table 4: Breakdown of 2018 carry over	52
Table 5: Volume of contracts (2014-2018)	55
Table 6: Staff turnover in 2018 by site.	58
Table 7: Compensatory leave by type and grade	59
Table 8: Benchmarking exercise 2018	62
Table 9: IAS, IAC and ECA recommendations.....	68

Abbreviations and acronyms

ACFC	Audit, Compliance and Finance Committee
AFIS	Automated Fingerprint Identification System
AG	Advisory Group
ARES	Advanced Records System
AST/SC	Secretaries and clerks function group
AWP	annual work programme
BCU	Backup Central Unit (backup centre in St Johann im Pongau)
BMS	Biometric Matching System
CA	contract agent
CAAR	Consolidated Annual Activity Report
CEPOL	European Union Agency for Law Enforcement Training
COSI	Standing Committee on Operational Cooperation on Internal Security
CRRS	Central Repository for Reporting and Statistics
CSSIM	Central System Simulator
DAPIX	Working Party on Information Exchange and Data Protection
DG DIGIT	Directorate-General for Informatics
DG HOME	Directorate-General for Migration and Home Affairs
DG TAXUD	Directorate-General for Taxation and Customs Union
DPO	Data Protection Officer
DTPITO	Development Training Programme for IT Operators
DubliNet	communication network for Eurodac
EASO	European Asylum Support Office
ECA	European Court of Auditors
e-CODEX	e-Justice Communication via Online Data Exchange
ECRIS-TCN	European Criminal Records System — Third Country Nationals
EDPS	European Data Protection Supervisor
EES	Entry/Exit System
EMPACT	European Multidisciplinary Platform against Criminal Threats
EIGE	European Institute for Gender Equality
ENISA	European Union Agency for Cybersecurity
EPMO	Enterprise Project Management Office
ETIAS	European Travel Information and Authorisation System
EU	European Union
eu-LISA	European Union Agency for the Operational Management of Large-Scale IT Systems in the Area of Freedom, Security and Justice
Eurodac	European Asylum Dactyloscopy Database
Eurojust	the European Union's Judicial Cooperation Unit
FG	function group
Frontex	European Border and Coast Guard Agency
FTE	full-time equivalent
HR	human resources
IAC	Internal Audit Capability
IAR	Impact Assessment Report

IAS	Internal Audit Service of the European Commission
ICAO	International Civil Aviation Organization
ICD	interface control document
ICF	internal control framework
ICS	internal control standard
ICT	information and communication technology
ISO	International Organization for Standardization
IT	information technology
ITAM	IT asset management
ITIL	IT Infrastructure Library
ITSM	IT service management
JHA	Justice and Home Affairs
KPI	key performance indicator
LIBE	Committee on Civil Liberties, Justice and Home Affairs
LMS	learning management system
MB	Management Board
MC	Management Committee
MEP	Member of the European Parliament
MWO	maintenance in working order
NCP	National Contact Point
N.SIS	national Schengen Information System
OJ	<i>Official Journal of the European Union</i>
OLAF	European Anti-Fraud Office
PD	Programming Document
PMB	Programme Management Board
PMO	project management office
SIRENE	Supplementary Information Request at the National Entries
SIS	Schengen Information System
SIS II	second-generation Schengen Information System
SLA	service-level agreement
SM9	HP Service Manager 9
SNE	seconded national expert
TA	temporary agent
TESTA-ng	Trans European Services for Telematics between Administrations — new generation
VIS	Visa Information System
WP	Working Party

Legal background

Article 24(3)(g) of Regulation (EU) No 2018/1726 of the European Parliament and of the Council of 14 November 2018 on the European Union Agency for the Operational Management of Large-Scale IT Systems in the Area of Freedom, Security and Justice requires the Executive Director to submit the draft of the Agency's Annual Activity Report to the Management Board for assessment and adoption, after prior consultation with the Advisory Groups. Article 19(1)(t) of the same Regulation requires the Management Board to assess and adopt the Agency's Annual Activity Report for the previous year in particular by comparing the results achieved with the objectives of the Annual Work Programme. The Management Board is required to send both the report and its assessment by 1 July of each year to the European Parliament, to the Council, to the Commission and to the Court of Auditors and to ensure that the Annual Activity Report is published.

Assessment by the Management Board

The Management Board of the European Union Agency for the Operational Management of Large-Scale IT Systems in the Area of Freedom, Security and Justice (eu-LISA or the Agency) has analysed and assessed the Consolidated Annual Activity Report of the Agency on the achievements and results for 2018. The Board acknowledges the Agency's performance and notes the following observations, in particular:



Credit: Zsolt Szolnoki

Zsolt Szolnoki, Chairman of the Management Board

General observations

The Management Board:

- considers that eu-LISA's performance in 2018 met the objectives set out in the Agency's Establishing Regulation and the goals and objectives established in the Agency's long-term strategy for 2018-2022;
- acknowledges that the Agency successfully delivered its mandate throughout the year, thus ensuring the normal functioning of the Schengen area and the implementation of relevant policies in the area of justice, security and freedom;
- acknowledges the importance of the entry into force in December 2018 of the new eu-LISA Establishing Regulation and emphasises the significance of the reinforced mandate of the Agency;
- observes the achievement of the objectives of the 2018 annual work programme, included in the Agency's Programming Document for 2018-2020, both in terms of results and performance;
- acknowledges that, in addition to successfully delivering its activities in 2018, the Agency demonstrated agility and flexibility throughout the year, facing considerable challenges with regard to available human resources;
- acknowledges the stable and continuous operations of the Agency throughout the year and the continuous availability to the Member States of the systems entrusted to it;
- acknowledges the continuously growing importance of the systems that have been entrusted to the Agency and insists on the urgent need to support this growth with additional human resources, necessary largely because of the expanded horizontal activities of the Agency;
- acknowledges the low turnover rate of the Agency's staff and emphasises the need for eu-LISA to continue its commendable efforts to ensure staff retention and professional development in the Agency;
- acknowledges the continuous effort of the Agency to evolve and refine its internal control system and emphasises the importance of further implementation of its corporate quality management system, as well as programme and portfolio management capabilities;
- recognises the successful and seamless move of the Agency's headquarters in Tallinn in July 2018;
- emphasises the importance of the finalisation of the reconstruction of the Agency's technical site in Strasbourg and the further extension of the premises in Strasbourg, including the data centre, and takes note of the issue of the capacity of the Backup Central Unit (BCU) in St Johann im Pongau and invites the Agency to explore

possibilities for optimising use of the BCU;

- acknowledges the good progress on the implementation of the action plan on non-legislative recommendations stemming from the first external evaluation of the Agency in 2016, and invites eu-LISA to close all pending actions according to the agreed timeline set out in the action plan;
- notes with satisfaction the discharge granted by the European Parliament for the budget year 2017.

Observations on the Agency's strategic and operational achievements

The Management Board:

- recognises that eu-LISA met and even exceeded the expectations of its stakeholders in delivering on programmed tasks, in particular with regard to the new initiatives entrusted to the Agency, such as the Entry/Exit System (EES) and the European Travel Information and Authorisation System (ETIAS);
- considers that the way the Agency handled the substantially increased workload was highly appropriate but emphasises the importance of providing the Agency with adequate resources (both financial and human) for the implementation of its mandated tasks;
- emphasises the great importance of EES for strengthening border management and internal security in the EU, congratulates the Agency on the substantial progress through the work done in 2018 and invites the Agency to continue its efforts towards the implementation of the system;
- emphasises the great importance of ETIAS and acknowledges the progress made by the Agency on preparing for its implementation following the adoption of the ETIAS regulations;¹
- emphasises the importance of the Automated Fingerprint Identification System (AFIS) for the second-generation Schengen Information System (SIS II), and congratulates the Agency on the successful implementation of Phase 1 of the project;
- takes note of the adoption of the new SIS II regulations and invites the Agency to carry out all activities required for their timely implementation;
- considers that the actions performed by the Agency to manage and evolve the European Asylum Dactyloscopy Database (Eurodac), the Visa Information System / Biometric Matching System (VIS/BMS) and SIS II are adequate and successfully contributed to the delivery of the tasks set out in the systems' legal instruments and invites the Agency to continue its efforts related to the recent and upcoming adoptions of new regulations;
- emphasises the importance of the proposals on interoperability and encourages the Agency to continue its close collaboration with the Commission and Member States to ensure the timely implementation of the various components of interoperability, following the adoption on 20 May 2019 of the legal bases by the co-legislators;²
- congratulates the Agency on its ability to continuously improve its operations, as evidenced by the positive results of the stakeholder satisfaction survey;

¹ Regulation (EU) 2018/1240, OJ L 236, 19.9.2018, p. 1-71 and Regulation (EU) 2018/1241, OJ L 236, 19.9.2018, p. 1-73.

² Regulation (EU) 2019/817 and Regulation (EU) 2019/818, OJ L 135, 22.5.2019, p. 27-135.

- welcomes the further development of the internal capabilities of the Agency with regard to budget planning and proactive management of budget execution to ensure the sound management of the Agency's financial resources and acknowledges that the overall execution levels of commitments and payments were respectively 99.5 % and 100 %, against a target of 95 %;
- notes with satisfaction the structured approach taken by the Agency to the design and implementation of its new organisational structure, acknowledges the progress made by the Agency on the implementation of its internal transformation programme and emphasises the importance of its successful implementation as an enabler of the Agency's long-term success;
- expresses satisfaction with the efficient functioning of the internal control system of the Agency, which has been acknowledged in regularly performed external and internal audits.

Assessment of the management of the Agency

The Management Board, acknowledging the results delivered by the Agency and considering the outcomes of the internal and external audits performed, expresses its satisfaction with the quality of the management of the Agency in 2018.

Variations in the use of human and financial resources compared with the annual work plan

The Management Board:

- considers this report to provide sufficient assurance that resources (staff and budget) are used by the Agency in line with their intended purpose as set out in the 2018 Work Programme included in the Programming Document 2018-2020;
- considers that the variations in the use of resources are not significant and are justified, considering the results achieved by the Agency and the outcomes of the audits that have been performed;
- emphasises the importance of achieving the right balance between the human and financial resources allocated to the Agency and its significantly extended tasks.

Performance indicators

The Management Board acknowledges the levels of the key performance indicators of the Agency for 2018.

Risk and control environment

The Management Board:

- acknowledges that the main risks to the organisation, which might have jeopardised the delivery of the tasks set out in the Programming Document 2018-2020, have been identified and adequate response plans have been put in place;
- considers that the Agency has taken appropriate measures to avoid these risks turning into issues that might negatively affect its activities;

- acknowledges that the internal control systems functioned efficiently, considering the results achieved by the Agency and the results of internal and external audits.

Assessment of assurances and reservations issued by the Authorising Officer

The Management Board:

- considers that adequate and appropriate measures are in place to address the identified management and control weaknesses;
- notes that eu-LISA is in the process of implementing activity-based budgeting and that therefore detailed information on the use of human and financial resources for each activity is not fully available for 2018.

Recommendations

The Management Board, considering the information provided in this report, encourages the Agency in 2019 to:

- implement obligations stemming from its new mandate and deliver with sustained efficiency and effectiveness;
- continue implementation of the internal transformation programme, necessary for the implementation of the new mandate;
- continue without delay the implementation of EES and ETIAS, establishing synergies in the use of allocated human and financial resources where possible;
- progress the implementation of the recast SIS regulations;
- continue its close collaboration with the Commission and the Member States to ensure the full implementation of the various elements of interoperability following the adoption of the relevant legal bases by the co-legislators;
- start preparations for the new centralised system for the identification of Member States holding conviction information on third country nationals and stateless persons to supplement and support the European Criminal Records System on convicted third country nationals (ECRIS-TCN), following the adoption of the legal basis by the co-legislators;³
- finalise the implementation of activity-based budgeting as planned;
- continue with the implementation of *ex ante* evaluations in the Agency;
- continue to further enhance its internal control system, paying specific attention to the regular reviews of the efficiency of internal processes and to the further development of the competencies and skills of staff members based on the Agency's competency framework;
- continue to further develop and strengthen the corporate governance framework by introducing up-to-date management tools, approaches and practices;
- continue with implementation of the internal transformation programme in the Agency;

³ Regulation (EU) 2019/816, OJ L 135, 22.5.2019, p. 1-26.

- conclude the implementation of the action plan for the implementation of the non-legislative recommendations of the evaluation of the Agency by the end of 2019, and report further to the Board.

Conclusion

The Management Board is highly satisfied with the overall performance of eu-LISA in 2018 and with the achievements of the Agency throughout 2018, which were in line with the goals and objectives set out in its annual work programme for 2018. The Management Board is also satisfied with the level and appropriateness of the use of the available human and financial resources.

The Board emphasises that while some additional human resources were provided to the Agency following the adoption of the new establishing regulation and the ETIAS regulations, the considerable pressure of work remains a concern, especially in the horizontal, cross-organisational functions. Furthermore, the Management Board considers the need to extend the Agency's technical site in Strasbourg as a strategic priority for the coming years.

The Management Board expresses its appreciation to the Executive Director and the Agency's management and staff for their commitment and achievements throughout the year and wishes to thank them for the constructive and pleasant collaboration.

Zsolt Szolnoki, Chairman of the Management Board

Introduction

The purpose of the Consolidated Annual Activity Report of the European Union Agency for the Operational Management of Large-Scale IT Systems in the Area of Freedom, Security and Justice is to give a structured overview of the activities performed and objectives achieved in 2018.

Background information

The European Union Agency for the Operational Management of Large-Scale IT Systems in the Area of Freedom, Security and Justice was established in 2011 by Regulation (EU) No 1077/2011 and became operational on 1 December 2012. The Agency was established to provide at EU-level a long-term solution for the operational management of present and future large-scale IT systems in the area of freedom, security and justice. On 11 December 2018, a new regulation - (EU) 2018/1726 of the European Parliament and of the Council of 14 November 2018 on the European Union Agency for the Operational Management of Large-Scale IT Systems in the Area of Freedom, Security and Justice (eu-LISA), and amending Regulation (EC) No 1987/2006 and Council Decision 2007/533/JHA and repealing Regulation (EU) No 1077/2011 - entered into force and expanded the Agency's mandate. This new mandate strengthens the Agency's capacity to improve and develop information systems for European security, border management and migration, and it broadens the scope of the Agency's work to research and innovation.

eu-LISA currently manages the European Asylum Dactyloscopy Database (Eurodac), the Schengen Information System (SIS) and the Visa Information System (VIS). These systems are essential for the smooth functioning of the Schengen area. At its external borders, these IT systems are instrumental to the efficiency of border management and ensure the implementation of common EU asylum and visa policies. Within the Schengen area, the availability of these systems is crucial to guarantee the freedom of movement of EU citizens.

The Agency is at the same time in the process of developing two additional IT systems: the Entry/Exit System (EES) and the European Travel Information and Authorisation System (ETIAS). These two new systems, when operational, will further reinforce the EU's internal security and improve migration management at the external borders. In 2019, the Agency is also expected to start the development of the European Criminal Records System on convicted third country nationals (ECRIS-TCN).

Our mission, vision and core values

The Agency's mission is based on its legal mandate and focuses on ***continuously adding value for Member States by supporting through technology their efforts for a safer Europe.***

This mission is delivered through the Agency's vision, which is to ***provide high-quality and efficient services and solutions to stakeholders, to earn their trust through continuously aligning the capabilities of technology with the evolving needs of Member States and to grow the Agency as a centre of excellence*** in the Justice and Home Affairs (JHA) domain.

The Agency's mission and the vision are translated into operational activities through the core values of eu-LISA. They drive and underpin all operational activities and the strategic development of the Agency. These values are:

- **Accountability:** deploying a sound governance framework, sound financial management and cost-efficient operations.
- **Transparency:** communicating regularly and openly with the Agency's key stakeholders and engaging them in a continuous dialogue to define the long-term strategy for the development of the Agency.

- **Excellence:** having the right organisational structure, the right people and the right processes in place to ensure service continuity to the Member States.
- **Continuity:** ensuring that the Agency makes the best use of expertise, knowledge and investments made by the Member States and continues to develop expertise and knowledge.
- **Teamwork:** seeking to empower each individual team member to make the best use of his or her knowledge and experience, contributing to the Agency's success.
- **Customer focus:** ensuring that the Agency is aligned at all times with the needs and demand of its stakeholders.

Where we are located

The seat of the Agency is in Tallinn, Estonia, while the operational management of the systems entrusted to the Agency is carried out in Strasbourg, France. eu-LISA also has a technical backup site in St Johann im Pongau, Austria, and a liaison office in Brussels, Belgium.

Executive summary

The free movement of people is one of the tangible symbols of European integration. During recent years, however, this symbol has been put to the test by migratory pressure, organised crime and terrorism. The European Union Agency for the Operational Management of Large-Scale IT Systems in the Area of Freedom, Security and Justice plays an important role in the development of timely and adequate responses to counter these challenges through its work related to innovative technological solutions.

eu-LISA is responsible for developing, managing and delivering IT solutions, systems and services that are key success factors for the implementation of the Union's policies in the area of freedom, security and justice. The Agency is one of the important elements of the engine that powers the normal functioning of the Schengen area. eu-LISA has proven itself as a reliable service provider for the Member States, being capable of assuming additional new responsibilities while managing and evolving the systems entrusted to it. At the same time, the Agency has maintained and further developed itself as a trusted and reliable partner to the European Commission, the European Parliament and the Council of the EU.



Credit: Aligar Lusti

Krum Garkov
Executive Director of eu-LISA

In this respect, 2018 was a decisive year. Significant progress was achieved on a number of legislative priorities intended to address various aspects of further strengthening internal security and border and migration management. The year was also important because of the entry into force of the Agency's new establishing regulation, which significantly expanded eu-LISA's mandate.

In this respect, eu-LISA faced a dual challenge in 2018:

- **On the one hand**, to stay focused on its core operations, given the importance of the systems managed by the Agency for internal security, border management and migration management in the EU;
- **On the other**, to continuously increase its contribution to the Member States and the EU as a whole, given its extended mandate.

The legal framework

On 11 December 2018, eu-LISA's new Establishing Regulation⁴ entered into force, providing the legal basis for the Agency to take on more tasks and provide more complete centralised operational management of EU information systems for migration, security and border management. The Agency's mandate now comprises, inter alia:

- the implementation of interoperability of EU information systems, following the adoption of the relevant regulations;⁵
- the development of new IT systems such as EES,⁶ ETIAS⁷ and ECRIS-TCN;⁸

⁴ Regulation (EU) 2018/1726, OJ L 295, 21.11.2018, p. 99-137.

⁵ Regulation (EU) 2019/817 and Regulation (EU) 2019/818, OJ L 135, 22.5.2019, p. 27-135.

⁶ Regulation (EU) 2017/2226, OJ L 327, 9.12.2017, p. 20-82.

⁷ Regulation (EU) 2018/1240, OJ L 236, 19.9.2018, p. 1-71.

⁸ Regulation (EU) 2019/816, OJ L 135, 22.5.2019, p. 1-26.

- the evolution of the existing systems for which it is already responsible: Eurodac,⁹ SIS¹⁰ and VIS;¹¹
- broader support for the Member States, in the form of more ad hoc technical and operational support to Member States;
- broader responsibilities in the area of research and development and testing of new technologies and solutions.

Existing systems

eu-LISA maintained stable and continuous operation of **Eurodac**, **SIS** and **VIS/BMS** throughout the year, within legal requirements and agreed service levels and with a high level of customer satisfaction. In 2018, no major issues or major incidents prevented the normal use of the systems. The availability of Eurodac was 100 %, that of SIS was 99.86 % and that of VIS was 99.96 %.¹² The annual eu-LISA stakeholder satisfaction survey showed that over 96 % of Member States were satisfied or very satisfied with eu-LISA's management of the systems.

The Agency successfully launched the first phase of the **SIS II AFIS**, introducing a biometric search capability to enable better identification of people. In addition, work was initiated on integrating Ireland into SIS. The new regulations on strengthening SIS entered into force on 28 December 2018 and will require eu-LISA to implement complex technical changes in the coming years.

In 2018, eu-LISA focused on preparing for the delivery of the required **VIS** and **BMS** capacity increases for the coming years. Furthermore, the Agency started identifying the interdependencies between **VIS** and **EES** and setting up the **VIS-EES** interoperability roadmap. In May 2018, the European Commission submitted a proposal¹³ to amend the **VIS** regulation, aimed at streamlining the system's performance, introducing a facial image search capability and bridging identified security gaps to enhance the Schengen area's internal security.

A new **Eurodac** release was delivered in 2018 and included various corrective measures. The Agency also started the integration of the Eurodac system with the shared backup infrastructure, in compliance with the specifications of eu-LISA's common shared infrastructure. Eurodac and Dublin regulation recasts were not adopted in 2018.

New systems

In 2018, following the entry into force of the **EES** regulation on 29 December 2017, the Agency accelerated its work on the implementation of the system. It was organised in three work streams, namely recruitment of additional staff, procurement and definition of technical specifications. All work was done in close coordination with the European Commission Directorate-General for Migration and Home Affairs (DG HOME) and the Member States. Furthermore, the Agency was heavily involved in the preparation of the implementing acts for **EES**.

Following the entry into force of the regulation on the establishment of **ETIAS** on 9 October 2018, the Agency started preparatory work by supporting the European Commission in drafting the related implementing and delegated acts as well as in the design of the tender procedures and recruitment processes.

The Agency also prepared well in advance the governance structures and processes related to the management of the new system. This has allowed the **EES** Advisory Group (**EES AG**) to meet and perform its tasks on a monthly basis since June 2018.

Further to the evolution of the individual systems, eu-LISA has been engaged in preparations for the **interoperability** of large-scale IT systems. Interoperability and its technical components, namely the Common Identity Repository, the

⁹ Regulation (EU) No 604/2013, OJ L 180, 29.6.2013, p. 31-59.

¹⁰ Regulation (EU) 2018/1860 and Regulation (EU) 2018/1861, OJ L 312, 7.12.2018, p. 1-55; Regulation (EU) 2018/1682, OJ L 279, 9.11.2018, p. 13-14; Regulation (EC) No 1986/2006 and Regulation (EC) No 1987/2006, OJ L 381, 28.12.2006, p. 1-23; Council Decision 2007/533/JHA, OJ L 205, 7.8.2007, p. 63-84.

¹¹ Regulation (EC) No 767/2008, OJ L 218, 13.8.2008, p. 60-81.

¹² The figures for system availability do not include time for maintenance.

¹³ European Commission, Proposal for a regulation of the European Parliament and of the Council amending Regulation (EC) No 767/2008, Regulation (EC) No 810/2009, Regulation (EU) 2017/2226, Regulation (EU) 2016/399, Regulation XX/2018 [Interoperability Regulation], and Decision 2004/512/EC and repealing Council Decision 2008/633/JHA — Mandate for negotiations with the European Parliament, Brussels, 19.12.2018.

European Search Portal, the shared Biometric Matching Service, the Multiple-Identity Detector and the Central Repository for Reporting and Statistics, will provide the foundations for more modern, agile and efficient IT-based services for national authorities. As a result, a new information architecture in the JHA area will be put in place. European Commission proposals for regulations establishing a framework for interoperability were presented on 12 December 2017 and entered into force on 11 June 2019. Throughout 2018, eu-LISA cooperated closely with the European Commission on the indicative planning for the implementation of the interoperability components and on analysing interdependencies with the existing and the new systems.

The communication infrastructure

During 2018, the European Commission handed over to the Agency its tasks related to the communication infrastructure of VIS (in June) and SIS II (in December). eu-LISA was already responsible for the supervision, security and coordination of relations between Member States and the relevant network service providers. The Agency is now also carrying out activities related to the implementation of the budget, acquisition, renewal and contractual matters with regard to the VIS and SIS II communication infrastructure. In line with its new establishing regulation, in the future the Agency will carry out all the tasks relating to the communication infrastructure of the systems entrusted to it, with the exception of those systems that make use of the Eurodomain (i.e. currently Eurodac, and ECRIS-TCN once operational).

The Agency ensured that the tasks related to the operational management of the communication infrastructure were performed in accordance with the service-level agreements (SLAs). The Member States received a reliable and continuous service throughout the year.

Together with other EU stakeholders, eu-LISA began preparations for a new tender for the successor to the present Trans European Services for Telematics between Administrations — new generation (TESTA-ng).

In conjunction with the deployment of the AFIS functionality, the SIS II network upgrade was started. At the time of preparing this report, it had been completed at six national sites, and was to be finalised for the other Member States in 2019.

Cooperation with stakeholders

eu-LISA abided by its commitment to a very close, transparent and constructive collaboration with its Management Board (MB) and the Advisory Groups (the Eurodac, SIS and VIS AGs). The Agency also provided all necessary support for the successful functioning of the MB and the AGs. In accordance with the regulation, the EES Programme Management Board (PMB) and the EES AG were established and started their regular meetings. Following the entry into force of the ETIAS regulations, the Agency initiated the ETIAS PMB and the joint EES-ETIAS AG. Their first meetings were subsequently held on 1 February 2019 (ETIAS PMB) and on 13 March 2019 (EES-ETIAS AG).

The Agency sustained its cooperation with other EU agencies, for example by hosting the 9th Security Officers' Network meeting in Tallinn on 14-15 November.

eu-LISA continued its involvement in the Schengen evaluation mechanism by contributing to the monitoring of the application of the Schengen *acquis*. In 2018, the Agency supported 11 Schengen evaluation missions following requests from the European Commission, including all of the SIS / Supplementary Information Request at the National Entries (SIRENE) area requests and several common visa policy evaluations.

In 2018, eu-LISA carried out work on three priority issues under the European Multidisciplinary Platform against Criminal Threats (EMPACT), namely facilitation of illegal immigration, cybercrime and illicit firearms trafficking. For the second time, the Agency organised dedicated training activities to enhance use of Eurodac and SIS II in relation to combating the facilitation of illegal immigration.

The organisation

In order to implement its new mandate, introduced by the new establishing regulation, the Agency developed a new organisational structure, which was discussed by eu-LISA's Management Board and subsequently adopted on 21 March 2018. A carefully prepared complex transformation programme for a corporate reorganisation has been prepared and put into action. It is expected to be accomplished by 2020.

Communication with stakeholders and the public

The Agency's activities in the communication domain focused on targeted actions to increase outward reach as well as further modernising eu-LISA's corporate communication channels. The highlight of the year was the joint eu-LISA-Frontex conference 'EU Borders — Getting Smarter through Technology', organised under the auspices of the Austrian EU Council Presidency, which attracted the largest ever number of participants in an eu-LISA conference and achieved a 97 % satisfaction rate. It was followed by a no less successful industry roundtable event dedicated to technologies facilitating land border crossings in the context of the future operation of EES. Another industry roundtable event was held in Sofia, Bulgaria, with the support of the Bulgarian EU Council Presidency; it focused on streamlining information exchange at the EU's external borders.

The launch of a fully revamped and modernised eu-LISA public website, which considerably increased traffic to the site and provided for more than 100 000 visitors a year, was another communication-related achievement in 2018. This was complemented by new types of awareness-raising videos for the general public to illustrate eu-LISA's mandate and both the present and future IT systems in an easily understandable and appealing fashion. All the audio-visual communication initiatives aimed to provide stakeholders and the public with easily understandable information on complex topics, as required by the relevant legal acts. The Agency was also actively involved in the EU Parallel and Coordinated Exercise 2018 and the SIS II security exercise, providing crisis communication advice and contributions.

Sites

Over 7 years ago, in October 2011, the European Parliament and the Council decided to establish eu-LISA with its headquarters in Tallinn, Estonia. The Estonian government committed to building headquarters fit for the needs and requirements of an EU agency. Throughout the years, eu-LISA has received remarkable support from the EU institutions and the Estonian government, allowing it to work initially from temporary premises and then move to its permanent home in July 2018. The complex exercise of moving from the temporary to the permanent building was carefully prepared for, planned, monitored and successfully completed thanks to the dedicated work of all the teams involved.

In 2013, eu-LISA was provided with the former Centre du Système d'Information Schengen in Strasbourg by the French government, and it has been running the Agency's large-scale IT systems from there ever since. Following the award of a contract in 2015, construction of the new building started in early 2016. Staff moved into the new building in August 2017. In November 2018, the construction works related to the technical part of the reconstruction project at the Agency's site in Strasbourg were finalised. It was necessary to eliminate single points of failure related to the data centre facility and to increase the power, cooling and ventilation capacity of the IT services infrastructure in the context of the implementation of the new systems.



Credit: Sten-Anders Ojakallas

eu-LISA's new headquarters in Tallinn

With the finalisation of the project, high standards have been achieved so that staff and contractors enjoy better working conditions.



eu-LISA's new building in Strasbourg

Budget implementation

In 2018, eu-LISA managed a budget of EUR 202.1 million in commitment appropriations and EUR 93.7 million in payment appropriations received from the EU general budget. The Agency retained a high budget implementation rate, in particular:

- 99.5 % for commitment appropriations, taking into account the non-automatic carry-over of commitment appropriations authorised by the Management Board in February 2019;
- 100 % for payment appropriations, including the carry-forward of administrative expenditure to 2019.

Human resources

eu-LISA continued to grow at a fast pace in 2018. The development of new systems and the evolution of the existing systems have required a steady flow of additional human resources: 26 external vacancies were published in 2018.

In terms of headcount, at the end of December 2018, eu-LISA had 162 full-time staff members: 122 temporary agents (TAs), 31 contract agents (CAs) and 9 seconded national experts (SNEs). Of these, 85 TAs, 21 CAs and 4 SNEs were based in Strasbourg; 37 TAs, 8 CAs and 5 SNEs were based in Tallinn; and 2 CAs were based at eu-LISA's Liaison Office in Brussels.

Another key achievement for 2018 was the further development of the already implemented Agency staff competency framework, beyond its initial scope in the recruitment and learning domains.

The Agency continued its efforts towards greater efficiency, increased use of digital tools and data-driven management in the field of human resources (HR). An e-recruitment tool was launched in the second half of the year, considerably facilitating the management of numerous recruitment processes. The appraisal process was deployed through the digital i-Learn platform, built in house.

Main risks and issues reported to the Management Board

Efficient and close collaboration between the Management Board and eu-LISA continued throughout the year. In 2018, three main issues were brought to the Management Board's attention.

- The need for further extension of the Agency's technical site in Strasbourg and greater capacity at the BCU site

to accommodate new developments: the Management Board asked the Agency to prepare for a building project for a second extension of the Strasbourg site.¹⁴ The Management Board also took note of the capacity issue at the BCU site and invited the Agency to explore possibilities for optimising use of the BCU.

- The staffing situation at the Agency: while the Agency will receive additional staff under various new legal proposals adopted, most of the new human resources are allocated to operational activities. At the same time, corporate horizontal functions (e.g. finance, HR, etc.) need reinforcement to enable them to effectively support the extended tasks and mandate of the Agency. Throughout the year, the Management Board was regularly updated on the issue.
- Eurodac recast implementation budget: because the adoption of the legal basis is still pending, the allocated budget cannot be used within the timeline established in the legal financial statement attached to the legal proposal. As a result, once the legal proposal is adopted (adoption is expected in 2020) an alternative budget will need to be allocated to the Agency in order for it to implement the recast proposal.

Assessment by management of the internal controls

The management of the Agency has reasonable assurance that appropriate internal controls are in place and that they are functioning as intended; throughout the year, major risks were appropriately identified and managed. This assurance is further confirmed by the results of the internal and external audits performed throughout the year.

Audit results

No critical recommendations were made to the Agency during audits performed over the course of the year by the European Court of Auditors, independent external auditors, the Commission's Internal Audit Service or the Agency's Internal Audit Capability. All other recommendations were addressed in related action plans.

Risks

During 2018, three major corporate risks were identified. A corporate risk response plan was established to address them.¹⁵

Conclusion

The achievements of the Agency in 2018 provide a solid foundation for future growth and the development of its operations and its mandate. The Agency should continue to develop its agility and ability to respond to shifting political priorities in the JHA domain. At the same time, the Agency should maintain its proactive partnership with the Member States, recognising and responding to their changing and evolving needs. Last but not least, eu-LISA should continue its already established close and constructive cooperation with the European Commission on the basis of mutual respect and learning, providing expertise and contributing to present and future initiatives as required.

In the years to come, the EU will face a dual challenge.

- **To stay open**, since it is part of a globalised and interconnected world in which international mobility is expected to increase further. More and more people will look at Europe as a place to come to visit, to study in, to work in or to seek protection in. In addition, the EU will be faced with the consequences of continuous instability in its immediate neighbourhood, rapid demographic changes and increasingly diverse societies.
- **To stay secure and guarantee the security of its citizens**. Technology has evolved at an extremely high pace

¹⁴ Decision 2018-040, adopted at the 17th meeting of the MB of eu-LISA, 20-21 March 2018.

¹⁵ See section 3.1, 'Risk management, and Annex VIII.

in recent years, creating new opportunities for economic growth and fundamentally transforming people's daily lives. However, these changes have also increased dramatically the number of new security challenges. Cybercrime cases are increasing rapidly; terrorism remains a major threat to security, taking advantage of new social platforms; and cross-border organised crime is taking on new shapes.

The ongoing digital transformation of the JHA domain will also continue and even accelerate in the coming years. Therefore, the EU should further explore the capabilities of technology to support and contribute to the delivery of priorities in the JHA domain.

Consequently, the role and importance of eu-LISA for the Member States and the EU as a whole will continue to grow. The Agency will be one of the most important contributors to the successful implementation of relevant JHA policies, aimed at strengthening border management and internal security. Therefore, in 2019 and the years thereafter, eu-LISA will face and address a dual strategic challenge of its own. On the one hand, the Agency will have to stay focused on its core operations (i.e. the development, operational management and evolution of the systems entrusted to it). On the other, it will have to continue to increase its contribution to Member States and the EU as a whole, capitalising on its knowledge, experience and capabilities in the area of its expertise and mandate.

The most tangible demonstration of the increased contribution of the Agency to Member States and the EU will be progress to be made in 2019 on the development and implementation of the new systems and initiatives entrusted to eu-LISA, namely EES, ETIAS, ECRIS-TCN and interoperability. At the same time, the Agency will continue with the management and evolution of existing large-scale IT systems in line with the relevant legal instruments governing them.

Finally, yet importantly, I would like to thank the Member States, the European Commission, the European Parliament, the Council and the governments of the countries hosting the Agency's sites for their continuous support and collaboration through the year. I especially want to thank all of eu-LISA's staff for their dedication and hard work in delivering on all our objectives during the year. If we have done something good in 2018, it is thanks in particular to this group of motivated, dedicated and talented professionals from almost every European country, who have worked so hard to make this possible.

In 2019 and the following years, no less will be required. The Agency will continue to operate in a very challenging and turbulent environment. But no matter what the environment and circumstances are, we will not lose sight of our priority: **to contribute through our services to the efforts of the Member States to make Europe safer and stronger**. To be successful in this, we will put our stakeholders and their needs at the heart of everything we do, showing the Member States how effectively we support them, with a passion for excellence, agility, flexibility and commitment.

Krum Garkov, Executive Director

Part I. Achievements of the year

Activities under Strategic Goal 1: 'Continue to grow as a contributor to and facilitator of freedom, security and justice policies in Europe'

1.1. Operational management of the systems

The core operations of the Agency in 2018 were aimed at maintaining high-quality and uninterrupted 24/7 operations of the systems entrusted to it: Eurodac, SIS II and VIS/BMS. It was therefore a key achievement for eu-LISA to maintain the stable operation of the systems throughout the year, within legal requirements and agreed service levels, and with a high level of customer satisfaction. In 2018, no major issues or major incidents prevented the normal use of the systems. Their overall performance was comparable to that in 2017: the availability of Eurodac was 100 %, that of SIS II was 99.86 % and that of VIS was 99.96 %.¹⁶

The operational management of the systems was performed through several activities, which were successfully carried out: system management and maintenance for continuous service provision; SLA monitoring; incident and problem management; and support for the Member States in their use of the systems.

To strengthen its operations and increase the quality of service, the Agency proceeded with the development of its service and process model, based on the implementation of IT Infrastructure Library (ITIL) / IT service management (ITSM). During 2018, four new processes were defined, taking into account existing practices as well as ITIL best practice recommendations. In parallel, additional automation and integration of the processes were carried out. The eu-LISA service model was also successfully revised and improved.

The audit of IT operations, performed by the Internal Audit Service of the European Commission, provided assurance that the Agency had laid a solid foundation for its operational model, using industry best practices and standards for service management, such as ITIL/ITSM.

As agreed by the Management Board in January 2018, an additional performance indicator for incident and problem management was included in the eu-LISA standard SLA. This decision was also supported by all three Advisory Groups (the Eurodac, SIS and VIS AGs).

In 2018, the regular eu-LISA stakeholder satisfaction survey was carried out. The results showed a very high level of satisfaction on the part of Member States: over 96 % were satisfied or very satisfied with eu-LISA's management of the systems. This survey is now an integral part of eu-LISA's standard SLA. The stakeholder satisfaction survey covers the following areas: overall eu-LISA Service Desk performance, incident and problem management, operational communication, technical assistance for national activities and release management.

Operational management of and statistics on Eurodac

During the reporting period, the system's performance was in accordance with the SLA. Continuous availability was ensured, along with all necessary services to ensure the normal functioning of the system. The relevant ITSM operational tools (e.g. HP Service Manager 9 (SM9)) were tested and updated for use in the Eurodac context, following the initiation of the execution of the new Eurodac contract. The necessary management and monitoring of DubliNet (the communication network for Eurodac) was also carried out in a timely and comprehensive manner. DubliNet operations were aligned with eu-LISA's ITSM operational and contractual model.

¹⁶ The figures for system availability do not include time for maintenance.

In 2018, the Member States and Europol successfully transmitted almost 880 000 sets of fingerprints to the Eurodac central system (Figure 1).¹⁷ October 2018 was the busiest month, with an average of around 3 800 transactions per day. In particular, the Eurodac central system processed over 551 000 sets of fingerprints of applicants for international protection aged 14 years or older (category 1) and over 103 000 sets of fingerprints of persons aged 14 years or older apprehended when irregularly crossing the external border of a Member State (category 2). More than 224 000 sets of fingerprints of persons aged 14 years or older illegally present on the territory of a Member State were sent (category 3). Member State law enforcement designated authorities and Europol sent 306 sets of fingerprints for the purpose of prevention, detection or investigation of terrorist offences or of other serious criminal offences (categories 4 and 5).¹⁸ At the end of 2018, the Eurodac central system stored 5.18 million sets of fingerprints (a 3.8 % increase compared with 2017). The numbers of data sets per category are shown in Figure 2.



Figure 1: Eurodac key figures

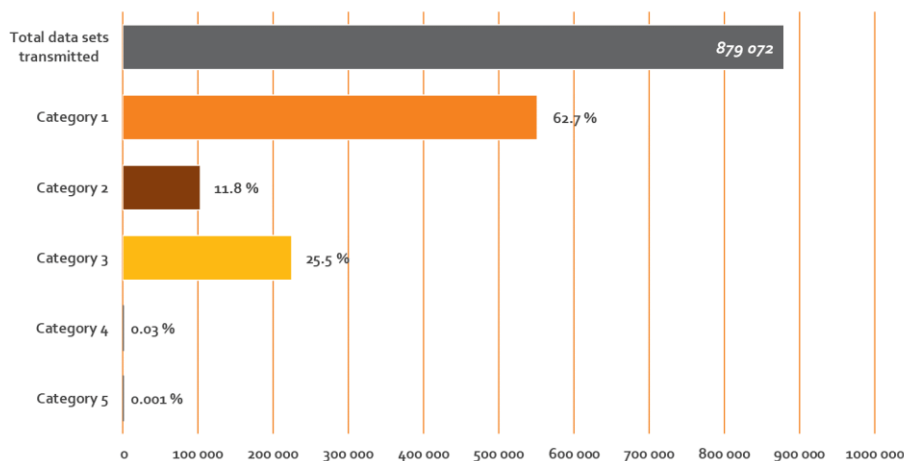


Figure 2: Total number of data sets successfully transmitted to Eurodac in 2018, and shares of the five main categories

Operational management of and statistics on SIS II

In 2018, SIS II behaved in accordance with legislative requirements. Events preventing the system from behaving appropriately were managed in a timely manner so that performance remained within the SLA with end-users. The Agency carried out corrective, adaptive, perfective and preventive maintenance tasks to achieve this objective. Some minor incidents impacted the SIS II central system: the issue was fixed with the second release in July.

The transition to the new SIS II maintenance in working order (MWO) contract was carried out. The change from the previous to the new supplier was appropriately managed and happened

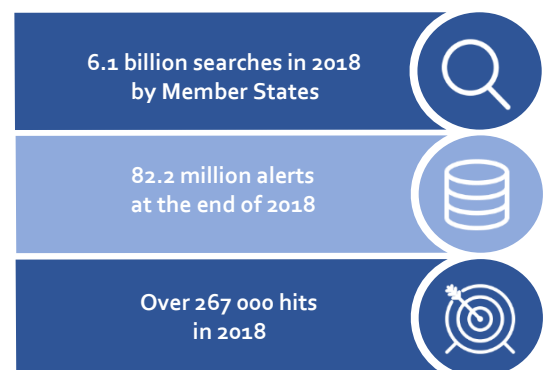


Figure 3: SIS II key figures

¹⁷ Eurodac 2018 annual statistics, available at <https://www.eulisa.europa.eu/our-publications>

¹⁸ As per Article 19 of the Eurodac regulation, connection can be achieved only through the use of a Member State's National Access Point. By agreement with the Dutch authorities, Europol sends transactions to Eurodac using the Dutch connection and infrastructure.

seamlessly.

The Agency supported Member States in carrying out compliance tests on new national systems and in the qualification of new message-oriented middleware.

In 2018, SIS II was accessed more than 6.1 billion times by Member States and associated countries, 20 % more than in 2017 (Figure 3). On 31 December 2018, SIS II contained over 82.2 million alerts. The largest alert category was 'Issued document', making up 75 % of the total alerts, whereas 1.14 % of the total alerts were on persons. Over 267 000 hits were reported in 2018, a 10 % increase compared with 2017. Similarly to in previous years, more than 77 % of the total hits were triggered by alerts on persons.³⁹

Operational management of and statistics on VIS/BMS

eu-LISA continued to ensure uninterrupted service for VIS and BMS through regular and comprehensive maintenance. The general performance of VIS and BMS was in accordance with the SLA. During the reporting period, the service management activities for VIS/BMS were delivered in full, following eu-LISA's operational model based on the ITSM framework. Regular reports were provided to the Member States on incident resolution times, measured using the SMg tool. No major deviations were found with regard to central system performance.

In 2018, over 274 million VIS operations were processed (a 1 % increase on 2017), up to 123 000 operations per hour at peak times. For VIS, the maximum throughput without performance deterioration is currently 450 000 messages per hour.

On 1 January 2019, there were 64.51 million visa applications, 64.48 million facial images and 56.73 million fingerprint sets in the VIS database (Figure 4). The five biggest VIS users were France, Spain, Germany, Italy and Czechia. The five most active VIS regions were Russia, East Asia, North Africa, India/Pakistan and the Gulf region. The average time between visa application and issuance was 5.07 days.

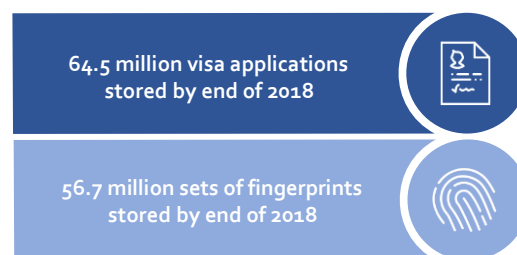


Figure 4: VIS/BMS key figures

1.2. Evolution of the systems

eu-LISA continued to evolve the systems under its management, in accordance with legal requirements and Member States' operational needs, in order to further enhance their capabilities. One key achievement was the improvement and upgrade of VIS and BMS: the capacity was increased from 60 million to 85 million visa applications. The upgrade also included a partial virtualisation of the core execution architecture of the system. For SIS, the implementation of the AFIS was a success. It is now available to all Member States, and is running smoothly for those already using it, providing additional capabilities and business benefits. Without delay, the Agency continued with preparations for the second phase of the AFIS project. The integration of Eurodac with shared service architecture standards was launched, supporting convergence on the same applicable standards throughout the organisation.

The Agency proceeded towards the implementation of the common shared infrastructure, intended to achieve widespread sharing of IT infrastructure and technical services. The activities and projects started in 2017, and the main results are planned to be delivered on schedule in 2019.

Evolution of Eurodac

Eurodac release 1 was delivered in 2018. The release was part of the corrective maintenance of the system; it was taken

³⁹ SIS II 2018 annual statistics, available at <https://www.eulisa.europa.eu/our-publications>

up during the first months of 2018 to make sure that events preventing the system from behaving appropriately were properly managed. The objective of this release was the replacement and externalisation of the mail server, and an increase in the maximum number of returned hits within the system from 18 to 36. The related technical approach and high-level plan were agreed with Member States during the year, and the request for service was signed accordingly. The factory development and testing were successfully concluded (as shown in the factory test results report) and approved by eu-LISA. The testing on the pre-production environment confirmed successful implementation, and thus the deployment to production was completed as expected during the year.

Since the Eurodac and Dublin regulation recasts were not adopted during 2018, corresponding activities have been put on hold. This concerns the Eurodac functional changes and capacity upgrade and the development of the Dublin Automation System. All subsequent milestones have been shifted accordingly to 2019-2020. Regarding the Dublin Automation System, the Agency participated in preparatory activities and provided its technical expertise for a study carried out by the European Commission.

The project for the integration of Eurodac with the shared backup infrastructure was initiated in 2018. The technical approach had been agreed with the Eurodac contractor, in compliance with the technical specifications of eu-LISA's common shared infrastructure. The specific contract for the Eurodac integration with the shared backup infrastructure was signed and the project started as planned. Owing to a technical issue (one of the components needed had become obsolete and was no longer supported by the vendor), the project planning was revised and moved for deployment within the 2019 release plan.

Evolution of SIS

After a little less than 2 years of intense efforts, the SIS AFIS Phase 1 was successfully delivered and SIS AFIS entered into operation on 5 March 2018, at 22:00 CET. This project phase introduced a biometric search capability in SIS, a major success for the Agency and a high political priority. The outcome was achieved by eu-LISA in close cooperation with ten Member States and associated countries (Austria, Germany, Latvia, Liechtenstein, Luxembourg, the Netherlands, Poland, Portugal, Slovenia and Switzerland), which were better prepared than others to start using biometric queries once the capability was deployed at the central system level. Following cooperation with the SIS Advisory Group, the project was implemented without substantially deviating from the agreed timescale. As a next step, preparation for the implementation of SIS AFIS Phase 2 has been started without delay. The project documentation has been drafted (the business case, the project initiation document) and a Project Management Forum meeting focusing on requirements for Phase 2 has been scheduled.

As for other SIS developments, the Central System 9.0 release was successfully delivered. It included changes managed through the change management process and a central user repository.

During the first Advisory Group meeting, in February 2018, the new state-of-the-art version of the Central System Simulator (CSSIM) was successfully delivered to Member States. This delivery was in keeping with the timeline and has been well received by the SIS community. The CSSIM is based on the SIS central system application (without AFIS) and replicates the same functionalities for the Member States.

In addition, the various activities required for an orderly transition to the new MWO contract were carried out.

One other main achievement was the start of the activities pertaining to the integration of Ireland into SIS. Activities started in May 2018 with the provision of training sessions and continuous testing support. Technical readiness for connection to SIS is expected in Q4 2019. More broadly, eu-LISA actively supported Member States in their national maintenance campaigns, providing testing assistance and help with qualification campaigns, thus ensuring continuous operation also on the Member States' sides.

eu-LISA supported the European Commission and the Member States in implementing the Schengen evaluation mechanism in the area of SIS/SIRENE. Experts from the Agency contributed as observers to all evaluation missions

carried out in this area, namely the evaluations of Estonia, Finland, Latvia, Lithuania and Switzerland.

Activities related to the SIS recast and to SIS return decisions were postponed until the approval of the legal bases. The revised SIS regulations²⁰ entered into force on 27 December and represent a major step forward for SIS. Their implementation will be carried out in the period 2019-2021. The new regulations include, inter alia, the following upgrades.

- **New alerts on criminals and return decisions:** the agreed changes will allow SIS alerts to be issued for unknown persons who are wanted in connection with a crime. In addition, a new alert category for return decisions will be introduced to improve the enforcement of return decisions issued to irregularly staying third country nationals.
- **Greater vigilance for terrorist offences:** national authorities will be obliged to create an SIS alert in cases related to terrorist offences and there will be a new 'inquiry check' to gather essential information.
- **Stronger provisions on missing children and people in need:** national authorities will be able to issue preventive alerts on persons who are in need of protection, in addition to existing alerts on missing persons.
- **Enforcement of entry bans:** it will now be compulsory to insert into SIS any entry bans issued to third country nationals, allowing their enforcement throughout the Schengen area.
- **Stronger data protection rules:** the agreed changes will strengthen the protection of personal data, by bringing it into line with the new general data protection regulation and the police directive on data protection.
- **Improved interoperability:** the reinforced SIS will make more efficient use of fingerprints, palm prints and facial images to identify suspects. The upgrades are also geared towards ensuring full interoperability of the SIS with other EU systems for migration, border management and security.
- **Enhanced access for EU agencies:** Europol will now have access to all alert categories in the SIS while operational teams from the European Border and Coast Guard Agency (Frontex) will be able to access SIS for the purpose of carrying out their tasks in hotspots and at external borders.

Evolution of VIS/BMS

During the first quarter of 2018, the decommissioning of BMS version 1.0 was achieved in order to release data centre space in the Central Unit (the main data centre in Strasbourg) and in the BCU. Furthermore, the implementation of the VIS/BMS end-to-end testing platform project was split into two phases. The first phase focused on the delivery of representative end-to-end VIS and BMS background databases connected to each other. The second phase dealt with the assessment, selection and implementation of new standardised testing tools, and the assessment of automated migration tools for the existing test cases. The impact assessment reports (IARs) were accepted and the specific contracts for the implementation were signed.

Continuing from 2017, the VIS transactional throughput project's IAR was finalised and the specific contract signed; implementation is ongoing. The project is handled together with the activities for tuning of the BMS transactional throughput, for which, as a first step, the virtualisation of the BMS pre-production environment and production platform were implemented.

The first step in the VIS database capacity increase from 60 million to 100 million visa applications was delivered and rolled out at the end of August, with capacity reaching 85 million visa applications. The final 100 million capacity will be delivered during the second half of 2019. A partial virtualisation of the core execution architecture of the system was also part of the changes embedded in this deployment. The installation of the new supplies has been completed and the

²⁰ Regulation (EU) 2018/1860 and Regulation (EU) 2018/1861, OJ L 312, 7.12.2018, p. 1-55; and Regulation (EU) 2018/1682, OJ L 279, 9.11.2018, p 13-14.

target configuration has entered the testing phase in the qualification environment. The builds of the production deployment overall and detailed procedures are progressing in parallel. As a continuation of a project launched in 2017, eu-LISA proceeded with the improvement of the VIS and BMS test environments by putting a second playground at the disposal of Member States. It delivered a new internal test environment and increased the overall capacity of that primarily used by the contractor, in order to better support the projects defined in the annual work programme. By the end of the year, the virtualisation of BMS had reached a level of readiness that would allow its completion in the first half of 2019. Significant progress was also achieved regarding the upscale of the BMS production and pre-production databases from 60 million to 85 million records, which aims to ensure the required capacity for business operations after April 2020 (the date by when the current ceiling capacity of BMS is forecast to be fully consumed).

Regarding the User Software Kit renewal, the legal assessment of the end-user licence terms and conditions is ongoing. VIS, SIS and EES requirements (the possible use of the tool for EES is under assessment) have been coordinated, taking into account the timeline of the activity.

No issues were detected at central level for VIS Mail, the communication mechanism allowing the transmission of messages between Member States using the VIS network infrastructure. Important elements for Schengen visa issuance, such as consultation and *ex post* notification, were supported, making a significant contribution to the security of the Schengen area procedures.

In 2018, eu-LISA participated, following invitations from the European Commission, in three Schengen evaluations in the area of the common visa policy (including VIS). eu-LISA supported the evaluations carried out at the Latvian consulates in Moscow, Russia, and Tashkent, Uzbekistan, in April; at the Finnish consulate in St Petersburg, Russia, and at the Service Centre for Entry Permits in Kouvola, Finland, at the end of May; and at the Estonian embassy in Astana, Kazakhstan, and at the Estonian consulate in St Petersburg, Russia, in October.

An overall evaluation of VIS was carried out in 2016 by the European Commission. It concluded that the system meets its objectives, but that new challenges in visa, border and migration management require further development in a number of areas. On 16 May 2018, the Commission submitted a proposal to amend the VIS regulation. Under the proposed new rules, VIS will include information not only on short-stay visas but also on long-stay visas and residence permits, as these documents allow free movement within the Schengen area. Registering these documents in a centralised database will help the authorities to verify their authenticity and validity. In addition, a digital copy of the biodata page of the travel document will be included in VIS. This will also facilitate the return of illegally staying third country nationals whose data may be stored in VIS, since, even if their travel document is not available at the time of return, a copy of it may be recognised by third countries as proof of nationality. Moreover, the list of recognised travel documents that entitle the holder to cross the external border will be integrated into VIS, in order to allow automatic verification of whether or not the applicant's travel document is recognised for this purpose.

Application support and testing activities

In 2018, eu-LISA delivered seven releases of core business systems (the large-scale IT systems under the operational management of the Agency). The most important releases were connected to the delivery of SIS AFIS Phase 1. Two releases were done for the maintenance of VIS/BMS (evolutive, adaptive and corrective), and one to increase the BMS database capacity. One release was also carried out to maintain Eurodac (corrective and adaptive maintenance). All releases underwent thorough testing prior to their deployment and ensured the continuous operation of the systems. Those intensive testing campaigns were successfully executed, lessons learnt were noted in recommendations/improvements for future projects. Various test design documents and test summary reports were delivered.

1.3. Secure communication infrastructure

During 2018, the European Commission handed over to the Agency its tasks related to the communication infrastructure of VIS (in June) and SIS (in December). eu-LISA was already responsible for the supervision, security and coordination of relations between Member States and the relevant network service providers. The Agency is now also carrying out activities related to the implementation of the budget, acquisition, renewal and contractual matters with regard to the VIS and SIS communication infrastructure. In the case of SIS, as agreed by all parties, the corresponding budgetary transfers will be completed in March 2019. The Commission will retain tasks related to the security measures and plan for the communication infrastructure of SIS until the entry into application of Article 16 of the new SIS regulations. In line with its new Establishing Regulation, the Agency will carry out in the future all the tasks relating to the communication infrastructure of the systems entrusted to it, with the exception of those systems that make use of the Eurodomain (i.e. currently Eurodac, and ECRIS-TCN once operational).

The Agency ensured that tasks related to the operational management of the communication infrastructure were performed in accordance with the SLAs. These tasks are entrusted to a private third party network provider that is bound by the security measures laid down in the legal instruments for the systems and in the Commission decisions on SIS II and VIS networks. As a result, the Member States and the core business systems received a reliable service from the communication infrastructure and the related communication systems.

The preparations for a new tender for the successor to the present TESTA-ng were initiated. An approved draft vision document from all stakeholders (eu-LISA, DG HOME, the Directorate-General for Informatics (DG DIGIT), the Directorate-General for Taxation and Customs Union (DG TAXUD), Europol and the Council of the EU) was finalised in summer 2018, in accordance with the schedule. Service requirements and service timelines have been agreed. While DG DIGIT will drive the tender works, eu-LISA will be the major user of the services under it. Therefore, the Agency's input into the preparations has been of the greatest importance. The Agency contributed to the drafting of the call for tender initiated by DG DIGIT.

The Agency continued to strive to optimise the communication infrastructure, aiming for a unified secure network for all systems under its management. The core business systems currently rely on multiprotocol label switching and on dedicated links and equipment. This leads to greater complexity and less flexibility. To achieve a more resilient communication infrastructure, and increase overall availability, a test phase for a unified network was initiated, following the completion of a study.

In order to increase the efficiency of the communication infrastructure's supervision, the Agency carried on with the introduction of advanced network statistics. This activity was conducted with a delay in the procurement process. It will allow eu-LISA to measure and evaluate the real performance of the communication infrastructure, with the aim of ensuring proactive reactions to 'bottlenecks' and faster troubleshooting of issues raised by Member States.

In order to ensure the proper functioning of SIS AFIS, the Agency was involved in the preparation of the necessary upgrade to the SIS II network. A two-step approach was followed, the first step involving upgrades to six sites and the second involving the overall upgrade. In the first step, the upgrades were completed at the primary sites in Poland, Portugal and Switzerland. Owing to a lack of rack space availability in the data centres, the upgrades in Austria, Germany and the Netherlands were carried out using an onsite build solution. For the overall upgrade, the contract was signed at the end of 2018 after long negotiations with the TESTA-ng provider. For budget reasons, the European Commission and eu-LISA opted for a slow-pace solution, with upgrades made to three sites per month.

1.4. Development and implementation of new systems

The successful start-up of the EES development was a key achievement of the Agency in 2018. The internal structures and governance models were established and tender procedures were prepared, including technical specifications.

Significant contributions were also made at various levels to new initiatives, namely ETIAS, ECRIS-TCN and interoperability. The operations department prepared a new organisational structure and operating model, in preparation for the upcoming new tasks and responsibilities.

EES

Following the entry into force of the EES regulation in December 2017, the Agency mobilised its resources for the development of the system. Recruitment for the new posts related to EES was completed. The technical team, consisting of 11 people, was built and on-board between January and April 2018. The recruitment of financial personnel has also been concluded.

The tender technical specifications were finalised, and the first phase of the EES tender was completed as planned. The second phase of the tender was launched on 9 October 2018. To facilitate the procedure, the Agency took into account deliberations in the Smart Borders Committee to incorporate already agreed requirements into the technical specifications. The preparatory work for the restricted tender procedure for a biometric system for EES was also concluded.

The EES Programme Management Board was set up, and its first official meeting was held on 3 May 2018 in Brussels. In accordance with the EES regulation, the PMB will have monthly meetings until the system is fully implemented. The EES PMB is composed of seven members elected by the Management Board of the Agency, one representative from the Commission, the Chairperson of the EES Advisory Group and one representative of the Agency.

The EES Advisory Group was also established and its chairman was appointed by the Agency. The EES AG held its first working meeting on 25 June in Tallinn. During the design and development phase of EES, the role of the EES AG is to provide technical expertise to support the tasks of the EES PMB, to follow up on and coordinate all related activities both centrally and at the national level and to provide support on various technical issues related to the development of the system. The EES AG will also follow up on and coordinate all activities related to adapting VIS and BMS for EES purposes, and will provide the Agency's Management Board with expert technical advice. The EES Advisory Group, chaired by eu-LISA, is composed of national EES project managers and includes Europol as well.

The Agency continued its broad and proactive support to the Commission and the Member States in the process of adopting the necessary implementing acts for EES. In particular, the Agency organised a series of meetings involving experts from Member States and the European Commission, addressing topics such as standards and the performance of the automatic biometric identification system.

ETIAS

The ETIAS regulations entered into force on 9 October 2018.²¹ eu-LISA is in charge of the development and the technical management of ETIAS, while Frontex will manage the ETIAS central unit. ETIAS comprises, among other aspects:

- a centralised system to process the applications;
- a national uniform interface in each Member State that connects the central system and the national infrastructures;
- a secure communication infrastructure between the central system and the national uniform interfaces;

²¹ Regulation (EU) 2018/1240 of the European Parliament and of the Council of 12 September 2018 establishing a European Travel Information and Authorisation System (ETIAS) and amending Regulations (EU) No 1077/2011, (EU) No 515/2014, (EU) 2016/399, (EU) 2016/1624 and (EU) 2017/2226, and Regulation (EU) 2018/1241 of the European Parliament and of the Council of 12 September 2018 amending Regulation (EU) 2016/794 for the purpose of establishing a European Travel Information and Authorisation System (ETIAS), OJ L 236, 19.9.2018, p. 1-73.

- a public website and a mobile app for mobile devices;
- an email service, as well as a number of tools for applicants, such as an account service, a verification tool and a tool to provide or withdraw consent for data retention beyond the general retention period.

Moreover, the European Commission tabled on 7 January 2019 two proposals (the ETIAS 'consequential amendments')²² to set out the technical amendments necessary to fully set up the ETIAS system by amending the legal acts of the EU IT systems that ETIAS will query. The proposals also sets out corresponding provisions and amend the ETIAS regulations accordingly. ETIAS is due to become operational by the end of 2021, and full implementation is expected in the course of 2022.

Prior to the adoption of the ETIAS regulations, the Agency was engaged in various preparatory activities, starting with the work on tender technical specifications initiated during the second quarter of the year. eu-LISA also participated in and contributed to a number of events to facilitate the required cooperation of the various ETIAS stakeholders. The development and operation of ETIAS will require the participation of international organisations and private entities (e.g. carriers), in addition to Member States, the EU institutions and EU agencies. On 26 April, eu-LISA hosted a trilateral meeting with the European Union Agency for Law Enforcement Training (CEPOL) and Frontex on the training requirements for EES and ETIAS. On 16 May, ETIAS was discussed during the eu-LISA industry roundtable event organised in Sofia, Bulgaria, inter alia to discuss the communication interface with carriers.

Following the adoption of the regulation, the Agency launched the recruitment of additional staff and supported the European Commission and the Member States in the creation of the necessary delegated and implementing acts, which were subsequently used to prepare tender technical specifications. In November, an interagency working group on ETIAS was kicked-off with Europol and Frontex. ETIAS delegated acts were also discussed at the first meeting of the ETIAS subgroup of the Expert Group on Information Systems for Borders and Security, which took place on 18 December.

In line with the ETIAS regulations, the remit of the EES Advisory Group has been extended to cover ETIAS activities. The EES-ETIAS Advisory Group will be chaired by eu-LISA until the entry into operation of both systems.

ECRIS-TCN

In the context of discussions on the proposal for a centralised system for the identification of Member States holding conviction information on third country nationals and stateless persons to supplement and support the European Criminal Records System, the Agency experts participated in meetings with the European Commission. A study was conducted to prepare the ECRIS-TCN technical specifications. This will be the basis for the Agency's future development of the system and the creation of the necessary implementing acts. eu-LISA also participated in meetings of the Expert Group on Criminal Records. This participation was particularly important given the changing views on the scope of the ECRIS-TCN system arising predominantly from the interoperability proposals and the ETIAS consequential amendments. Based on the outcome of the negotiations and the legislative developments, the system is expected to be more complex and highly available than was envisaged in the initially tabled proposal; therefore, its development and operational management will require additional resources.

The ECRIS-TCN regulation entered into force on 11 June 2019 and the development of the system is expected to start in 2020.

e-CODEX

Preparatory discussions on a future Commission proposal for e-Justice Communication via Online Data Exchange

²² COM(2019) 3 final and COM(2019) 4 final.

(e-CODEX) were held during 2018. A conference entitled 'The Future of e-Justice in the EU and New Technologies in the Service of the Judiciary', organised by the Bulgarian EU Council Presidency, took place in Sofia on 14-15 May 2018. The Executive Director of eu-LISA gave a presentation on how technology enables stronger border management and internal security in Europe: he pointed out that the focus of internal security and border management has shifted from physical to virtual matters and that very fast convergence between border management, internal security and migration management could be seen. In this respect, there should be a focus on a holistic approach, the facilitation of information exchange, the establishment of common standards and best practices, and enabling interoperability.

1.5. Towards interoperability of EU large-scale IT systems

Throughout 2018, the Agency supported discussions on the legislative proposals on interoperability tabled by the Commission in late 2017, in particular by providing technical expertise and advice as requested. In May 2019, the interoperability regulations were adopted by the co-legislators.²³ In addition, eu-LISA supported the Commission's technical workshops with stakeholders and experts, ensuring full and widespread understanding of the challenges and opportunities to be taken into account in appropriate decision-making. The Agency's experts participated in several meetings of various formations of the Council's DAPIX (the Working Party on Information Exchange and Data Protection), which focused on the proposals and on clarifying questions posed by delegations to support their analyses. The Agency also received a visiting delegation from the European Parliament's Committee on Civil Liberties, Justice and Home Affairs (LIBE) in March to discuss the legislative proposals for regulations on interoperability. The topics on the agenda included the relevance of interoperability of large-scale IT systems for facing today's challenges, and impacts on eu-LISA and the current large-scale IT systems. In September, an Agency expert participated in a discussion with MEPs at the European Parliament to further contribute to their analysis. With a view to the development of the Central Repository for Reporting and Statistics (CRRS) (slated for development in 2019 as part of the implementation of the interoperability regulations), the Agency convened a dedicated working group of EU JHA agencies, examining how the scope of the future development of the CRRS could best accommodate their needs and those of their stakeholder communities. Participants from six agencies (the European Asylum Support Office (EASO), Europol, Eurojust (the European Union's Judicial Cooperation Unit), the European Union Agency for Fundamental Rights and Frontex, as well as eu-LISA) attended. Three meetings took place in 2018. Further meetings will take place as necessary in advance of the development kick-off, expected to take place in 2019.

Given the significant changes expected in the coming years, it is critical that new developments and evolutions currently being planned and even under way proceed with full knowledge of the intended future state. This is particularly true for the development of ETIAS and EES. EES will be the first system to be built in an interoperable environment and the Agency will ensure that the anticipated future interoperability architecture is considered to the extent feasible. This will be the case when considering not only the secure communication channel between EES and VIS but also the development of its biometric system, which will be the basis for a shared BMS. Furthermore, the EES and ETIAS regulations foresee the development of data repositories for reporting and statistics that will constitute significant components of the aforementioned CRRS.

In this respect, in Q3 2018, the Agency launched its own study on a future overarching architecture for interoperable systems. The objectives include the drawing up of detailed arrangements for optimising, inter alia, functionality, security and the cost-effective maintenance and evolution of the future IT system setup, comprising existing and future systems as well as the anticipated interoperability components. The work conducted takes into account end-to-end processes and integrates the outcomes of the final report of the High-Level Expert Group on Interoperability, the European Commission's recommendations, the draft legal proposals on establishing a framework for interoperability between EU information systems and their impact assessments, the Agency's technology strategy and roadmap, the existing

²³ Regulation (EU) 2019/817 and Regulation (EU) 2019/818, OJ L 135, 22.05.2019, p. 27-135.

systems' interface control documents (ICDs), the draft or approved legal changes to existing systems and all feasibility studies conducted in 2016-2017 on the interoperability components.

The interoperability architecture study will be completed in the first half of 2019, establishing an important framework for the development of new systems, the technical components envisaged in the interoperability legislation and their interfaces with existing and future systems.

The possible development of a centralised router for the exchange of Advance Passenger Information / Passenger Name Records among Member States and the use of such information for checks against large-scale IT systems was proposed as an interoperability element of future interest by the High-Level Expert Group on Information Systems and Interoperability. The group suggested the delivery of a feasibility study, which was conducted by the European Commission between April 2018 and January 2019. eu-LISA was a member of the core study team and participated in several meetings on the matter throughout the year, in particular giving presentations at an induction workshop on 18 and 19 April 2018 and generally providing feedback to further progress related documentation.

Given the highly impactful nature of the interoperability proposals on a range of communities, the Agency also undertook significant efforts to communicate with all stakeholders on future planning and arrangements for coordinated work. In particular, the Agency's conference in October 2018 included substantial discussions on interoperability. Furthermore, planning for and work towards interoperability was presented to all of the Agency's Advisory Groups as well as its Management Board. Further outreach included presentations on interoperability to the Council's Visa Working Party (WP) and the SIS-VIS Committee.

1.6. Security

Security is a core element of all activities undertaken in an IT-focused organisation such as eu-LISA, not only for legal reasons but also given its role as a centre of excellence in the provision of IT services, emphasising the security of systems and information. During 2018, the Agency's security function continued to maintain and upgrade measures concerning physical security, personnel security and system security. As a core element of its information security management framework, the Agency established, operated and continuously developed its Information Security Management System (ISMS), in compliance with the relevant ISMS standards and International Organization for Standardization (ISO) standard 27001. The Agency's security policies and procedures were also further developed and improved, incorporating security standards and procedures based on the relevant policies and standards of the European Commission. As part of the ongoing assessment of the effectiveness of the security management framework, the Agency has identified a number of critical areas for improvement, which are reflected in the results of corporate KPIs 1 and 2. These improvement actions are being actively analysed and it is planned to implement them as part of the security management process cycle.

To ensure that the central systems of Eurodac, VIS and SIS continue to comply strictly with the requirements of their respective regulations in terms of data protection and security and with international best practices in terms of information security, the Agency continued to strengthen and upgrade the security framework and procedures for the organisation itself, the systems under its management and the relevant communication networks. Continuous monitoring and management of the residual risks took place throughout the year to provide assurance that the appropriate security controls for the IT systems under eu-LISA's management had been properly implemented and managed. All critical issues identified are treated through a combination of corrective actions and compensating controls. In particular, for SIS, the implemented security, business continuity, disaster recovery, incident management and other IT operations-related measures or processes were tested in October 2018 through an operational exercise in cooperation with nine Member States.

Cooperation with the Member States and other EU agencies has been maintained at the level of exchange of knowledge and best practices through the biannual meeting of the Security Officers' Network. The group of experts, chaired by eu-

LISA's Security Officer, focused on topics such as incident management, system security, data protection, business continuity and risk management based on the EBIOS (Expression of Needs and Identification of Security Objectives) 2018 methodology, and on how security is organised in different organisations to ensure continuity and intervention in case of incidents.

1.7. Data protection

The year 2018 was a crucial one for the Data Protection Officer (DPO), with the entry into force on 11 December 2018 of the new data protection rules for EU institutions and bodies.²⁴

Awareness-raising sessions among staff members were intensified over the course of the year, aiming to ensure that all staff members had the knowledge and tools to put the new rules into practice. Encouraging the development of a culture of accountability within the Agency was a 'pivotal' goal. A DPO mobile application was developed to increase awareness of data protection issues among eu-LISA's employees. It was released in September on both Android and iOS platforms. The eu-LISA DPO application offers users quick access to the general principles of data protection at eu-LISA, to the applicable legislation and to specific data protection documents (e.g. personal data breach incident reports).

Over the year, the number of notifications to the DPO increased, starting to reflect the growing maturity of the Agency and the need to comply with the new legal obligations, in particular the obligation to properly notify the DPO of any processing operations involving personal data. To help with this, the DPO extended the catalogue of specific guidelines and policies, including the data protection breach policy, which now covers operational data from the core systems.

Among the DPO's activities, special attention was given to the review of the legal bases for the new large-scale IT systems entrusted to eu-LISA. The DPO participated in the 43rd DPO Network Meeting and the 4th JHA Agencies DPO Network Meeting in order to prepare for the requirements stemming from the new data protection rules.

In relation to the above, security by design and privacy by design principles were implemented by embedding security and data protection artefacts and control points within the project management methodology used by the Agency.

1.8. Reporting and statistics

The Agency entirely fulfilled its legal reporting obligations in 2018 as far as the statistical reports and the reports on the technical functioning of the systems were concerned.

In accordance with the legal provisions, in 2018 the Agency published the following reports:

- SIS II 2017 annual statistics, published and submitted to the EU institutions in April 2018;
- SIS II updated list of authorities, adopted by the MB in May and published in the *Official Journal of the European Union*, C 226, 28 June 2018;
- Eurodac 2017 annual statistics, published and submitted to the EU institutions in April 2018;
- Eurodac updated list of authorities, adopted by the MB in May and published on eu-LISA's website in May 2018;
- Eurodac 2017 annual report, adopted by the MB in August, published and submitted to the EU institutions in August 2018;
- VIS report on technical functioning (covering October 2015 to September 2017), adopted by the MB in July 2018, published and submitted to the EU institutions in August 2018.

²⁴ Regulation (EU) 2018/1725 of the European Parliament and of the Council of 23 October 2018 on the protection of natural persons with regard to the processing of personal data by the Union institutions, bodies, offices and agencies and on the free movement of such data, and repealing Regulation (EC) No 45/2001 and Decision No 1247/2002/EC, OJ L 295, 21.11.2018, p. 39-98.

1.9. Provision of systems training to Member States

In 2018, eu-LISA delivered at various scales and in various formats 39 training sessions related to SIS II, VIS, Eurodac and horizontal topics. Horizontal topics included two 'Train the trainer' sessions, closing the Development Training Programme for IT Operators (DTPITO), and one training session on Eurodac and SIS II under the umbrella of EMPACT. The training plan established at the beginning of the year anticipated the delivery of 31 training sessions. During the year, 10 additional training sessions were delivered, accommodating requests submitted by Member States or suggested by eu-LISA. Following the Management Board decision to deprioritise activities related to access for Romania and Bulgaria to VIS, two planned courses for VIS newcomers from Bulgaria and Romania were postponed. Compared with 2017, the total number of eu-LISA training sessions decreased by 7 % (from 42 training sessions in 2017 to 39 in 2018).

In 2018, 22 e-courses were developed and the contents of 9 e-courses were updated. The majority of the new e-learning products were related to horizontal topics (39 %), followed by Eurodac (24 %), SIS II (20 %) and VIS (17 %). Currently, all training courses in the eu-LISA training portfolio have an e-learning component integrated into their curricula. In order to further support the DTPITO certification process, in addition to the existing test questions on SIS II, new tests were developed for Eurodac and VIS DTPITO; there are currently more than 700 system-related test questions in the eu-LISA training database.

The year 2018 saw a milestone for eu-LISA's Member State training activities, as this year all training delivered to the Member States had e-learning support. The National Contact Points (NCPs) have access to all training courses in eu-LISA's learning management system (LMS) so that they can observe and support the participants. The network of NCPs also has its own space in the LMS, to provide and share news, up-to-date training plans and quarterly training reports.

Finally, in 2018, the process of updating eu-LISA's training strategy was completed. The updated training strategy aligns the training-related activities with the Agency's long-term strategy for 2018-2022. The document was adopted by an MB decision of 21 March 2018.

Activities under Strategic Goal 2: 'Become an acknowledged ICT centre of excellence and service provider'

Continued progress towards becoming a centre of excellence in ICT services and corporate governance

Since the very earliest days of the Agency, one of the main objectives set for it was to grow and become a centre of excellence. Achievement of this objective requires significant effort and dedication and involves various building blocks. One of the most important is the internal governance model and process.

Enterprise Project Management Office

One of the important decisions made when the Agency was set up was to establish a project management office (PMO). This was essential because of the requirement set out in Article (2)(g) of the initial establishing regulation (still in force in 2018), requiring the Agency to 'use ... an adequate project management structure for efficiently developing large-scale IT systems'. Because of the increasing need for a more strategic alignment between the benefits of a traditional PMO and the requirements of the internal governance of the Agency, the Enterprise Project Management Office (EPMO) was established at the end of 2017. EPMO's mission was to integrate and monitor all eu-LISA projects and to contribute to the internal governance of the Agency to ensure transparency, accountability and the deployment of industry standard best practices. The establishment of EPMO resulted in better compliance with the Agency's legal mandate and increased stakeholder satisfaction. In 2018, eu-LISA completed the first phase of the work to build EPMO's capability to further promote and implement best practices, standardise processes, and deploy project and portfolio

management methodologies to effectively manage project resources and project goals.

Article 29 of eu-LISA's financial regulation stipulates that projects requiring significant expenditure are subject to an *ex ante* evaluation prior to approval and inclusion in the Agency's annual work programme.

In 2018, EPMO, as an independent organisational entity, was mandated to perform *ex ante* evaluations for the qualifying significant expenditures planned for implementation in 2018, 2019 and 2020 as part of the annual work programmes. The methodology for the selection of projects for *ex ante* evaluation was prepared by EPMO and adopted by the Management Board.

Based on a review of eight projects' business cases, the underlying information and a series of interviews with key stakeholders, the EPMO evaluation team produced three project evaluation reports that were presented to the Management Board in November 2018.

IT service management

eu-LISA kept on developing and strengthening its ITSM framework, following ITIL standards and best practices. The Agency maintained and refined its internal processes and defined services related to the operational management of the systems.

The ITSM Phase 2 project was launched in November 2017 and continued in 2018. During this phase, four new processes were defined and implemented: knowledge management, continuous service improvement management, availability management and capacity management. The knowledge management process was defined and is in the phase of gradual implementation. Its purpose is to structure eu-LISA's key knowledge artefacts and make them usable by and easily accessible to stakeholders. The continuous service improvement management process was also defined and is in the process of implementation. It is a key element for efficient quality management, as it establishes the practical means needed to identify improvements. Part of the continuous service improvement management process is the application CSI Register, already available. Using this application, eu-LISA will collect, properly assess and follow up in a transparent and structured way the identified improvements. Part of this process is the established eu-LISA measurement tree, which will guarantee that all metrics, measurement goals and relevant reports are aligned. This in turn will significantly facilitate the overall measurement of the Agency's goals and objectives, by setting targets and monitoring their achievement. In close relation to the continuous service improvement management process, the project to create an advanced reporting solution was launched at the beginning of 2018, starting with a study phase. The study phase was successfully finalised by mid-2018, and a provider for the solution suggested.

Necessary improvements in eu-LISA's integrated ITSM tool were introduced throughout 2018, addressing the requirements related to the new processes. A project to give contractors access to the tool was also carried out. This was necessary to simplify everyday communication with the contractors and enable more efficient reporting of their performance, based on operational SLAs and KPIs.

In addition to strengthening the process model, eu-LISA successfully improved its service model, based on the eu-LISA Service Catalogue review and update, completed in 2018. It will guarantee that up-to-date descriptions of eu-LISA's services are provided to stakeholders.

All the 2018 updates and achievements will significantly increase the efficiency of everyday operational activities and facilitate the measurement and reporting of performance against the SLAs and KPIs. They demonstrate the steady commitment of the Agency to service quality and cost-effectiveness improvements. eu-LISA will continue to improve the efficiency and effectiveness of its ITSM processes and service model: further coordinated integration of ITSM processes will provide additional control and greatly improve eu-LISA's services.

Growing the Agency's technology and business expertise

Change management

The change management process ensures a coordinated and transparent approach to the identification, assessment and implementation of necessary changes in the systems managed by the Agency, to ensure that they are in line with the needs of the Member States and changes to the legal instruments governing them. It is a consolidated and well-functioning process, in which the first-rate contribution of the Member States helps the Agency to enhance existing applications and support future evolutions. In 2018, the annual report of the Change Management Group was presented to the Advisory Groups, receiving favourable responses from Member States.

Following the adoptions of the EES and ETIAS regulations, and in anticipation of the upcoming adoption of the ECRIS-TCN regulation, the Change Management Group started to assess the changes needed to make VIS and SIS II interoperable with these new systems.

In 2018, eu-LISA received 14 new change requests on SIS (and closed 3), 8 new change requests on VIS and BMS (and closed 3) and 8 new change requests on Eurodac (and closed 5).

Compared with the previous year, the total number of new change requests received in 2018 decreased for the three platforms. However, the complexity of the new change requests to be assessed for implementation is increasing every year. The reason for this is that the 'clean-up' process of implementing simple changes has already been completed, and therefore only complex changes have emerged recently. The effort required on the part of both the Member States and eu-LISA has slightly increased because of this increase in complexity and the impact that these changes have on central and national systems. One example is the new International Civil Aviation Organization (ICAO) 2015 enhanced specifications, which affect VIS and SIS II and which have been under assessment since February 2018; the necessary changes will be implemented in September 2019.

Thanks to the excellent cooperation between Member State experts and eu-LISA within the Change Management Group, agreement has always been reached on the proposed technical enhancements and on the actions to be taken to implement the requested changes. Cooperation with Member State experts has increased over recent years, starting with work on Eurodac, for which important usability enhancements were proposed. For VIS, Member State experts contributed to the impact assessment on making the platform interoperable with EES. And for SIS, they contributed to the identification of a smart approach to make the system's transliteration compliant with the ICAO 2015 specifications.

eu-LISA, by adopting a single, consistent change management process, has introduced a more coherent and auditable approach to system evolution and maintenance. Considerable efforts have been made by the Agency to review and improve the change management process in close collaboration with Member States and the European Commission, an activity planned for continuation in 2019. The Agency also consulted the DPO and the Security Officer on the changes proposed to the change management process, following the PRINCE 2 (Projects in Controlled Environments) methodology.

Test management

eu-LISA started activities towards the implementation of an end-to-end testing platform for all core business systems. An IAR has been drafted and validated for the implementation of the standardised testing tools. A detailed design for the technical solution was requested from the contracting party and subsequently delivered, reviewed and, towards the end of 2018, accepted. The actual implementation of the tools will happen in the first half of 2019 and ensure the timely testing of EES.

Monitoring of technology

The 'monitoring of technology' function continued to explore relevant technological developments in 2018, in

accordance with the annual roadmap drawn up and presented to the Advisory Groups. It reported on the outcomes of its work to internal and external stakeholders.

Priorities for 2018 included biometrics, system architecture modelling, interface and gateway design, and artificial intelligence. Research monitoring on technologies to enhance data quality also underpinned significant work undertaken as the Agency coordinated the action plan on data quality approved under the information management strategy action list. Addressing the work of the JHA agencies group on interoperability and CRRS, a discussion paper, 'Assuring high quality of data in the Central Repository for Reporting and Statistics (CRRS)', was compiled and disseminated.

A report on distributed ledger technology (of which blockchain is the most well-known implementation) was prepared and possible use cases mapped. The final report will be distributed in 2019.

To ensure that stakeholders are continuously updated on developments in technology and that the information exchange necessary for community capacity building takes place, the technology monitoring function also supported the organisation/delivery of:

- two industry roundtable events, with the first being held in Sofia with the support of the Bulgarian EU Council Presidency;
- the Agency's annual conference, held in Tallinn in cooperation with Frontex and under the aegis of the Austrian EU Council presidency;
- a panel discussion at the European Police Congress in February 2018 in Berlin;
- various presentations at topical conferences held by other stakeholders.

More details on the above events can be found in the 'Partnership with the industry' and 'Further strengthening external communication' sections.

The scope of the research function was expanded significantly with the approval of the new eu-LISA regulation in November 2018. The function is now responsible for the implementation of parts of the EU framework programme for research and innovation as well as for monitoring developments in research on the operational management of large-scale IT systems in the area of freedom, security and justice. This requires the creation of a new strategy for optimisation of efforts. The Agency has already set about planning for this renewal of practices and approaches, undertaking an extensive outreach exercise among stakeholders both internally and externally to assess how expectations and demands can best be met. The outcomes of this work will feed into the drafting of the strategy in 2019.

Technology strategy

It is a challenge for the Agency to operationally manage large-scale IT systems on different platforms, in terms of applications, infrastructure and relevant tools. This situation led to a clear need to create economies of scale, while ensuring service delivery, security and additional flexibility. The Agency therefore completed in 2016 an initial technology strategy study, with a proposed technology target state and a 5-year implementation roadmap.

When the results of this study were presented to the Management Board in 2017, there was a general endorsement of the approach. However, it was deemed necessary to conduct an additional follow-up study, aimed at revising the implementation roadmap and conducting a cost-benefit analysis. This complementary follow-up study was successfully completed in March 2018. The revised eu-LISA technology strategy was subsequently presented to and adopted by the Management Board, defining the following five key areas for improvement:

1. consolidate and virtualise infrastructure;
2. rationalise and redesign applications;

3. streamline delivery processes driven by automation;
4. standardise monitoring and operations;
5. enhance security processes.

Moreover, the associated cost-benefit analysis provided guidance for the budgetary exercise related to the aforementioned areas of improvements.

Finally, the assessment of eu-LISA's operating model, conducted as part of this study, concluded that the increased maturity of core in-house capabilities and improved knowledge sharing and standardisation would be key for eu-LISA in the context of the extension of its mandate. In addition, it was recommended that eu-LISA should formalise its delivery model and explore opportunities for new delivery methods. These actions would allow eu-LISA to become more efficient and put an operating model in place that would be suitable for the execution of the technology roadmap and for eu-LISA's reinforced mandate.

Activities under Strategic Goal 3: 'Grow as the principal EU ICT technology centre and hub of expertise'

Partnerships with the Member States, EU institutions and other stakeholders

The Agency continued to closely monitor and, when requested, support with its technical expertise negotiations on various initiatives, both in the Council of the EU and the European Parliament. This facilitated the adoption of the new Agency regulation, the SIS reform package and the ETIAS regulation. It also contributed to progress in negotiations on other initiatives, such as the interoperability package and the ECRIS-TCN regulation, and eu-LISA also provided support to the European Commission with regard to discussions on the proposals for the recast VIS regulation and the new Eurodac regulation.

With regard to the implementation of the EES regulation, which was adopted and entered into force in 2017, the Agency continuously provided support to the European Commission and Member States in relation to the preparation of the implementing acts for EES and actively participated in discussions in the Smart Borders Committee. The EES governance bodies have been established: the EES PMB and AG began their meetings in May and June 2018 respectively. One additional working group, for ICT solutions for Member States with external land and/or sea borders, was also established under the umbrella of the EES AG and held its first meeting in November 2018. eu-LISA also supported the European Commission by participating in the readiness missions in which 12 Member States (Austria, Belgium, Estonia, Finland, France, Germany, Hungary, Italy, the Netherlands, Poland, Spain and Sweden) were visited. The objective was to discuss the need for a coherent approach in the context of national preparations for the implementation of EES and the revised SIS, as well as, in future, ETIAS and interoperability.

The EES, Eurodac, SIS and VIS AGs continued to provide the necessary platforms for cooperation with Member States and associated countries, with the involvement of representatives of Europol, Eurojust and the European Commission, enabling the exchange of relevant technical expert advice and support on issues relating to the evolution and/or development of various systems.

eu-LISA provided input and substantial contributions to the relevant discussions of various Council working parties and committees (in particular the Schengen Matters (*Acquis*) WP, the SIS/SIRENE WP, the Asylum WP, the Visa WP, the Standing Committee on Operational Cooperation on Internal Security (COSI) (including the COSI Support Group), DAPIX (various formations), the WP on Cooperation in Criminal Matters (with regard to ECRIS-TCN), the Frontiers WP and the Strategic Committee on Immigration, Frontiers and Asylum). eu-LISA also worked in close cooperation with the European Commission (e.g. DG HOME, the Directorate-General for Justice and Consumers) and the various committees

of the European Parliament (e.g. LIBE, the Committee on Budgets, the Special Committee on Terrorism). The Agency worked closely with the Bulgarian and Austrian Presidencies of the Council of the EU by providing expertise and advice when requested. Likewise, the Council Presidencies contributed particularly to the Agency's flagship events with stakeholders: the annual conference in October and the industry roundtable events, which took place in May in Sofia and in October in Tallinn.

Fully in line with the provisions of its legal basis and the expectations of its stakeholders, eu-LISA continued to improve the EU's internal security position. This included, inter alia, coordination of the action plan on data quality under the 6th information management strategy action list discussed in DAPIX and activities carried out under the EMPACT priorities. The Agency was actively engaged in three EMPACT operational actions plans, namely on firearms, attacks against information systems and facilitation of illegal immigration. In the context of the EMPACT priority area facilitation of illegal immigration, eu-LISA organised training for Member State experts and prepared an online module focusing on the use of SIS and Eurodac to tackle human smuggling cases.

Other stakeholder events with cooperation partners were held to present the Agency's mandate and enable an exchange of views on the Agency's activities and plans. A meeting was held with the Heads of Diplomatic Missions on 4 April in Tallinn, with the JHA Counsellors on 10 April in Brussels and with LIBE members on 24 April 2018. eu-LISA organised, in addition to planned visits and briefings, several high-level meetings with representatives of the Swedish Ministry of Justice's Criminal Policy and e-Justice Department, with the Director of Strategic Initiatives and Global Case Management System Coordination of Canada, with the State Secretary at the Federal Ministry of the Interior of Germany and with the European Commission's Director-General for Migration and Home Affairs. Furthermore, the Agency also managed to organise thematic expert discussions, for example on identity management and biometric data sharing with the International Organization for Migration in September.

The entry into force of the Agency's new regulation on 11 December 2018 will have a positive impact on the Agency's future relations with stakeholders. The strengthened mandate gives the Agency an expanded role in, inter alia, research, assurance of data quality in IT systems, and pilot projects, proof of concept and testing activities, which will result in closer and more active cooperation with the various stakeholder groups. The new legislation will also bring new opportunities to reinforce cooperation, to deliver proactive advice and to provide additional support and assistance to the European Commission, Member States and other JHA agencies, as well as to work more closely with international organisations. Further to the new legal framework, the Agency also adopted in December 2018 a revised stakeholder management strategy for 2018-2022, aiming to define strategic goals for stakeholder management and providing a structured approach to achieving them.

Partnership with other agencies

In 2018, eu-LISA continued its participation in the activities of the JHA Agencies Network, which was chaired by the European Institute for Gender Equality (EIGE). eu-LISA actively contributed to the topics 'Combating human trafficking, in particular of children', and 'Meeting the digital challenge for girls and boys', as SIS supports the protection of vulnerable groups, including minors. Training and ICT cooperation among JHA agencies were the two other most important themes for the Agency.

As regards ICT cooperation in particular, eu-LISA hosted, on behalf of EIGE, a meeting of JHA agencies' ICT and security experts in Brussels on 13 September 2018. The meeting covered topics such as the exchange of classified information, the exchange of non-classified sensitive information by encrypted email, document management between JHA agencies and digitalisation. The discussions on these topics of particular importance to JHA agencies will continue during Europol's chairing of the network in 2019.

In advance of the annual Heads of JHA Agencies' Meeting in November 2018, eu-LISA provided input into the network's final report for 2018, highlighting in particular the evolution of existing systems and preparatory steps towards

implementing new systems and the interoperability architecture.

In the context of establishing interoperability among European IT systems in the area of freedom, security and justice, eu-LISA hosted meetings to share information on the future CRRS. Two meetings were convened at eu-LISA in 2018 to identify the needs of JHA agencies as regards CRRS. The agencies expressed their need for statistical information for the purpose of their analytical products and trend reports. A joint assessment was needed to determine how eu-LISA could assist other agencies in relation to their analytical products, considering existing and new legislation as well as data protection provisions.

Two-year cooperation plans were agreed and signed on a bilateral basis with EASO, CEPOL and Frontex, for the period 2017-2018. A working arrangement between eu-LISA and the European Union Agency for Cybersecurity (ENISA) was finalised in 2017 and signed on 10 January 2018. ENISA continued to support eu-LISA in security exercises as regards planning and technical platforms, for example during the SIS II exercise.

Several projects were carried out involving regular information exchange with partner agencies. eu-LISA's technical site in Strasbourg provided the backup service for EASO's technical equipment, and the Agency supported Frontex's preparations for the launch in 2019 of its backup site in Strasbourg.

eu-LISA participated in and contributed to the EU Agencies Network, attending the Heads of Administration and Heads of Agencies meetings as well as several subgroups, primarily the Inter-agency Legal Network, the Heads of Communication and Information Network, the Performance and Development Network and the ICT Advisory Committee.

Partner agencies were invited to the eu-LISA annual conference in October 2018 in Tallinn and to the industry roundtable events in May in Sofia and in October in Tallinn.

Partnership with the industry

Industry is a key stakeholder for the Agency, supporting its work in the delivery of high-quality technical solutions. Furthermore, monitoring the efforts of the industry in the research domain represents an important element of the general research monitoring efforts at the Agency, in accordance with its establishing regulation. Efforts to engage this group continued in 2018 as in previous years, with the tenets of community, transparency and constructiveness guiding the work.

The Agency hosted two industry roundtable events. The first focused on streamlining information exchange at the EU's external borders, included substantial discussion of future communications with carriers in the context of EES and ETIAS, and brought together carriers themselves as well as solution providers and Member State representatives. It was hosted on 16 May at the European Commission's premises in Sofia, Bulgaria, with strong support from the Bulgarian Presidency of the Council of the EU. The second event examined technologies facilitating land border crossings and took place in Tallinn on 18 October, the day after the Agency's annual conference. Some 70 participants were present at the first meeting and almost 100 at the second, reflecting the industry's strong support for such events generally and the spirit of constructive cooperation with the industry that the Agency has established. Notices of all events are posted in advance on the Agency's website and short summaries made available afterwards, ensuring that all parties are aware of the events and all information shared equally.

Research monitoring work is further reinforced by the work undertaken in partnership with research and advisory industry partners with whom the Agency has relevant contracts. By engaging such parties on a regular basis in relation to developments in technology of relevance to the Agency, staff are kept fully aware of technological developments and share such knowledge internally and externally.

Activities under Strategic Goal 4: 'Develop a modern, efficient and agile organisation'

Strategic and operational planning

The Agency is putting substantial efforts into maintaining and improving its planning and programming processes, including strategy planning and multiannual and annual programming. It continuously improves its corporate IT planning tools and provides relevant training. As part of these efforts, the Agency has developed and embedded in its planning process the *ex ante* evaluation of activities with substantial impact, as mentioned in the section on EPMO above.

At the beginning of 2018, eu-LISA delivered its Consolidated Annual Activity Report 2017, which received a positive opinion from the AGs and was adopted by the MB in March. In the course of the year, the Agency delivered to the MB an implementation report to ensure that it was informed on the implementation of the activities planned for 2018.

In February, the Agency organised a specialised training session on business case development to strengthen its capacity to plan projects and to make them suitable for thorough *ex ante* evaluation. To support the planning process, the Agency significantly evolved its sophisticated planning application, which further reduced the likelihood of technical mistakes and improved quality.

The year 2018 was also the first year of implementation of the Agency's updated long-term strategy, covering the period 2018-2022. In this respect, no new strategic analyses were carried out except with regard to the organisational structure, which led to a new structure for the Agency being adopted by the Management Board.

eu-LISA's Programming Document 2019-2021 was presented to the Management Board in November 2018 and was adopted in December 2019. The Agency, in cooperation with the European Commission, successfully delivered the first draft of its Programming Document 2020-2022 to the Advisory Groups in October and to the Management Board in November 2018 for their review. In December 2018, the AGs gave a positive opinion on the document.

At the same time, the Agency continued to strengthen its relationship with the Advisory Groups, in particular by involving them in the earliest stage of its annual planning cycle, in order to increase the efficiency of the planning process and utilise as much as possible the groups' technical expertise.

Evolving the Agency's governance framework

The governance framework ensures that statutory requirements and relevant business needs are met and that the Agency adheres to, practises and delivers good governance in its actions and activities. The Agency's governance framework includes several elements: stakeholder consultation and management, corporate risk management, corporate KPI performance management, internal control management and legal advice. A dedicated planning and reporting process is used to support the Agency and its stakeholders with a clear and transparent approach for delivering its results.

The governance model, processes and procedures are established in a robust yet agile way, based on the eu-LISA Service Catalogue and lower level process documentation. This ensures that stakeholder needs are identified, evaluated and further incorporated into organisational objectives. It also provide a framework for the Agency to take up new or amended activities and tasks for the coming years. For this purpose, the Agency's governance approach will be maintained and fine-tuned if needed, and new requirements will be gradually incorporated to enhance its continuous contribution to and added value for the Agency and its stakeholders.

As a continuation of the 2017 quality management exercise, performed by applying the common assessment framework methodology, eu-LISA implemented the agreed measures for maintaining and improving quality in its processes and activities. A quality improvement plan was presented to the Executive Director in April 2018, detailing the quality improvement actions planned for the period 2018-2019. During 2018, several milestones in the plan were reached,

helping to achieve smoother organisation.

The Agency's transformation programme: eu-LISA 2.0

In 2018, the Agency launched a transformation programme with the aim of delivering a new organisational structure, suited to the new eu-LISA mandate. This programme, named eu-LISA 2.0, has been designed to ensure that the reorganisation project is open, transparent and involves eu-LISA's staff.

The programme was initiated following the assessment that the Agency would face a dual strategic challenge in the period 2019-2021 and beyond. On the one hand, the Agency will need to continue delivering on its core operations, while, on the other, it will significantly increase its contribution to Member States and the EU as a whole, through the implementation of new systems and services.

The Agency therefore evaluated how it had been organised in the past 5 years to lay the foundation for its future successes. The new organisational structure has been designed to address all the challenges identified. It will introduce a number of improvements, for example to enhance business knowledge, planning and strategy alignment. The interfaces between the various entities will be improved and collaboration between teams and units/departments will be fostered. The number of leadership positions (head of unit / head of sector) will increase and the Leadership Development Programme will support efficiency and effectiveness.

New functions will be added to help develop synergies, such as an architecture function, supporting the technology strategy and looking for solutions across systems, as well as an operational planning function and a customer and stakeholder management function.

The new organisational structure is planned to be rolled out from September 2019 and be completed by 2020.

Financial management

The Agency continuously developed and strengthened its internal financial processes and procedures, to ensure the transparent and effective management of its available financial resources. The elements necessary for the future deployment of activity-based budgeting were established, along with continuous monitoring and development of the Agency's financial and procurement procedures.

eu-LISA made a renewed effort to plan for the future, especially in the budget and procurement areas, and to embrace change in its processes: 2018 has seen a progressive shift from paper to electronic workflows — using the EU-wide Advanced Records System, or ARES — for most processes in the finance, budget, asset and procurement areas. The Agency also introduced e-procurement. The re-engineering of processes is a key factor in ensuring the continued success of the Agency, as it is becoming clear that the new tasks and consequently increased workload will not always result in a corresponding increase in staff, especially with regard to corporate functions.

Procurement

The Agency's procurement activities were streamlined through the consolidation and reinforcement of financial and procurement procedures, and the drafting of relevant standard operating procedures for operational initiating agents, including steps towards introducing e-procurement tools. Support for contract management proved to be particularly intense, especially in relation to complex contracts such as those that are systems related and with regard to follow-up work linked to the Strasbourg technical site.

Logistics and facilities management

The Agency's move to its new premises in Tallinn was a major achievement in 2018. Prior to the move itself, a considerable amount of effort was put into the logistical and organisational operations needed to gain official

authorisation to occupy the newly constructed building in Tallinn and the refurbished building in Strasbourg.

These goals were achieved and the Agency moved into its new headquarters building in Tallinn during the summer of 2018. The contract for the construction had initially been signed in March 2017, between Estonian State Real Estate Ltd and the construction company Fund Ehitus. In July 2018, the Estonian Ministry of the Interior passed the building over to the Agency. On 19 September, eu-LISA celebrated the opening of its new headquarters with an inauguration event. Representatives of eu-LISA's governing bodies, the EU institutions, EU agencies and the Estonian government, as well as eu-LISA's staff, took part in the festivities.

The building features a new and redesigned corporate IT data centre and an online building management system. In addition, activities were carried out to re-establish required corporate services in both new facilities, such as cleaning, waste disposal, supplies and post, and a new framework contract for the provision of furniture was signed.

New facilities were also inaugurated at the Agency's technical site in Strasbourg, on 20 November 2018. In 2013, eu-LISA received the former Centre du Système d'Information Schengen from the French government and continued to run the Agency's large-scale IT systems from there. Following the award of a contract in 2015, construction of the new building started in early 2016. Staff moved into the new building in August 2017. The building, handed over to the Agency in 2017, provides accommodation for existing eu-LISA staff and contractors, including a welfare and training facility. In addition, the main goal of rebuilding was to have a fully upgraded data centre facility, which eliminated single points of failure and increased the power, cooling and ventilation capacity of the IT services infrastructure to meet current and forecast IT system requirements. Following this renovation, the technical site can host up to 185 people.

Corporate IT management

In addition to the headquarters building's new data centre, the main priorities in 2018 were the maintenance and evolution of the Agency's corporate network, corporate system and storage architecture, as well as the re-establishment and rehabilitation of services and corporate IT systems and applications (e.g. Microsoft SharePoint, Microsoft Project Server, dedicated tools for document and HR management).

The main activities delivered in 2018 included the procurement of new IT data centre items and the relocation of the existing IT data centre, the deployment of landline telephony, the installation of proxy redundancy, the modernisation of identity management, an upgrade to the email server, the launch of the new records management system (ARES) and the new e-recruitment application.

Owing to the use of resources mainly for the project to relocate the Agency's headquarters in Tallinn, two major projects are still ongoing and are expected to be completed in 2019. First, the enhancement of the conference rooms in Tallinn and Strasbourg with advanced audio-visual equipment will be finalised by the end of 2019. Second, the automated storage backup — with regard to which, apart from the lack of resources, the complexity of the new backup application had not been envisaged — will be completed by mid-2019.

Human resources

The Agency focused on ensuring optimal use of the human resources available to it to achieve its strategic goals and operational plans. Key priorities included the finalisation of recruitment of the additional staff for EES and the start of recruitment for ETIAS, the SIS recast and the additional staff envisaged in the new eu-LISA regulation.

The Agency reviewed the implementation of its HR strategy and staff retention policy and started work on the implementation of the health and safety policy that was developed in 2017. Preparatory work for the procurement of medical services at the Agency's premises was started and should be concluded in 2019.

eu-LISA continued to consolidate and improve its internal processes and services for recruitment, staff development, training, personnel administration and payroll. The development and implementation of new HR IT tools were carried

out (e.g. Allegro, Sysper, i-Learn), and data-driven decision-making has been implemented for learning and development.

eu-LISA further strengthened its culture of excellence through technical and non-technical targeted development programmes for staff.

The staffing situation of the Agency in 2018 is presented in Section 2.4, 'Human resources management'.

Further strengthening external communication

The 2018 external communication and information activities focused on two of the three high-priority areas of the Agency as listed in the Programming Document 2018-2020:

- operational management and evolution of the existing systems;
- introduction of new systems.

All the 2018 priorities for eu-LISA external communication and information were carefully followed and the set objectives fully reached:

1. to raise awareness among stakeholders and citizens about **eu-LISA's enlarged mandate and responsibilities and its new offices** (the latter involving selected target groups);
2. to increase the visibility of the Agency among stakeholders and citizens through a **modernised website and novel multimedia communication formats** (animations, infographics, data visualisation information products);
3. to make all the **high-quality corporate publications** of eu-LISA available, in line with the requirements of the established linguistic regime, in a timely manner.

Tasks relating to maintaining a regular and active online presence, providing well-coordinated input to awareness-raising events organised under the aegis of the Austrian EU Council Presidency and timely publishing of good-quality corporate and awareness-raising publications were all performed with success. The highlights of the year were the conference 'EU Borders — Getting Smarter through Technology', organised jointly by eu-LISA and Frontex under the auspices of the Austrian EU Council Presidency; eu-LISA's active participation in the European Police Congress 2018, attended by 1 500 experts from 20 countries; the Agency's participation in Europe Day celebrations, with the largest ever turnout of 15 000 visitors; the launch of a fully revamped and modernised eu-LISA public website; and the creation of four informative videos that explain to stakeholders and the general public eu-LISA's mandate and the present and future IT systems under its management.

The Agency's main communication tool to ensure transparency — the website — was used to further enhance the visibility of our work and achievements in order to strengthen public engagement and proactively manage stakeholder relations. For the first time in its history, the eu-LISA website had more than 100 000 visitors over the year. Social media platforms were systematically used to highlight awareness-raising activities, the progress of legislative processes related to the IT systems that the Agency manages and training courses for Member States, as well as to increase the visibility of eu-LISA's recruitment and procurement processes.

With the aim of raising awareness of eu-LISA's role and tasks, the Agency successfully participated in joint initiatives of the EU Agencies Network, such as the EU agencies photo exhibition and the EU agencies handbook.

Internal communication

Internal communication continued to facilitate and promote the mission, vision and core values of eu-LISA and to keep the organisation unified, regardless of the presence of Agency staff and facilities in several locations. The annual internal communication action plan was accomplished in full. The results of the annual staff satisfaction survey show a 74 %

satisfaction rate (compared with 67% in 2017), with the weekly internal newsletter being the primary source of information for 91% of employees. The results demonstrate improved staff engagement and greater awareness regarding organisational and operational matters. Continuous improvements to internal communication among the Agency's sites were made by executing a broad range of targeted communication efforts, improving the look and feel of internal information products and the usability of the information-sharing platform, and by coordinating communications relating to the physical relocation to the new headquarters building and to the extension to the technical site. Photo galleries and time-lapse videos of the building process were produced, and the inauguration events at both buildings were also publicised internally. These events were successful and allowed eu-LISA's stakeholders and staff to meet and strengthen their professional engagement. Two-way communication with the employees was reinforced by regular staff assemblies in the form of face-to-face discussions with the Executive Director and briefings on meetings of eu-LISA's Management Committee and governance bodies. Altogether, 20 sessions were organised within the reporting period. Internal communication standards and guidelines were created to outline best practices for corporate communication to be followed in the Agency.

Internal audit

eu-LISA uses its audit function as a key enabler for governance, risk management and internal controls. Based on its annual internal audit plan, the Internal Audit Capability (IAC) provided independent, objective assurance and consulting services to the Executive Director and the Management Board, designed to add value and improve eu-LISA's operations. Notably, the Agency, with IAC support, carried out the following activities:

- drew up rules on the prevention and management of conflicts of interest for MB and AG members;
- revised of eu-LISA's anti-fraud strategy 2019-2021;
- performed preparatory work for the revised internal control framework;
- set up the Audit, Compliance and Finance Committee of the MB;
- received a commitment from the managers of the various areas within the Agency to improve the effectiveness of governance and control procedures in IT asset management.

The Agency continued its cooperation with the European Court of Auditors and the Internal Audit Service of the European Commission, hosting their audit missions and taking measures to respond to the resulting recommendations where necessary. The IAC coordinated work in this area, including with regard to the preparation of reports, missions and follow-up activities, and also ensuring general awareness among the Agency's management and staff of the principles, objectives and procedures of internal and external auditing.

The IAC carried out its work in the framework of its Quality Assurance and Improvement Programme, continuing to conform to auditing standards²⁵ and the Code of Ethics.

²⁵ The *International Standards for the Professional Practice of Internal Auditing (Standards)* issued by the Institute of Internal Auditors (IIA).

Part II. (a) Management

2.1 Management Board

In 2018, the Agency continued its very close, transparent and constructive collaboration with its Management Board. In addition to the items approved by the Board in accordance with its functions, as defined in eu-LISA's establishing regulation, the Agency presented to the MB all the significant risks and issues identified during the reporting period.

The Agency continued to provide its administrative support to the MB and to the Advisory Groups of all three existing systems (Eurodac, SIS and VIS) during the reporting period.

The Agency started providing regular administrative support to both the EES PMB and the EES AG in 2018. In accordance with Article 37 of the EES regulation, the MB decided in January 2018 on the mandate and the composition of the EES PMB, which started meeting in May 2018. Pursuant to Article 69 of the same regulation, the EES AG was established during the reporting period and its monthly meetings commenced in June 2018.

The Agency also started to support the work of the MB Audit, Compliance and Finance Committee (ACFC). The MB adopted a decision on the mandate and composition of the MB ACFC in June 2018. The role of the subgroup is to support and advise the MB on audit- and finance-related matters.

The meetings of the MB and its subgroup, the AGs and the EES PMB were organised in a timely and efficient manner during the reporting period.

Through its regular meetings, the MB was informed of the status of the existing systems (Eurodac, VIS and SIS) and of the preparations for the new systems (EES, ETIAS, interoperability). Preparations for the work of the ETIAS PMB began in accordance with Article 73 of the ETIAS regulation. The MB decided on its mandate and composition in November 2018. During the reporting period, the MB also decided on the budgetary allocations for the preparatory activities for ETIAS, taking into account the implementation activities anticipated for 2018 and 2019.

Pursuant to the provisions of the Agency's establishing regulation, each year the MB adopts the Agency's Consolidated Annual Activity Report (CAAR) for the previous year and its Programming Document for the following year. The MB adopted the CAAR 2017 during its meeting in March 2018 and the final Programming Document 2019-2021 as well as the final statement of revenue and expenditure for 2019 in December 2018. The latter was initially planned for adoption in November 2018, but the MB decided to postpone it, with a view to waiting for the adoption of the Union budget, which was finally adopted on 12 December 2018.

During the reporting period, the Agency kept the MB regularly informed on the implementation of the 2018 budget. The MB adopted the amending budget in Q4 2018. The MB formed its opinion on the final accounts for 2017 in Q2 2018. The Agency also presented to the MB its plans related to the multiannual financial framework for the period 2021-2027.

As an annual exercise and in close cooperation with the Agency's IAC, the MB analysed the progress report on the internal audit plan for 2018 and expressed its appreciation for the Agency's consistent approach to providing assurance on a regular basis. Also in this regard, the MB adopted eu-LISA's internal audit plan for 2019.

The findings and recommendations stemming from the external evaluation of the Agency in 2016 were followed up in accordance with an action plan adopted by the MB in March 2017, and the Executive Director provided regular updates during MB meetings in 2018.

In Q1 2018, the MB took note of the training activities delivered in 2017 and of the training plan for 2018. In Q2 2018, the MB adopted eu-LISA's training strategy for 2018-2022.

During the reporting period, the MB adopted the list of designated authorities that have access to data recorded in the central system of Eurodac; the SIS II list of authorities (the national SIS II (N.SIS II) offices and SIRENE bureaux); the VIS

security exercise 2017 report containing recommendations for the Member States for further implementation; the VIS technical reports pursuant to Article 50(3) of the VIS regulation and Article 17(3) of the VIS decision; and the annual report on the 2017 activities of the Eurodac central system, including its technical functioning and security, pursuant to Article 40(1) of Regulation (EU) No 603/2013.

Anticipating the increase in eu-LISA's tasks in relation to the new mandate and stemming from the new systems, the Agency worked on preparing a building project for a second extension of Strasbourg site and provided regular status reports to the MB. In addition, the MB adopted the new organisational structure of the Agency. The Executive Director had provided regular updates on the progress of its preparation during the MB meetings in 2018. In November, the MB also adopted the rules on the prevention and management of conflicts of interest for the Management Board and Advisory Groups, which it was agreed would enter into force after the adoption of the Agency's new establishing regulation.

In relation to the Agency's staff, in December 2018 the MB decided to delegate appointing authority powers in various staff-related matters to the Executive Director of eu-LISA. The MB also adopted new implementing rules on the Staff Committee, on protecting the dignity of the person and preventing psychological and sexual harassment, on the function of an adviser, on temporary postings to middle management posts and on opt-out from the Commission's '7 years' rule (this last implementing rule was adopted in December 2018). In June 2018, the MB also adopted guidelines on whistleblowing. Throughout 2018, the Agency kept the MB informed of the staffing and budgetary status of the Agency.

2.2 Major developments

External developments

In response to threats and challenges to internal security, the EU continued to put particular emphasis on border management, migration management (including combating human smuggling), serious and organised crime, terrorism and cybercrime in 2018. These threats have a particularly high impact, are becoming more and more international and are increasingly of a cross-border nature. They therefore require an effective and coordinated response at European level. Amid an increasing number of security challenges, the EU as a part of a globalised and interconnected world should remain open and maintain full respect for fundamental freedoms, while guaranteeing an adequate level of security to the people living in Europe.

The goals of securing external borders, making border crossing more efficient and ensuring better application of the common rules on European asylum, as put forward in the European agenda on migration,²⁶ remained vital. Although arrivals from third countries in 2018 were at the lowest level since the migration crisis began, structural migration pressure remained strong. As stated in the Commission Communication 'Managing migration in all its aspects: progress under the European Agenda on Migration',²⁷ 'we have a window of opportunity to fix the weaknesses, and build a system that can withstand future crises. This means moving from ad hoc responses to durable solutions.'

Moreover, the threat of organised and cross-border crime prevailed, which was identified along with terrorism by the European agenda on security²⁸ and the Council Conclusions on the renewed internal security strategy 2015-2020.²⁹ Through its activities and its extensive engagement and collaboration with stakeholders throughout the year, and in particular as a result of its management of high-quality tools for information exchange and cooperation, eu-LISA has made important contributions to Europe's efforts to meet all the above mentioned challenges and to address all the threats described above in a harmonised and comprehensive manner. By following the priorities and overall objectives of the high-level policy documents, the Agency has also ensured that there has been continuity of activities on a year-on-year basis.

In parallel, the area of freedom, security and justice has been going through continuous and significant transformation in recent years. While — as a consequence of, for example, irregular migration and terrorist threats — the pressure on effective policies has significantly increased, solutions have become highly reliant on modern technologies and efficient information sharing. Moreover, there is a process of very fast convergence between border management, migration management and law enforcement, which increases demands on and expectations of technologies and systems both at the present and in the future.

In this challenging and demanding environment, eu-LISA's role in the area of freedom, security and justice becomes more and more prominent, with the business demands on the Agency being continuously extended in order to accommodate additional and new tasks. In particular, the Agency must ensure the steady development and adaptation of the systems it operates and of any new systems entrusted to it, in order to efficiently and effectively support the business needs of its stakeholders and end-users.

Within this changing environment, eu-LISA, as a key stakeholder in the JHA domain, continued also to deliver its core mission in 2018, which is to continuously add value and support the delivery of the Member States' priorities in internal security. Furthermore, the Agency continued to ensure uninterrupted operations and the security and resilience of the systems entrusted to it.

²⁶ COM(2015) 240 final of 13.5.2015, 'A European agenda on migration'.

²⁷ COM(2018) 798 final of 4.12.2018, 'Managing migration in all its aspects: progress under the European agenda on migration'.

²⁸ COM(2015) 185 final of 28.4.2015, 'The European agenda on security'.

²⁹ Draft Council Conclusions on the Renewed European Union Internal Security Strategy 2015-2020, Council of the EU, 9798/15, 10.6.2015.

Political priorities in the JHA domain have resulted in a number of practical initiatives and actions addressing various dimensions of security, border management and migration management. These priorities are also reflected in eu-LISA's annual and long-term activities. At the same time, there is growing acknowledgment among Member States and the EU institutions of the crucial importance of the large-scale IT systems and the need for information exchange within the JHA domain, especially in the light of new challenges and threats. In 2018, significant progress was achieved on a number of legislative priorities, addressing and leading to convergence between different dimensions of security, border management and migration management.

On 11 December 2018, eu-LISA's new establishing regulation entered into force. With the strengthened mandate, the Agency now has a better capacity to develop and improve EU information systems for security, border management, migration and asylum and to ensure interoperability between these systems. The new mandate entrusts eu-LISA with setting up several new large-scale IT systems and broadens the scope of the Agency's work, giving it a greater role in research, assurance of data quality in IT systems, and pilot projects, proof of concept and testing activities. It will bring new opportunities to reinforce cooperation, deliver proactive advice, and provide additional support and assistance to the European Commission and other JHA agencies, as well as ad hoc support to Member States. The new regulation also provides a legal basis for possible formal cooperation with Union institutions other than the Commission, EU agencies and international organisations, such as Interpol or the International Air Transport Association, by means of the conclusion of working arrangements.

On 9 October 2018, the ETIAS regulation entered into force, making eu-LISA responsible for the development and technical management of the new system. As it had done for EES, the Agency launched preparations for ETIAS in three work streams: first, recruitment of additional staff; second, preparation of tender technical specifications and for a tender procedure; and, third, support for the European Commission in preparing the necessary implementing and delegated acts.

Three new regulations aiming at strengthening SIS were also adopted in 2018 and entered into force on 28 December 2018, establishing requirements to implement the various provisions within 1, 2 or 3 years from the entry into force of the legal acts in question. In 2018, eu-LISA implemented the SIS AFIS, introducing a biometric search capability that allows the identification of persons of interest based on fingerprints. Twelve Member States (by the end of 2018) could already perform biometric searches; from the end of 2020, it will be mandatory for all Member States to be able to carry out fingerprint searches in SIS. Furthermore, eu-LISA will be working towards interoperability, as the upgraded SIS legal framework is geared towards ensuring full interoperability of SIS with other large-scale IT systems for migration, border management and security operated by the Agency.

Discussions on the proposal for a regulation on ECRIS-TCN continued throughout 2018. The regulation, which entered into force on 11 June 2019, lays down a requirement to create a centralised system and specifies the data to be included, for which purposes they are to be included and the rights of access. eu-LISA is responsible for the development and operational management of the system.

The Agency also closely followed and, when requested, contributed to discussions on the legislative proposals for regulations establishing a framework for interoperability between EU information systems in the areas of (i) police and judicial cooperation, asylum and migration, and (ii) borders and visas. Interoperability and the required technical components (namely the Common Identity Repository, the European Search Portal, the shared Biometric Matching Service, the Multiple-Identity Detector and the Central Repository for Reporting and Statistics) are to be developed by the Agency. eu-LISA has been cooperating closely with the Commission and providing its technical expertise on the indicative planning for the implementation of the interoperability components and on the analysis of interdependencies. The Agency has published its study on the shared Biometric Matching Service and supported the Commission in its studies on the European Search Portal and Common Identity Repository.

In May 2018, the Commission submitted a proposal for a regulation amending VIS by introducing, inter alia, a facial image search capability and the inclusion of information on long-stay visas and residence permits. Work is ongoing in

the European Parliament and in the Council on the legislative proposal concerning the reinforcement of the current legal framework. Owing to interdependencies between VIS and EES, eu-LISA started preparations in 2018 to set up a VIS-EES interoperability roadmap.

The Commission proposal to strengthen Eurodac (through a recast Eurodac regulation), tabled in May 2016 as a part of the European asylum system reform, would expand Eurodac's remit by including identification not only of asylum applicants but also of illegally staying third country nationals and those who enter the EU irregularly, and by extending Eurodac's scope to, inter alia, reflect changes in the Dublin mechanism, introduce alphanumerical data, contribute to combating irregular migration and assist in resettlement procedures. Although interinstitutional negotiations have been ongoing already for several years and both the Commission and various Council Presidencies have highlighted the benefits of adopting this proposal, the adoption of the recast regulation is still pending.

Major organisational developments

In 2018, the Agency continued to grow at a fast pace. The development of new systems and the evolution of existing systems have required a steady flow of additional human resources: 26 external vacancies were published in 2018, and it is planned that the number of staff will almost double between the beginning of 2018 and the end of 2020.

A proposal for a new organisational structure of the Agency was therefore submitted to and adopted by the Management Board in March 2018. The eu-LISA 2.0 transformation programme was subsequently launched to implement the new structure. This programme has been designed to be open and transparent and to involve eu-LISA's staff. The new organisational structure has been designed to address all the challenges that the Agency will face in the coming years. It will introduce various improvements, enhancing business knowledge and strategy alignment and fostering collaboration between the various teams and units. New functions and positions have been created, to pursue efficiency gains and support the Agency's strategies. The new structure is planned to be rolled out from September 2019.

During the summer of 2018, the Agency moved to its new premises in Tallinn. The new Tallinn headquarters are a highly modern working environment, in a smart and energy-efficient building. The inauguration event was held on 19 September, officially introducing the new eu-LISA building to all stakeholders. The building also includes a redesigned corporate IT data centre. New facilities were also inaugurated at the Agency's technical site in Strasbourg in November 2018, following the end of the construction works for the technical part of the reconstruction project.

2.3 Budgetary and financial management

Financial management

eu-LISA's budget is financed through different funding sources.³⁰ The main revenue comes from EU subsidy, received on an annual basis from the EU budget — Commission section, Chapter 18 02 'Internal Security' — as adopted by the budgetary authority, that is, the European Parliament and the Council of the European Union.³¹ Further contributions are received from associated countries.

As part of its annual reporting framework, the Agency publishes its budget execution rates and performance indicators, which can help in understanding the efficiency and effectiveness with which the Agency was able to manage its spending during the reporting period.

Budgetary implementation

The 2018 final statement of revenue of expenditure was adopted by eu-LISA's Management Board³² on 5 October 2017.

In 2018, eu-LISA managed a budget of EUR 202.1 million in commitment appropriations and EUR 93.7 million in payment appropriations received from EU subsidy.

The Agency had a high budget implementation rate at the end of 2018:

- 99.5 % for commitment appropriations, taking into account the non-automatic carry-over of commitment appropriations authorised by the Management Board in February 2019, as summarised in Table 1.
- 100 % for payment appropriations, including the carry-forward of administrative expenditure to 2019.

Table 1: Commitment appropriations

2018 budget implementation as of 31.12.2018			Budget implementation with carry-over by decision	
2018 final adopted budget (EUR million)	Executed commitments (EUR million)	Implemented (%)	Non-automatic carry over (EUR million)	Implemented taking non-automatic carry-over into account (%)
202.1	152.1	75.2	49.2	99.5

Of the total budget, a significant proportion was subject to the adoption of a legal basis for new tasks assigned to the Agency, as indicated in the Table 2.

³⁰ In 2018, Regulation (EU) No 1077/2011 was still in force until 11 December 2018 and Article 32(1) thereof applied. After that date, Regulation (EU) 2018/1726 applied.

³¹ See Article 45(5) and (6) of Regulation (EU) No 2018/1726. This subsidy relates to C1 commitment and payment appropriations (voted credits for the current budgetary year).

³² In accordance with Article 32(10) of Regulation (EU) No 1077/2011.

Table 2: Commitment appropriations for new tasks

New tasks subject to new legal bases ^a	Commitment appropriations (in EUR million)
LFS ^b Eurodac recast	12.1
LFS Dublin allocation	1.0
LFS SIS recast border/police cooperation	13.1
LFS SIS recast return decisions	2.6
LFS ETIAS	26.8
Total budget subject to new legal basis	55.6

^a Amounts include administrative expenditure, to be allocated according to the budgetary nomenclature in Title 1 'staff expenditure' and Title 2 'infrastructure and operating expenditure'.

^b LFS: Legislative financial statement.

Amending Budget No 1

The Agency's 2018 budget included appropriations as follows:

- a) For the development of EES and ETIAS: the legal basis was adopted but the budget was not required in 2018, as procurements was either ongoing or in the process of preparation.
- b) For the evolution of existing systems (Eurodac, Dublin allocation, SIS): the use of the budget was conditional on the adoption and entry into force of the relevant legal bases.

In addition,

- c) the initial 2018 budget did not reflect the transfer of budget for the VIS communication infrastructure, handed over from DG HOME to the Agency on 30 June 2018, following the adoption of the EES regulation.

The Management Board approved on 21 November 2018 one amendment to the budget addressing the issues highlighted above by:

- returning EUR 74.3 million in payment appropriations, initially inscribed in the Agency's budget for the new tasks based on the legal financial statements for the Eurodac recast, Dublin allocation, SIS recasts and EES, and resulting from the late or pending adoption of the legal bases;
- receiving an additional EUR 1.5 million in commitment appropriations, owing to the transfer of the VIS network following the adoption of the EES regulation in December 2017, compensating for the effect of returning commitment appropriations in Title 1, staff expenditure, and Title 2, infrastructure and operating expenditure, because of the late or pending adoption of the legal bases for the Eurodac recast, Dublin allocation, SIS recasts, and ETIAS.

Table 3 provides a detailed breakdown of the amending budget by budgetary title.

Table 3: Breakdown of 2018 amending budget

Budgetary title	System/task	Amending budget (in EUR million)	
		Commitment appropriations	Payment appropriations
A01	Staff expenditure	-2.2	-2.2
	out of which		
	ETIAS	-1.6	-1.6
	Eurodac recast	-0.3	-0.3
	SIS recast border/police cooperation	-0.2	-0.2
	SIS recast return decisions	-0.1	-0.1
A02	Infrastructure and operating expenditure	-1.7	-1.7
	out of which		
	ETIAS	-1.7	-1.7
B03	Operational expenditure	5.3	-70.5
	out of which		
	Handover of VIS network (C1 appropriations)	5.3	3.8
	SIS recast border/police cooperation		-2.5
	SIS recast return decisions		-1.0
	Eurodac recast		-8.3
	Dublin allocation		-1.0
	EES		-38.0
	ETIAS		-23.5
Total 2018 amending budget		1.5	-74.3

Carry over by decision

The late adoption of the legal proposals for ETIAS and the SIS recasts in the last quarter of 2018 and the outstanding adoption of the Eurodac recast and the Dublin allocation allowed the Agency to carry over more than EUR 49.2 million in commitment appropriations from 2018 to 2019 by Management Board decision, in order to preserve these funds for use in the following years (Table 4).³³

Table 4: Breakdown of 2018 carry over

Budgetary title	System/task	Non-automatic carry-over of 2018 commitment appropriations (in EUR million)
B03, operational expenditure	Dublin allocation	1.0
	ETIAS	20.9
	Eurodac recast	11.9
	SIS recast border/police cooperation	12.9
	SIS recast return decisions	2.5
Total		49.2

Commitment appropriation execution

The commitment credits (C1) voted for 2018 were split among the different titles as follows:

- 85.7 % for the operational budget (Title 3);

³³ In line with Article 14(3) of the Agency's financial regulation.

- 5.5 % for infrastructure and operating expenditure (Title 2);
- 8.8 % for staff expenditure (Title 1).

Figures 5 and 6 show budget implementation by title at year end.

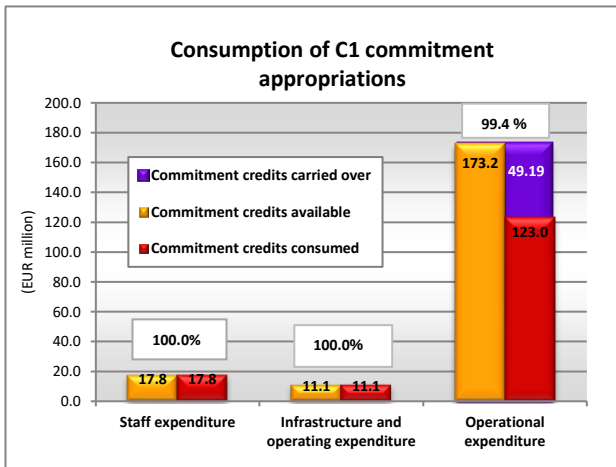


Figure 5: Consumption of C1 commitments

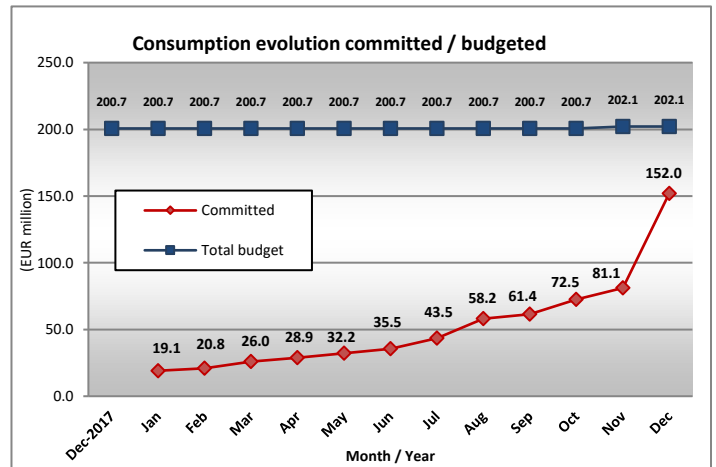


Figure 6: Trends in consumption of funds committed and budgeted

With regard to Title 3, owing to the multiannual nature of contracts used to support core operations, EUR 117.2 million of 2018 open commitment appropriations were automatically carried forward and will be paid in 2019 and in the following years. EUR 49.2 million in commitment appropriations related to new tasks were carried over by decision. For a detailed breakdown, see Annex II.

Of the operational budget, 99.5 %, amounting to EUR 173.2 million, was implemented. Figure 7 shows the breakdown of the operational budget by chapter.

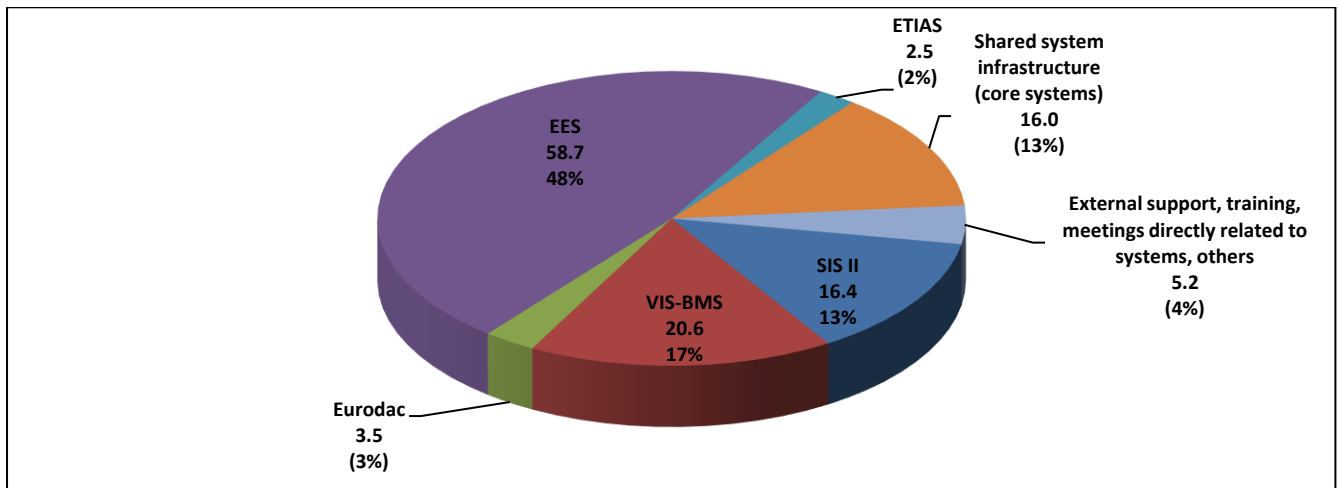


Figure 7: Title 3 executed commitment appropriations (EUR million)

Payment appropriation execution

The total voted budget for payment appropriations amounted to EUR 93.6 million, of which EUR 3.8 million was received for 2018 payment appropriations related to the handover of the communication infrastructure from the European Commission to eu-LISA.

At the end of 2018, the execution of payment appropriations for C1 credits reached 100 %, including the carry-forward

of administrative expenditure to 2019. Figures 8 and 9 show the split of the total budget by title and the overall consumption of payments credits over 2018.

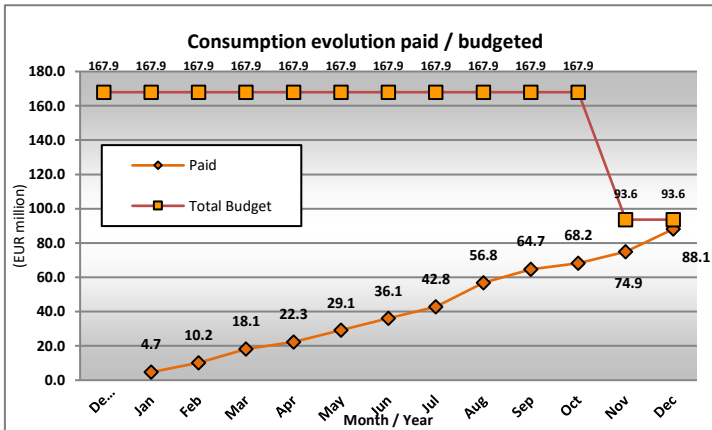


Figure 8: Trends in consumption of funds paid and budgeted

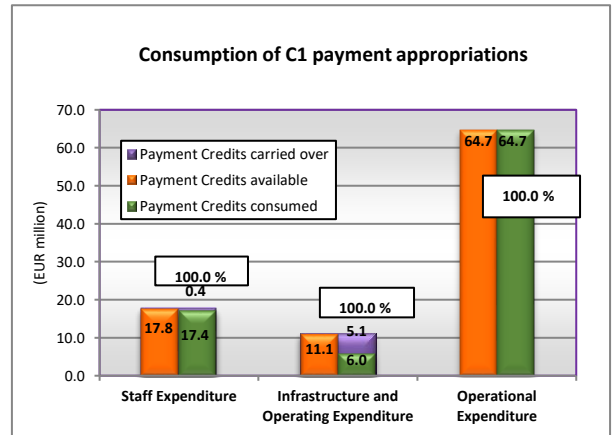


Figure 9: Consumption of C1 payment appropriations

Furthermore, 84.1 % of the payment appropriations carried forward from 2017 to 2018 in administrative expenditure have been executed.

Commitment appropriations in Title 1 (staff expenditure)³⁴ amounting to EUR 0.4 million and in Title 2 (infrastructure and operating expenditure) amounting to EUR 5.1 million not yet consumed through payments in 2018 and for which a valid legal commitment exists are to be carried forward to 2019 together with the corresponding payment appropriations.

Within Title 3, the largest proportion of payment appropriations was spent on VIS/BMS. Figure 10 shows the breakdown of executed payment credits for the operational budget.

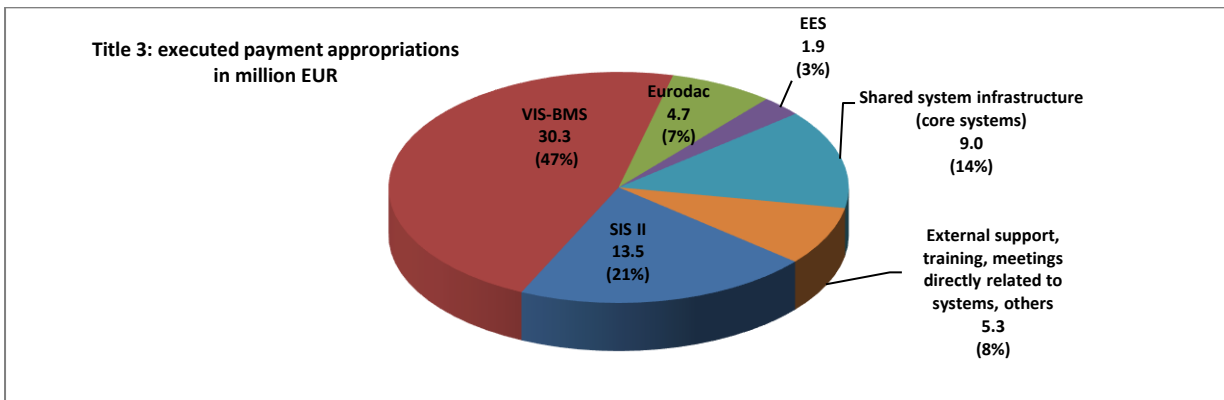


Figure 10: Title 3 executed payment appropriations (EUR million)

Performance indicator: time to pay

A total of 2 670 payment transactions were carried out in 2018; of these:

- 2 477 transactions had a maximum payment time of 30 days, with an average time to pay of 17.3 days;
- 182 had a maximum payment time of 60 days, with an average time to pay of 42.4 days;

³⁴ Commitment and payment appropriations related to remuneration are not carried forward.

- 11 had a maximum payment time of 45 days.

Overall, 91.1 % of all transactions were done within the contractual time limit.

Procurement procedures

Volume analysis of activities in procurement

Table 5 and Figure 11 present the results of a synoptic volume analysis performed by examining the number of transactions (i.e. contracts) in the period 2014-2018. The volume analysis highlights the need to strengthen procurement functions across the Agency.

Table 5: Volume of contracts (2014-2018)

Contracts	2014	2015	2016	2017	2018	Total
Direct contracts	16	12	5	17	9	59
Framework contracts eu-LISA (non-systems related)	3	5	3	—	6	17
Framework contracts eu-LISA (non-systems related) — amendments	—	—	—	2	16	18
Framework contracts eu-LISA (systems related)	2	—	1	1	1	5
Purchase orders	76	49	55	54	54	288
Specific contracts / order forms under framework contracts	118	195	278	337	476	1404
Total	215	261	342	411	562	1791

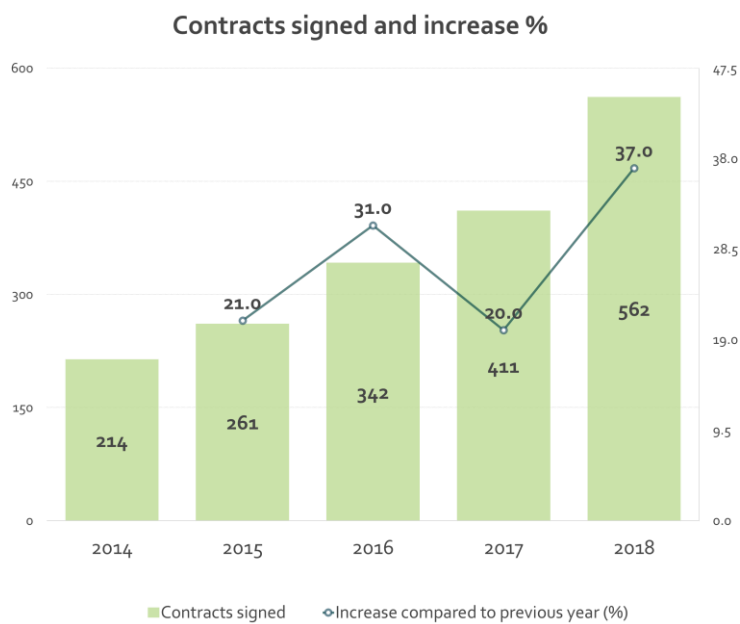


Figure 11: Trend in number of contracts signed (2014-2018)

2.4 Human resources management

Developments

In 2018, the Agency's activities in the area of HR management were focused on the objective set in the Programming Document 2018-2020: 'to consolidate the HR processes and services in the areas of recruitment, staff development, personnel administration and payroll'. Key achievements included the customisation of Sysper (an HR IT tool), and the finalisation of the development of and the start of use of the e-recruitment tool. The Agency reviewed the mid-term implementation of the activities listed in the HR strategy 2016-2020. Staff retention was a particular focus, and the Agency managed to keep the staff turnover rate below the target of 5 %. Specific activities targeted at staff retention were communication relating to the facilitation of establishment (e.g. relocation services for new staff, a host country language course open to family members, active cooperation with European schools), staff development (renewal of employment contracts for an indefinite time, new development opportunities offered by defining the role of head of sector) and improved working conditions and well-being. These activities will continue to be performed in future to ensure sustained improvement.

Recruitment was a major activity in 2018, following the evolution of the Agency's mandate: in 2018, 26 vacancies were published, not including internal ones. The recruitment of additional staff for EES was finalised. It was started for ETIAS, for the SIS recast and for the new establishing regulation.

Considering the upcoming new initiatives and legislation (e.g. ECRIS-TCN, interoperability), the Agency will continue to recruit in 2019. To prepare for the impact of additional staff, a proposal for a new organisational structure was approved by the Management Board in March 2018. The Agency designed and implemented a transformation programme to address all aspects of the new structure. More information on this is presented in the section 'Organisational structure' below.

Learning and development

The main achievement in the learning and development area in 2018 has been the implementation of data-driven decision-making: data from staff engagement surveys, the learning landscape, individual objective-setting exercises and appraisals, as well as data from the learning management system, contributed to managerial decision-making and to the introduction of a tailored annual learning and engagement plan. The eu-LISA competency framework identifies the various technical, leadership, professional and core competencies expected of eu-LISA staff. It was further developed and a related roadmap adopted. Its implementation started in the areas of recruitment procedures and learning opportunities for staff.

The results of the annual training needs analysis for 2018 were reflected in the training offer for staff members. The Agency organised approximately 60 in-house training sessions on technical and non-technical subjects and processed 166 individual training requests and 10 language learning requests for spouses. New e-learning content was introduced, including with regard to the technical onboarding of staff members.

Social events were organised in cooperation with the established #BeSocial club (a group of volunteers). A staff engagement survey was launched, and it led to workshops and discussions. Coaching and support for staff and managers were offered. The Agency also took part in a benchmarking exercise on staff engagement, comparing eu-LISA with eight other EU agencies in various areas measured by their staff engagement surveys.

To align the Agency with the text of the implementing rules regarding the appraisal of temporary and contract agents, and to increase the maturity of the organisation, the entire objective-setting and appraisal process is now electronic.

This also allows HR to monitor the process much more closely. The heads of sectors' involvement in objective-setting and appraisals has also been formalised within the organisation.

The successful onboarding of EES staff was another key achievement. The annual learning plan was implemented, and the Leadership Pipeline has been updated. The eu-LISA learning management system (i-Learn) was further developed and processes linking learning and performance were streamlined through the tool.

The Agency created the eu-LISA DPO mobile application, a joint project between HR and eu-LISA's Data Protection Office. The purpose of this application is to reinforce eu-LISA's commitment to processing personal data in a lawful manner. The app is available for both iOS and Android operating systems and had been downloaded around 500 times at the end of 2018.

Establishment plan and headcount

In 2018, eu-LISA's authorised posts were the following: 136 TAs, 41 CAs and 9 SNEs. The total number of posts in the establishment plan decreased by 2 in comparison with 2017 because of staff cuts and reached a base level of 113 posts. However, it was then increased by 23 posts,³⁵ reaching a total of 136 posts. It should be noted that the Agency's establishment plan does not include posts for secretaries and clerks function group (AST/SC). Annex IV shows eu-LISA's 2018 establishment plan. The number of CA posts increased because budget authorisation was received for the new tasks allocated to the Agency.³⁶

In terms of headcount, at the end of December 2018, eu-LISA had 162 full-time staff members: 122 TAs, 31 CAs and 9 SNEs. Of these, 85 TAs, 21 CAs and 4 SNEs were employed in Strasbourg, 37 TAs, 8 CAs and 5 SNEs were working in Tallinn, and 2 CAs were located in eu-LISA's Liaison Office in Brussels.

Figure 12 shows the number of eu-LISA staff members by type of contract and in each of the Agency's offices.

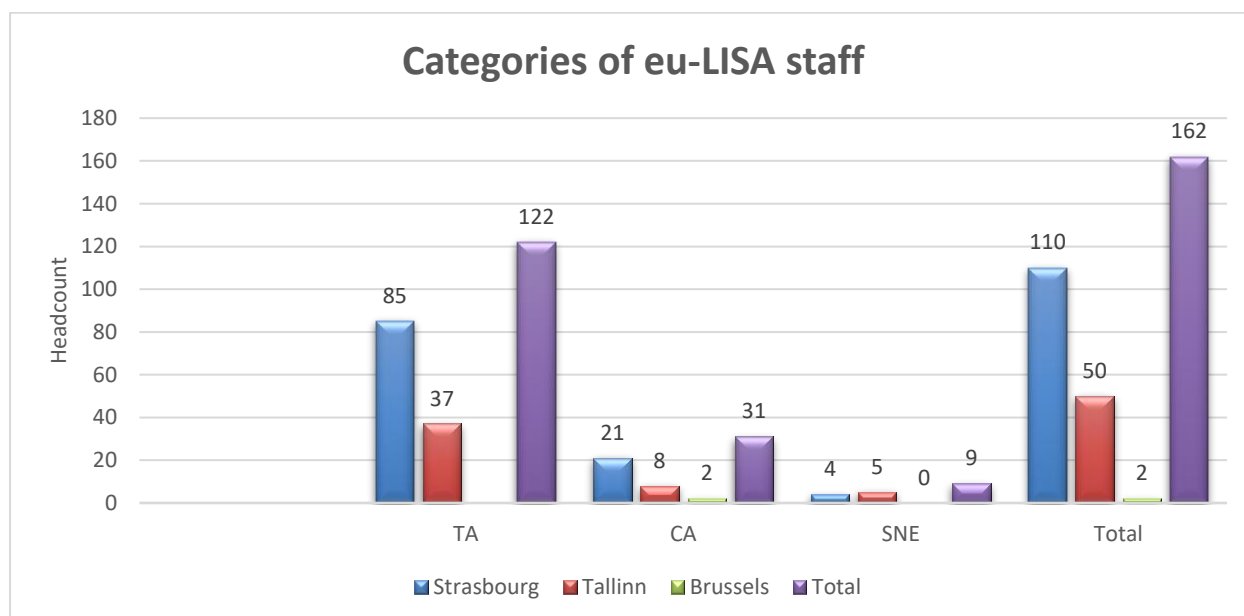


Figure 12: Categories of eu-LISA staff on 31.12.2018

³⁵ This number includes 14 posts for EES, 7 posts for ETIAS and 2 posts for the Eurodac recast, which could not be filled by the end of the year because of the delay in the adoption of the relevant legal instruments.

³⁶ Four additional posts for the SIS II recast and 10 posts for ETIAS have been granted to eu-LISA.

The occupancy rate of 87.1 % was due to the date of adoption of the ETIAS regulation, which took place in November 2018, and the fact that the expected recast of the Eurodac regulation, on the basis of which the establishment plan was increased by two posts, was not adopted in 2018.

The Agency staff had 21 nationalities. Women constituted 23 % of the staff (36), while 77 % (126) were men.

The Agency offered internship opportunities. At the end of 2018, there were two interns located in Tallinn and one in Brussels.

Organisational structure

In March 2018, the Management Board of eu-LISA adopted a proposal for a new organisational structure in anticipation of the Agency's growth as a result of an increase in tasks following the adoption of new regulations and the additional staff granted to eu-LISA to perform these new tasks. The Agency will almost double its number of staff between the beginning of 2018 and the end of 2020. Although the implementation of the new organisational structure is a complex process, it is expected that it will be fully completed by the end of 2019.

The following changes were implemented by the end of 2018:

- the Resources and Administration Department changed its name to the Corporate Services Department;
- the Corporate Services Sector became a unit in the Corporate Services Department;
- the Internal Auditor's function name changed to Head of Internal Audit Capability;
- the Human Resources and Training Unit changed its name to the Human Resources Unit;
- the Liaison Office's reporting line was set directly to the Executive Director;
- the post of Legal Officer was transferred from the General Coordination Unit to the Corporate Services Department.

eu-LISA's organisational chart showing the status on 31 December 2018 is presented in Annex III.

Performance indicators in the area of HR

The Agency has set key performance indicators³⁷ (KPIs) for areas related to HR management. They measure the rate of absenteeism, staff turnover, staff performance and staff engagement.

The absenteeism rate KPI remained at 22 %, the same as in 2017; the target was to keep it below 25 %.

The turnover of staff (calculated as the number of staff leaving the Agency during the year as a percentage of the number of staff in place on 31 December 2018) was 4.94 %; eight employees left the organisation in 2018. This was below the benchmark KPI of 5 % for turnover. The Tallinn headquarters was affected more than the Strasbourg site, as staff turnover there reached 11.54 % (Table 6).

Table 6: Staff turnover in 2018 by site.

Strasbourg	Tallinn	eu-LISA as a whole
1.82 %	11.54 %	4.94 %

The staff performance index met the KPI target of 100 % of appraisals completed. A few delays were caused because

³⁷ eu-LISA Corporate Performance Indicators; this document was adopted by the Management Board of eu-LISA on 15 March 2015 (ref. 2015-042) and the change request to the Management Board to change the Agency's corporate KPIs (ref. 2016-127) dates from October 2016.

staff members were on long-term sick leave. In addition, a KPI targeting less than 10 % of staff reaching the highest level of performance and less than 5 % at the lowest level of performance was achieved. Of the staff, 1.5 % were assessed as having achieved level I performance (exceeded expectations), and 98.5 % achieved level II (partially exceeded expectations) or III (met expectations). There were no cases of level IV performance (partially failed to meet expectations) and no negative evaluations at level V (failed to meet expectations).

Staff engagement was measured by evaluating the percentage of staff responding to the staff satisfaction survey. This KPI reached 87 % in 2018, with a target value of 80 % or more.

Compensatory leave schemes

The Agency is required, in accordance with paragraph 28 of the Parliament's discharge report *2011 discharge: performance, financial management and control of EU agencies*,³⁸ to report on the number of days of leave authorised to each grade under the flexitime and compensatory leave schemes.

Flexitime is a default working pattern applied by analogy at eu-LISA in accordance with the implementing rules on working time.³⁹ The Agency is mandated to offer its services to Member States on a continual basis (24/7); this implies that some staff will need to work in shifts or be on stand-by duty. The maintenance of the IT systems managed by the Agency require, from time to time, that work be performed outside regular office hours, including at night or on public holidays. Therefore, compensation for overtime, compensation under the flexitime rules and compensation for work during stand-by duty or on particular projects are inherent features in the operation of the organisation.

Table 7 shows the number of leave days granted as compensation for overtime for each function group and grade of staff member and the average number of days absent on compensatory leave.

Figures 13 and 14 show the number of days and percentage of compensatory leave for overtime and work during stand-by duty and for flexitime by grade.

Table 7: Compensatory leave by type and grade

Function group and grade	Compensated overtime	Compensated flexitime	Compensated stand-by duty
AD05	0.0	62.0	0.0
AD06	3.9	99.6	0.0
AD07	1.0	169.5	0.0
AD08	1.0	91.5	0.0
AD09	2.5	65.5	0.0
AD10	0.0	17.5	0.0
AD11	0.0	0.0	0.0
AD12	0.0	0.0	0.0
AD13	0.0	0.0	0.0
AD14	0.0	0.0	0.0
AD15	0.0	0.0	0.0
AD16	0.0	0.0	0.0
AST01	0.0	0.0	0.0
AST02	0.0	0.0	0.0
AST03	0.0	18.0	0.0

³⁸ P7_TA(2013) 0134.

³⁹ Commission decision on working time of 15.4.2015, C(2014) 2502, adopted by the Management Board of eu-LISA on 15.4.2015.

AST04	0.0	24.5	0.0
AST05	5.0	15.5	0.0
AST06	0.0	34.5	0.0
AST07	0.0	20.0	0.0
AST08	0.0	23.5	0.0
AST09	0.0	0.0	0.0
AST10	0.0	0.0	0.0
AST11	0.0	0.0	0.0
Total number of days	13.4	641.6	0.0
Number of people	9	89	0
Average number of days on leave	6.68		0
GFIll09	0.0	9.0	0.0
GFIll10	2.0	7.5	0.0
GFIV13	0.0	40.0	0.0
GFIV14	2.4	100.4	0.0
GFIV15	0.0	31.0	0.0
GFIV16	2.5	18.5	0.0
Total number of days	6.9	206.4	0.0
Number of people	5.0	23.0	0.0
Average number of days on leave	7.62		0
SNE	1.0	66.6	96.0
Total number of days	1.0	66.6	96.0
Number of people	1	10	6
Average number of days on leave	6.15		16
TOTAL number of days	21.3	914.6	96.0
TOTAL number of people	15.0	122.0	6.0
Overall average	6.83		16.00

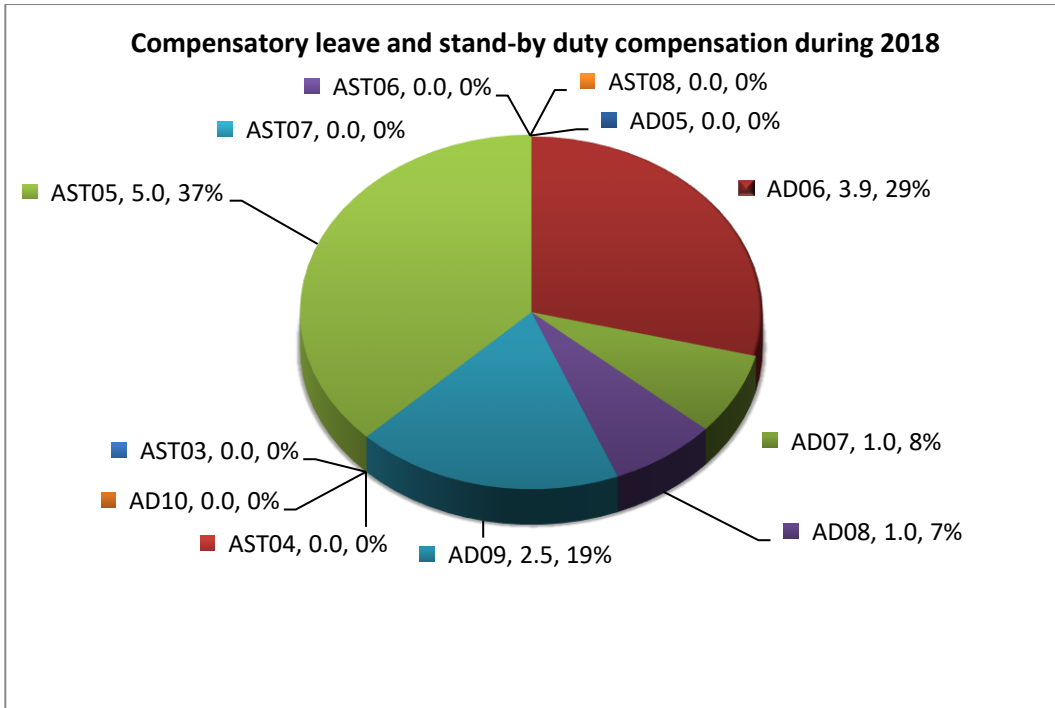


Figure 13: Number of days and percentage of compensatory leave for overtime and work during stand-by duty for temporary agents by grade

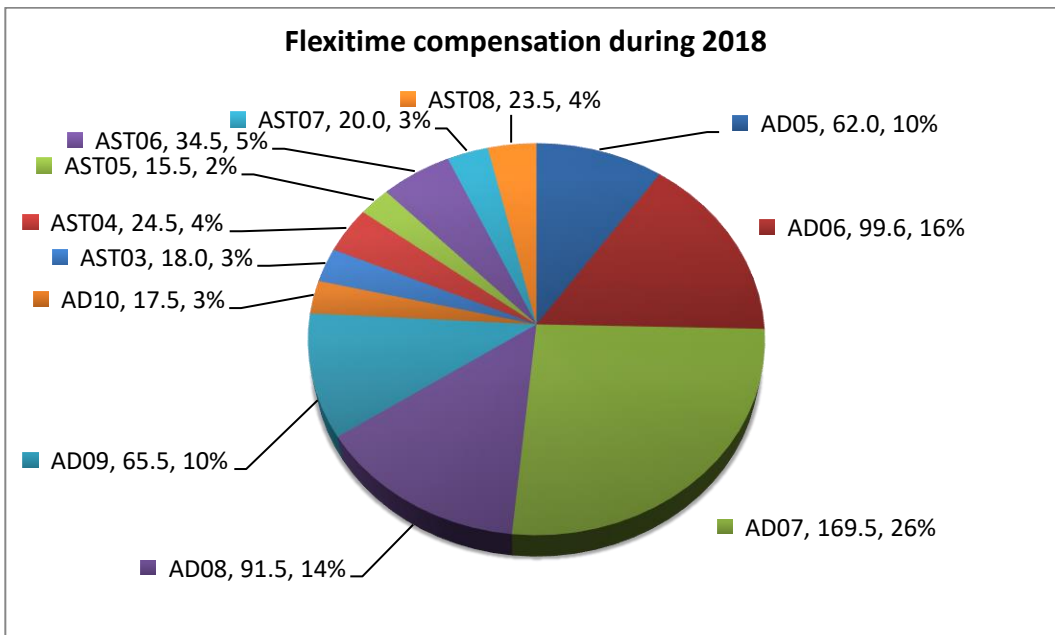


Figure 14: Number of days and percentage of flexitime compensation for temporary agents by grade in 2018

Description of the results of the screening/benchmarking exercise

eu-LISA has undertaken its fourth benchmarking exercise to calculate the ratio of administrative to operational staff. This is done in accordance with the requirements of the framework financial regulation, which stipulates that all agencies should carry out such a benchmarking exercise on an annual basis to justify administrative expenditure in a structured and transparent way. The screening exercise was conducted in accordance with the methodology agreed by the Heads of Administration of the European agencies in 2014. It was applied to all eu-LISA posts occupied in December

2018. A summary of the results is presented in Table 8. Almost 73 % of eu-LISA staff are involved in the operational activities of the Agency, 16 % of staff are working on coordination activities and in administrative support, and over 11 % of staff are involved in activities related to contract management, procurement and financial operations.

Table 8: Benchmarking exercise 2018

<i>Staff screened on 31.12.2018</i>		162
2018 benchmarking results	Number of staff	Percentage of staff
Operational	117.75	72.91 %
General operational	95.4	59.07 %
Project management and implementation	9.65	5.98 %
Top-level coordination	12.7	7.86 %
Evaluation and impact assessment	0	0.00 %
Administrative support and coordination	25.9	16.04 %
Administrative support	20.2	12.51 %
Coordination	5.7	3.53 %
Neutral	17.85	11.05 %
Finance, accounting, contract management, non-operational procurement	17.85	11.05 %
Linguistic activities	0	0.00 %
Total	162	100 %

Compared with the similar exercise conducted in 2017, the results of the 2018 benchmarking show a slight increase (1 %) in the percentage of operational posts. This was because additional operational posts were added to eu-LISA's establishment plan. This increase would be more significant (4 %) if all the posts granted could have been filled by the end of the year and included in the screening.

The percentage of administrative posts was slightly lower in 2018 than in 2017, decreasing from 17 % to 16 %, because the additional posts granted to eu-LISA were not allocated to this area. The share of neutral posts remained at the same level.

A further split of the types of posts into categories shows that, in the operational posts, there was a slight increase in the percentage of the general operational posts (from 58 % to 59 %), while the programme management and top-level coordination posts remained at the same level (6 % and 8 % respectively).

According to Analytical Fiche No 15⁴⁰ on HR management at the EU decentralised agencies, administrative staff 'represent 30 % of agencies' staff'. Using this as a reference point, the benchmarking ratio at eu-LISA is remarkably far below this level. The Agency considers that a 'healthy' ratio would see a 20 % level of posts in administrative support and coordination. The relatively low level was balanced by a higher ratio of administrative support posts provided through external support, as seen in the benchmarking of the external service providers, according to which the percentages of outsourced services in administrative support and operational activities is almost equal (47.5 % and 48.5 % respectively). The share of neutral posts in external services has decreased from 6.43 % to 4 % because of the additional staff granted to eu-LISA in the financial area and to enable insourcing of human resources.

To enable the organic growth of eu-LISA as an organisation, further insourcing of personnel, in particular in the area of

⁴⁰ European Commission, Analytical Fiche No 15, 2011. Available at https://europa.eu/european-union/sites/europaeu/files/docs/body/fiche_15_sent_to_ep_cons_2011-07-20_en.pdf

administrative support and coordination, should be envisaged and planned for, in order to ensure that the Agency remains within the benchmarking figures for both sourcing options, internal and external support.

The results of the 2018 screening are shown in the tables in Annex IV, which provide the following information:

- the establishment plan adopted for 2018;
- the levels at which the key roles listed by the European Commission for benchmarking of key functions are represented in eu-LISA;
- a comparison of the results of the benchmarking exercises undertaken by eu-LISA in 2017 and 2018 for both staff members and external service providers (*intra muros*).

2.5 Assessment by management

The Agency's internal control standards (ICSs) (as outlined in Article 30, Article 44(2) and Article 47(1)(b) of the financial regulation of the Agency) were formally adopted by the Management Board by written procedure on 15 June 2014, although in fact they had already been implemented in 2013. The 16 individual control standards are structured around six major areas: (1) mission and values, (2) HR, (3) the planning and risk management process, (4) operations and control activities, (5) information and financial reporting, and (6) evaluation and audit. An Internal Control Coordinator has been formally appointed by the Executive Director. The Agency's internal control system integrates all these 16 ICSs as adopted by eu-LISA, establishing the overall internal control environment and providing assurance to management that objectives are being achieved, with robust financial and operational checks and balances in place. The framework is monitored on a regular basis to ensure that the controls in place work effectively.

In the last quarter of 2018, the Agency started the preparatory work on the revised internal control framework (ICF), which was subsequently adopted in March 2019. The Agency envisages full deployment by the end of 2019.

Registration of exceptions

In accordance with ICS 8, 'Processes and procedures', the Agency runs an exception process to document deviations from established processes and procedures. To ensure traceability, deviations from the rules and/or procedures are documented in an exception request, which is registered in a dedicated exception register. For each request, corrective/preventive actions and risk level are identified prior to approval by the relevant manager. The Internal Control Coordinator reviewed the exception requests raised in 2018. The results of this review are reported to the Management Committee.

2.6 Budget implementation tasks entrusted to other services and entities

The Agency did not entrust budgetary implementation to any other service or entity.

2.7 Assessment of audit results during the reporting year

Internal Audit Service

The European Commission's Internal Audit Service (IAS) established a strategic audit plan for the period 2019-2021 with regard to eu-LISA. The audit plan is based on the results of a risk assessment exercise carried out by the IAS in February 2018 at the headquarters in Tallinn and at the technical site in Strasbourg, covering eu-LISA's major administrative and operational processes.

Based on the results of the risk assessment and considering the risk profile of eu-LISA, the IAS intends to perform four engagements in this period, with the prioritisation of each topic reassessed on an annual basis. The next in-depth risk assessment is planned for 2022.

Internal Audit Capability

Review of the Agency's IT asset management (ITAM). The objective of this review was to make an assessment and provide the Executive Director and the Management Board with independent assurance on the adequacy and effectiveness of the internal control system as regards the ITAM process. Since area managers assessed that the maturity of the process had been limited, the IAC agreed to facilitate a control self-assessment exercise, which would efficiently identify, assess and prioritise risks and issues, and would provide for agreement on the mitigating actions, their ownership and the target dates for implementation. During the exercise, eight high risks and one medium risk were identified and targeted for further treatment. To address them, the IAC agreed an action plan with area managers, and logged it in its follow-up procedure.

Prevention and management of conflict of interest. The IAC facilitated the drafting of the rules for preventing and managing conflicts of interest for members of the Management Board, their alternates and members of the Advisory Groups. The Management Board adopted the rules at its meeting in November 2018. According to the rules, each person concerned will annually have to make and/or update a declaration of interests and the appropriate chairperson will have to check and approve it, otherwise that person will not be able to attend the meetings of the relevant body.

Revision of eu-LISA's anti-fraud strategy. In 2015, eu-LISA adopted its first anti-fraud strategy, covering the period 2016-2018. As the environment eu-LISA operates in is very dynamic, it was necessary to update the risks on the anti-fraud radar, fine-tune mitigating actions and revise the strategy accordingly, covering the next 3 years, from 2019 to 2021. The IAC facilitated the identification and assessment of potential fraud risks relevant to its objectives as part of the annual corporate risk management exercise. The results were compiled in the revised anti-fraud strategy, which comprises three objectives for the period 2019-2021: (1) reinforce anti-fraud culture in the Agency, (2) set and maintain a high level of ethics, and (3) develop intelligence for prevention and detection purposes. The document also highlights suggested indicators, actions, owners and deadlines to support the achievement of the abovementioned objectives. The Agency's anti-fraud strategy was adopted by the MB in March 2019.

Revised eu-LISA ICF. The IAC facilitated the drafting of a Management Board decision on the revised ICF. The IAC also organised a workshop to test the implementation of the ICF. As a result, the IAC issued a report with suggested indicators and targets, which was validated by the programme team. The exercise revealed important information for establishing the way forward in implementing the revised ICF in all eu-LISA's units and departments in 2019. The revised ICF was adopted by the MB in March 2019.

European Court of Auditors

In 2018, the European Court of Auditors (the Court) finalised the usual audit on the annual accounts of eu-LISA for the financial year 2017.⁴¹ The Court audited the annual accounts of the Agency, which comprise the financial statements⁴² and the reports on the implementation of the budget⁴³ for the financial year ended 31 December 2017, and the legality and regularity of the transactions underlying those accounts. In the Court's opinion, the annual accounts of the Agency present fairly, in all material respects, the financial position of the Agency at 31 December 2017, the results of its operations, its cash flows and the changes in net assets for the year then ended, in accordance with its financial regulation and with accounting rules adopted by the Commission's accounting officer. These are based on internationally accepted accounting standards for the public sector.

In the Court's opinion, the revenues and payments underlying the annual accounts for the year ended 31 December 2017 are legal and regular in all material respects.

The Court also made 11 comments that do not call the opinions above into question.

⁴¹ *ECA annual report on EU agencies for the financial year 2017*, para. 3.26, 'European Agency for the Operational Management of Large-Scale IT Systems in the Area of Freedom, Security and Justice (eu-LISA)'.

⁴² These include the balance sheet and the statement of financial performance, the cash flow table, the statement of changes in net assets and a summary of the significant accounting policies and other explanatory notes.

⁴³ These comprise the budgetary outturn account and the annex to the budgetary outturn account.

2.8 Follow-up of recommendations and action plans from audits

The implementation rate of audit recommendations for the year 2018⁴⁴ is 42 % (i.e. 13 implemented and 31 due). To confirm closure (see the header 'Closed' in Table 9), the IAS⁴⁵ and IAC⁴⁶ auditors carried out the annual follow-up on those action plans declared to be 'Implemented' (i.e. based on the auditor's assessment of the evidence provided and collected). The European Court of Auditors (ECA) also followed up on its observations issued in previous audits.⁴⁷

For a quick view, the status of audit recommendations on 31 December 2018 is summarised in Table 9. For monitoring purposes, recommendations issued by ECA are rated as 'Very important'.

Table 9: IAS, IAC and ECA recommendations

IAS, IAC and ECA recommendations by rating	Total	In progress	Implemented	Past due	Closed	N/A
Critical	0	0	0	0	0	0
Very Important	38	15	6	12	3	5
Important	16	3	7	6	4	0
Total	54	18	13	18	7	5

Notes:

In progress: Implementation proceeds according to the plan. Deadline not due or new action plan / deadline agreed with the auditor.

Implemented: This is an assertion by the recommendation owner. The issue is ready for the auditor's follow-up with a view to closure.

Past due: Implementation of recommendation is in progress but was not achieved by the agreed deadline.

Closed: The auditor has formally closed the issue.

N/A: Not applicable, as the auditor made a statement or highlighted a non-actionable issue.

Critical: Fundamental weakness in the audited process that is detrimental at the entity level.

Very important: Fundamental weakness in the audited process that is detrimental to the whole process.

Important: Significant weakness in the whole audited process or fundamental weakness in a significant part of the audited process.

⁴⁴ Monitoring report (January-December 2018), 'KPI #24 audit recommendations implemented within deadline', ref. Ares(2019)748754 — 8.2.2019.

⁴⁵ 'Follow-up of outstanding recommendations from past IAS audits in eu-LISA – note on audit conclusions', ref. Ares(2019)744730 — 8.2.2019.

⁴⁶ 'Follow-up results for the year 2018 — IAC memo', ref. Ares(2019)1031340 — 19.2.2019.

⁴⁷ ECA annual report on EU agencies for the financial year 2017, para. 3.26, 'European Agency for the Operational Management of Large-Scale IT Systems in the Area of Freedom, Security and Justice (eu-LISA)'.

2.9 Follow-up of observations by the discharge authority

<i>Observation by the discharge authority</i>		<i>Response and measures taken by the Agency</i>
Budget and financial management		
2.	Notes that, according to the Court's report, although the Agency paid the full price for construction works for its new premises in Strasbourg in 2016, the work is still not finalised, due to the inability of the contractor to deliver, and that only 70 % of the works are covered by the accepted works progress reports.	<p>The latest accepted works progress report from 30 April 2018 indicated 88.17 % completion of works.</p> <p>A works progress report from 30 June 2018 indicating 99.35 % completion of works was refused by the Agency owing to technical issues and lack of completeness (litigation September 2018).</p> <p>To protect the Agency's financial interests, eu-LISA keeps in its possession a EUR 1.2 million performance guarantee.</p>
	Notes that, according to the Agency, it registered a statement of defence with the Administrative Court of Strasbourg, and that the decision of this court is pending; calls on the Agency to report to the discharge authority on the final decision of the Administrative Court of Strasbourg.	<p>The Agency registered statements of defence on 15 May 2018 and 15 February 2019. The decision of the Court of First Instance has not yet been issued.</p> <p>Informal talks for out of court settlements took place between September and October 2018, but they were interrupted suddenly and unilaterally by the contractor in October 2018.</p> <p>Meanwhile, talks for an out of court settlement were restarted on 3 April 2019 on the initiative of the contractor.</p> <p>The Agency undertakes to inform the European Parliament without delay either if it reaches an out of court settlement or as soon as the judgment of the court is issued.</p>
Cancellation of carry-overs		
3.	Regrets that the cancellations of carry-overs from 2016 to 2017 amounted to EUR 658 000, representing 12.20 % of the total amount carried over, representing a notable increase of 7.11 % in comparison with 2016.	Of the amount cancelled, more than one third was caused by contracts for external support (interim staff) that became vacant and for which suitable candidates could not be found, thus requiring the cancellation of commitments. Another third of the amount stemmed from the corporate IT and facility management of the Strasbourg operational site, both areas where managerial supervision could be ensured only <i>ad interim</i> ; the Agency planned to establish the post of Head of Corporate Service Unit, which was filled in 2019.

<i>Performance</i>		
8.	<p>Notes with concern that, according to the Court's report, the Agency currently manages three separate, non-integrated large-scale IT systems, which may prevent the Agency from realising economies of scale and synergies between those three systems, and that the extension of the Agency's mandate to manage several additional IT systems is expected during the coming years;</p> <p>welcomes the suggestion of the Court that the Agency should prepare a detailed cost-benefit analysis to support a discussion on the future development strategy for the IT systems it manages;</p> <p>calls on the Agency to report to the discharge authority on the outcome of this study and the corrective actions planned.</p>	<p>The Agency manages three large-scale IT systems in accordance with the respective legal instruments for those systems. The fact that those systems have been built in a separate, non-integrated way was not a choice made by the Agency but a result of different development timelines and the constraints stemming from the way the legal framework for the different systems had been designed at the time of their development. The Agency, however, recognises that this approach is not sustainable, given both the increased number of applications within its mandate and the overall fact that it is not efficient from an operational or budgetary perspective. The Agency has already begun an initiative to streamline system architecture and design, and sees the Commission's 'Interoperability Initiative' as one of the main drivers in this respect. The Agency's future infrastructure strategy is towards a common shared infrastructure for current and future applications wherever the legal bases allow.</p>
<i>Staff policy</i>		
10.	<p>Notes with concern that on 31 December 2017 the establishment plan was only 87.02 % executed, with 114 temporary agents appointed out of 131 temporary agents authorised under the Union budget (compared with 118 authorised posts in 2016).</p>	<p>The difference between the 114 temporary agents appointed and the 131 authorised is justified by the fact that 2 posts were added in anticipation of the recast Eurodac regulation, which has not been adopted to date; therefore, recruitment could not be initiated. In addition, 14 posts were provided under the EES regulation, which entered into force on 29 December 2017, enabling the Agency to start the recruitment process from that date. Moreover, the job offer for one post, that of Head of the Operations and Infrastructure Unit, was sent and accepted by the end of 2017.</p>
12.	<p>Regrets the gender imbalance within the Agency's Management Board with 46 out of 52 members being male and 6 being female; in this regard requests the Commission, the Member States and other concerned parties to take into account the importance of ensuring gender balance when presenting their nominees for members of the Management Board.</p>	<p>eu-LISA takes note of the recommendation to the Commission and the Member States. Nevertheless, the Agency cannot influence the nominations of the members and observers of the Management Board.</p>

13.	<p>Notes with concern that, according to the Court's report, the small number of staff creates significant risks for the continuity of the Agency's operations, particularly considering that the Head of the Application Management and Maintenance Unit also occupied <i>ad interim</i> the posts of Head of the Operations Department and Head of the Operations and Infrastructure Unit and thereby combined the three highest management posts in the Operations Department;</p> <p>acknowledges that the Agency successfully delivered its mandate throughout 2017, despite the lack of resources in the operational and horizontal functions in the Agency; supports the continued efforts necessary for staff retention and development in the Agency; welcomes in this regard the Agency's measure to appoint a different staff member as interim Head of the Operations and Infrastructure Unit; urges the Agency to fill all posts with permanent staff without further delay.</p>	<p>The Agency has acknowledged the risk and has requested additional staff in its programming documents. However, the solution lies with the budgetary authorities, which could approve an increase in staff. The Agency is trying to mitigate the risk through reprioritisation of tasks, which is possible to a small extent.</p> <p>Recruitment is ongoing at full speed up to the maximum capacity of the Agency. The time of adoption of the legal bases that made it possible to hire staff, in the last quarter of the year, had an impact on the occupancy rate, as the average termination notice to end a contract with a former employer is for candidates 3 months from the moment of receiving a job offer, which can be sent only after the legal basis is adopted.</p>
Procurement		
16.	<p>Notes with concern that, according to the Court's report, the Agency encountered difficulties in attracting sufficient competition for several middle-value procurement procedures, receiving only one offer in the procedures concerned.</p>	<p>A new set of guidance has been issued by the Procurement Sector to encourage more effective market surveys as part of all middle-value procurement processes. The issue, however, appears to result at least in part from the formal requirements for tenders, whereby economic operators weight the administrative cost of preparing the tender and the expected margins.</p>
17.	<p>Notes with regret that the audit undertaken by the IAS with respect to the Agency's procurement processes found significant weaknesses, including two 'very important' issues regarding the estimation of contract values and key controls and three other findings rated as 'important';</p> <p>acknowledges that many of the weaknesses are related to the insufficient staffing of the Financial and Procurement Unit and the Procurement Sector in particular;</p> <p>notes that the Agency has put in place an action plan addressing the audit findings and the IAS's recommendations; calls on the Agency to report to the discharge authority on the measures taken to mitigate these weaknesses.</p>	<p>Regarding insufficient staffing, the Agency has acknowledged the risk and has requested additional staff in its programming documents. In the new establishing regulation, additional limited resources are provided for and recruitment is ongoing at full speed up to the maximum capacity of the Agency.</p> <p>The weakness has been addressed via the new standard operating procedure on procurement and contract management (2019), which better explains the rationale for the estimation of contract values by operational initiating agents.</p>

<p>18.</p>	<p>Notes that, according to the Court’s report, the Agency makes extensive use of external contractors and that 90 % of the work relating to the development and implementation of IT projects is carried out by the Agency in a combined effort with external contractors;</p> <p>notes with concern that although all phases of IT projects are under the Agency’s control, outsourcing the development of sensitive IT systems to such an extent creates considerable risk of over-reliance and over-dependency on external contractors; acknowledges the Agency’s reply that the complete development of those systems in-house and a reduction in outsourcing would require a substantial increase in the staff of the Agency and that, in order to ensure proper segregation of duties, contractors involved in quality assurance are not involved in providing external support to the operational management of large-scale IT systems; calls on the Agency to, therefore, limit dependency on external contractors by better use of its own resources and to set up a proper policy to limit the use of external contractors.</p>	<p>The Agency is working on a resourcing strategy to ensure the best use of its own resources. However, the decision lies with the budgetary authorities to allocate sufficient resources for the staff of the Agency.</p> <p>The Agency reiterates that resorting to external staff has value and is effective only in a limited number of cases and cannot be substituted for regular staffing.</p>
<p>19.</p>	<p>Requests the Agency to take all necessary measures to ensure that contractors having access to sensitive information about IT systems or the data they process are legally bound to stringent confidentiality rules and to demand that such contractors have formal national security clearance at the time of accessing such information; requests the Agency to ensure that its contractors are not bound by any laws of third countries that could bring them into conflict with the confidentiality arrangements established by the Agency.</p>	<p>Currently, the systems of eu-LISA do not process classified information. However, physically both sites hosting the central systems in Strasbourg and the backup systems in Austria (data centres, technical rooms, monitoring rooms, etc.) are defined as secured areas as per Commission Decision 444/2015. Consequently, there is a formal requirement to have security clearance for most of the staff and contractors.</p> <p>Furthermore, contractors, as per the legal bases, cannot access operational/business information from the large-scale IT systems of eu-LISA (e.g. personal data); their access to the infrastructure, servers and other system equipment is limited to stringent and supervised maintenance to keep the systems in good working order.</p> <p>All the requirements are included in the tender specifications and contracts and are strictly enforced.</p> <p>In addition, as part of the security requirements, all the contractors’ representatives are required to sign individual declarations on confidentiality and conflict of interest, as well as to submit certificates of good conduct.</p>

20.	<p>Notes that, according to the Court's report, by the end of 2017, the Agency had not yet introduced all of the tools launched by the Commission to introduce a single solution for the electronic exchange of information with third parties participating in public procurement procedures (e-procurement);</p> <p>notes on the basis of information from the Agency that it has already introduced e-invoicing and e-tendering for certain procedures, but not e-submission; calls on the Agency to introduce all the necessary tools and report to the discharge authority on their implementation.</p>	<p>Like other EU bodies, the Agency constantly monitors the development of the e-submission module, with a view to deploying it as soon as it meets the required standards.</p>
<i>Prevention and management of conflicts of interest and transparency</i>		
21.	<p>Acknowledges the Agency's existing measures and ongoing efforts to secure transparency, prevention and management of conflicts of interest, and whistleblower protection.</p>	<p>The Agency adopted in November 2018 new rules on the prevention and management of conflicts of interest for the Management Board and the Advisory Groups. According to the new rules, the Management Board and Advisory Group members and observers must submit annually a declaration of interest by the end of March. The chairpersons of the groups, with the support of the Agency, are to assess the declarations by the end of May and then publish them on the website.</p> <p>The Agency also has in place rules on the prevention and management of conflicts of interest for its staff members. In 2018, staff members submitted 154 declarations of interest (100 %), of which 31 declared an interest (20 %). Line managers assessed all 154 declarations of interest (100 %) and for 3 staff members (2 %) actions were taken to mitigate the risk of potential conflict of interest.</p> <p>In June 2018, the Management Board adopted a decision on eu-LISA's guidelines on whistleblowing. In 2019, the Agency has planned two awareness sessions on whistleblowing, the first to take place on 29 May 2019 at the operational site in Strasbourg and the second in the last quarter of 2019 at the Agency's headquarters in Tallinn. An expert from the European Anti-Fraud Office (OLAF) has agreed to participate and deliver a presentation as well as providing some practical examples.</p>
	<p>Notes with concern that the Agency does not publish the CVs of the members of its Management Board or of its managerial staff in general, only of its executive director; calls on the Agency to publish the CVs of all members of its Management Board and of its managerial staff and to report to the discharge authority on the measures taken in this regard.</p>	<p>There is no legal obligation to meet this request and therefore the members/ alternates/observers of the Management Board cannot be asked to provide their CVs. Nevertheless, the Agency will continue to encourage the representatives of the Management Board to provide their CVs in order to increase the transparency of the group.</p>

		The Agency may consider in future the suggestion to publish the CVs of its Management Committee members on its website after prior consultation of the applicable rules on security and data protection.
	Encourages the Agency to use the independence policy of the European Chemicals Agency as a best practice and an exemplary system of monitoring and preventing any conflicts of interest.	The newly adopted rules are based on examples of good practice from the EU institutions and the Commission was consulted prior to their adoption.
22.	Regrets that despite previous calls the Agency does not publish the declarations of interests of the members of its Management Board, of its managerial staff in general or of its executive director; calls for the publication of declarations of interest listing membership in all other organisations; stresses that it is not for the members of the Management Board, the managerial staff or the executive director to declare themselves out of conflict of interest but that a neutral body should assess the existence of conflicts of interest.	<p>In accordance with the new rules implemented by eu-LISA, the chairpersons of the Management Board and the Advisory Groups, with the support of the Agency, will assess on an annual basis the declarations received from the members and observers of the Management Board and Advisory Groups and then publish them on the website of the Agency. In accordance with the Agency's establishing regulation and the rules on prevention and management of conflicts of interest concerning eu-LISA staff members, the declarations of interest are submitted, but are not to be published.</p> <p>According to Article 29 of eu-LISA's establishing regulation, only the public statements of the Management Board members, the Executive Director, the Deputy Executive Director and the members of the Advisory Groups must be published.</p> <p>Article 29 of the establishing regulation reads: 'The members of the Management Board, the Executive Director, the Deputy Executive Director and the members of the Advisory Groups shall undertake to act in the public interest. For that purpose, they shall issue an annual, written, public statement of commitment which shall be published on the Agency's website.'</p>
Internal controls		
23.	Takes note that as of 31 December 2017, the Agency had 23 open audit recommendations which were rated as 'very important', including nine which had been issued recently, three that were past their due date and four that were still in progress; notes that no 'critical' issue is open; calls on the Agency to report to the discharge authority on the implementation of these audit recommendations.	The implementation rate of action plans put in place following various audit recommendations declined in 2018. To correct the situation, the Agency reinforced its monitoring system and internal reporting on this matter. The Agency also adopted and deployed the revised ICF early in 2019. The Agency is confident that, based on these measures, the implementation rate will improve significantly by the end of 2019.
Other comments		

24.	Notes the reconstruction of the Agency's operational site in Strasbourg, France, and the construction of the new headquarters building in Tallinn, Estonia; notes that the Agency also has a backup site in St Johann im Pongau, Austria, and a liaison office in Brussels, Belgium; notes with concern that the relocation to new premises in Strasbourg suffered considerable delays and that there have been several failings on the part of the contractor responsible.	<p>The headquarters reconstruction project was finalised by the Estonian government in accordance with the original plan and the Agency moved to its permanent location in July 2018.</p> <p>The reconstruction works at the technical site in Strasbourg were contractually finalised in June 2018. The delay was attributed to changes in the design, agreed with contractor. The Agency worked closely with the contractor to fix technical inefficiencies identified and to progress the acceptance of the works. To protect the Agency's financial interests, eu-LISA keeps in its possession a EUR 1.2 million performance guarantee.</p>
OPINION OF THE COMMITTEE ON CIVIL LIBERTIES, JUSTICE AND HOME AFFAIRS		
3.	Regrets that the Agency lacked the human resources needed to fulfil its operational and horizontal functions without recourse to external contractors; calls on the Agency to continue its efforts to ensure staff retention and development within the Agency; welcomes how the Agency handled the substantially increased workload in 2017 despite the high turnover in expert staff.	<p>The Agency has acknowledged the risk and has requested additional staff in its programming documents. However, the solution lies with the budgetary authorities, which could approve an increase in staff. The Agency is trying to mitigate the risk through reprioritisation of tasks, which is possible to a small extent.</p> <p>Recruitment is ongoing at full speed up to the maximum capacity of the Agency. The time of adoption of the legal bases that made it possible to hire staff, in the last quarter of the year, had an impact on the occupancy rate, as the average termination notice to end a contract with former employer is for candidates 3 months from the moment of receiving a job offer, which can be sent only after the legal basis is adopted.</p>

4.	<p>Welcomes that IT projects were implemented on time, on cost and on budget in 2017; welcomes that the Agency has undertaken a study in order to get an overview of the architecture of its future IT systems;</p> <p>points out, however, that the Agency had to make extensive use, via three framework contracts, of external contractors for the operational management of the systems entrusted to the Agency due to a lack of the necessary establishment posts; stresses that even if the Agency's IT projects are under its control, outsourcing its activities to such a large extent creates risks of over-reliance and over-dependency on external contractors; requests, therefore, that the Agency devise a long-term strategy to mitigate this risk;</p> <p>requests the Agency to present its vendor and contractor strategy to Parliament;</p> <p>requests the Agency to take all necessary measures to ensure that contractors having access to sensitive information about IT systems or the data they process are legally bound to stringent confidentiality rules and to demand that such contractors have formal national security clearance at the time of accessing such information; requests the Agency to ensure that its contractors are not bound by any laws of third countries that could bring them into conflict with the confidentiality arrangements established by the Agency.</p>	<p>The Agency is working on a resourcing strategy to ensure the best use of its own resources. However, the decision lies with the budgetary authorities to allocate sufficient resources for the staff of the Agency.</p> <p>The Agency reiterates that resorting to external staff has value and is effective only in a limited number of cases and cannot be substituted for regular staffing.</p> <p>Currently, the systems of eu-LISA do not process classified information. However, physically both sites hosting the central systems in Strasbourg and the backup systems in Austria (data centres, technical rooms, monitoring rooms, etc.) are defined as secured areas as per Commission Decision 444/2015. Consequently, there is a formal requirement to have security clearance for most of the staff and contractors.</p> <p>Contractors, as per the legal bases, cannot access operational/business information from the large-scale IT systems of eu-LISA (e.g. personal data); their access to the infrastructure, servers and other system equipment is limited to stringent and supervised maintenance to keep the systems in good working order.</p> <p>All the requirements are included in the tender specifications and contracts and are strictly enforced.</p> <p>In addition, as part of the security requirements, all the contractors' representatives are required to sign individual declarations on confidentiality and conflict of interest, as well as to submit certificates of good conduct.</p>
5.	<p>Regrets the small number of staff in key operational units and reminds the Agency of the importance of adequate staffing and appropriate human resources management in particular in the Application Management and Maintenance (AMM) unit; points out that in the second half of 2017, the head of the AMM unit also occupied <i>ad interim</i> the posts of Head of the Operations Department and Head of the Operations and Infrastructure Unit, thereby combining three of the highest management posts in the Operations Department; points out that this is not just a risk from a business continuity perspective but also flawed segregation of duties, creating potential operational conflicts of interest; requests the Agency to avoid taking unnecessary operational risks due to its human resource constraints and requests it to address those issues without delay.</p>	<p>The Agency has acknowledged the risk and has requested additional staff in its programming documents. However, the solution lies with the budgetary authorities, which could approve an increase in staff. The Agency is trying to mitigate the risk through reprioritisation of tasks, which is possible to a small extent.</p> <p>Recruitment is ongoing at full speed up to the maximum capacity of the Agency. The time of adoption of the legal bases that made it possible to hire staff, in the last quarter of the year, had an impact on the occupancy rate, as the average termination notice to end a contract with former employer is for candidates</p>

		3 months from the moment of receiving a job offer, which can be sent only after the legal basis is adopted.
6.	Notes that the Agency currently manages three separate, non-integrated large-scale IT systems all dealing with data in the Union's policy area of freedom, security and justice; agrees with the Court that the Agency should, in close consultation with the Commission and the Member States, prepare a cost-benefit analysis supporting a discussion on its long-term evolution; points out that the recently expanded mandate of the Agency should not happen to the detriment of system availability, ongoing development or the stability and security of the operations of the Agency's current IT systems, which must remain its first priority.	The Agency manages three large-scale IT systems in accordance with the respective legal bases for those systems. The fact that those systems have been built in a separate, non-integrated way was not a choice made by the Agency but a result of different development timelines and the constraints stemming from the way the legal framework for the different systems had been designed at the time of their development. The Agency, however, recognises that this approach is not sustainable, given both the increased number of applications within its mandate and the overall fact that it is not efficient from an operational or budgetary perspective. The Agency has already begun an initiative to streamline system architecture and design, and sees the Commission's 'Interoperability Initiative' as one of the main drivers in this respect. The Agency's future infrastructure strategy is towards a common shared infrastructure for current and future applications wherever the legal bases allow.

Part II. (b). External evaluations

At the time of writing this report (April 2019), the Agency has undergone external evaluation, in accordance with Article 31 of Regulation (EU) No 1077/2011.

The evaluation examined the way in which eu-LISA implemented its mandate, as laid down in its establishing regulation, looking at four areas: efficiency, effectiveness, added value and coherence. It also examined the Agency's contribution to the establishment of a coordinated, effective and coherent IT environment for the management of large-scale IT systems supporting the implementation of JHA policies.

The evaluation was successfully carried out in 2016 and came to the conclusion that the Agency effectively fulfils its mandate. The evaluation also suggested particular ways of improving the operations of the Agency and identified potential opportunities to extend its mandate.

The major conclusions of the evaluation were the following.

- The Agency had, overall, achieved its objective of effectively ensuring the operational management of the three IT systems entrusted to it.
- Although the organisational set-up and internal processes were still developing, these were properly structured and described. The Agency had been able to identify solutions for carrying out the assigned tasks. This was particularly observed through the project case studies (e.g. the Smart Borders pilot project and the Common Shared Services studies).
- The Agency had been successful, overall, in respecting the clear allocation of roles and responsibilities at EU and national levels concerning its core business of managing large-scale IT systems.
- The activities of eu-LISA were generally well aligned with the relevant JHA policy frameworks and strategies.
- The Agency had developed a coherent cooperation strategy for engaging with different stakeholders in a structured way through the adoption of its stakeholder management strategy.
- The establishment of a single management authority to assume operational management of the three IT systems inherently created a high level of added value, to the extent that the Agency effectively and efficiently carried out its tasks. The ultimate added value of eu-LISA was, therefore, logically highly dependent on its ability to fulfil its core tasks in an efficient and effective manner.
- Overall, the evaluation noted positive feedback concerning the level of involvement and communication with national-level stakeholders.

The evaluation report made 65 recommendations. They looked at opportunities for improvements related to the present tasks of the Agency as well as the possibility of enlarging the Agency's mandate to increase its added value, taking into account the possible future needs of the EU and the Member States.

Each recommendation had a rating (critical, very important, important or minor), which was assigned in view of necessity and time for implementation. The impact of the recommendations has also been analysed from financial, legal and organisational perspectives.

In this respect, recommendations have been split into two major groups:

- recommendations with legal impact (11 recommendations in total);
- recommendations with organisational and/or financial impact (54 recommendation in total).

Recommendations in the second group were further broken down as follows:

- 7 critical
- 10 very important
- 30 important
- 7 minor.

The recommendations with organisational and/or financial impact stemming from the external evaluation of the Agency have been followed up in accordance with an action plan. In March 2017, the Management Board adopted it and, in November 2018, an update on its implementation status was presented to the Management Board. At the time of preparation of this report, the implementation rate of the actions in the plan was above 80 %.

Part III. Assessment of the effectiveness of the internal control system

3.1 Risk management

The Agency follows a comprehensive risk management process performed regularly through the year at corporate level, through the entire life cycle of programmes and projects or at the level of entities or activities. At a lower level, risk management activities follow individual tailored approaches. At corporate level, the risk management process follows a dedicated schedule of events including the collection of risks, the assessment and prioritisation of risks and the organisation of a corporate risk management workshop during the fourth quarter of each year. At the workshop, risk owners, as well as risk strategies and responses, are decided. The outcome is documented in the annual corporate risk response plan and corporate risk register, which are valid until the following annual corporate risk management workshop. The register also includes the details of the risk-monitoring exchange between the risk owners and the Corporate Risk Officer.

In 2018, EPMO performed the Corporate Risk Officer function on an interim basis. A total of six corporate risks were identified and dealt with in the Agency's corporate risk response plan. Two risks related to the lack of statutory staff, which might negatively affect the Agency in achieving its assigned tasks, in ensuring business continuity and in increasing dependency on non-statutory staff. The other four risks related to potential delays and non-compliance issues with regard to the Strasbourg site construction; external cyberattacks on the eu-LISA infrastructure; lack of sufficient and appropriate security and changes in the corporate IT services sector; challenging staff management and recruitment to carry out the new initiatives.

During follow-up of the corporate risks in 2018, the two risks related to the lack of statutory staff were combined and reclassified as an issue. Similarly, the risk related to the Strasbourg site construction was classified as an issue but at the time of writing the actions to manage the issue were still in progress. For the three remaining risks, 13 individual risk measures have been set up with the nominated risk owners. Eight were implemented during the year or are permanent actions, with the aim of sufficiently mitigating the risks identified and their impact on the organisation. In order to minimise the risk of external cyberattack, a pilot implementation of Bromium for browser and email hardening was performed. In addition, the implementation of a new security information and event management software is in preparation. Regarding the risk related to security controls and changes in the corporate IT services sector, reviews of the corporate IT strategy and of the current system architecture have been initiated. A draft analysis of the major areas of risk that could impact security and business continuity had been presented by the end of the year. The actions taken to mitigate the staff hiring and management risk are mainly permanent actions, such as intensifying the onboarding programme and applying a lessons learned approach to the recruitment process. The revamping of the competency framework is another effort to mitigate risk. More details of the three corporate risks can be found in Annex VIII.

3.2 Compliance with and effectiveness of internal control standards

All 16 approved eu-LISA ICSs have been applied to the tasks stemming from the Agency's Programming Document 2018-2020 and have been integrated in a balanced way. In 2018, the 16 ICSs were further detailed and assigned to relevant staff members in the organisation. Considering the measures taken in 2018 to achieve and maintain compliance with the Agency's ICSs, it can be stated that internal control is sufficiently established in eu-LISA. A number of actions have been implemented, thus demonstrating eu-LISA's efforts in applying and striving for good governance.

The function of the Internal Control Coordinator has been established to support the efficient and effective implementation of ICSs in eu-LISA by creating a focal point for providing information and raising awareness, as well as

increasing capacity for monitoring and reporting. Following biannual monitoring exercises with managers and staff with ICS-related functions, the Internal Control Coordinator reported regularly in 2018 to the Executive Director on the status and progress of ICS compliance in eu-LISA.

In addition, the overall effectiveness and efficiency of the internal control system was assessed by the Internal Control Coordinator. For this purpose, the eu-LISA ICS register (which documents the status of each individual measure related to the implementation of the ICSs at the Agency) was consulted to extract the necessary data, which was then summarised and forwarded as a report to the eu-LISA Management Board for its information. More details on the implementation of the ICSs can be found in Annex VIII.

In the last quarter of 2018, the Agency started the preparatory work to adopt and implement the revised ICF. The Agency envisages full deployment by the end of 2019.

Part IV. Management assurance

4.1 Review of elements supporting assurance

The building blocks of assurance underpin the reasonable assurance given by the Authorising Officer in his declaration of assurance in the Annual Activity Report. These are summarised below.

Building block 1: Assessment by management

Assessment by management

The management of the Agency has reasonable confidence that, overall, suitable controls are in place and are working as intended; risks are being monitored and mitigated appropriately and the necessary improvements and reinforcements are being implemented.

Furthermore, the management of the Agency recognises the need to maintain a high level of efficiency in its internal control environment and for continuous assessment and strengthening of existing internal controls to achieve and then maintain full compliance with the requirements of the 16 ICSs adopted to ensure the achievement of the objectives set in its Programming Document.

Register of exceptions

The Agency has had a procedure in place for the registration of exceptions since 2013. At the beginning of 2015, a formal procedure for the registration and management of exceptions was adopted. Its overall objective is to establish appropriate arrangements to ensure that any exceptional circumstances of significant instances of overriding controls or deviations from the established regulatory framework are well explained, registered and reported in accordance with the principle of transparency. An exception must be documented, justified and approved at the appropriate level before any action is taken.

In 2018, 39 exceptions and no non-compliance events were registered. The Authorising Officer has determined that these exceptions do not require a formal reservation in the declaration of assurance on the basis of materiality. However, in the light of the latest audit findings, a root cause analysis will be performed to identify the reasons why the exception procedure has not always been observed. Swift actions will be taken based on the results. The target date is June 2019.

Building block 2: External audit results

IAS opinion

Not applicable. In 2018, the IAS did not carry out assurance audits. Nevertheless, based on the results of a risk assessment exercise, the IAS established a strategic audit plan for the period 2019-2021, which includes four audit topics.

Final audit report on the controls on the procurement process

The IAS acknowledges that the controls on the procurement process in eu-LISA support the achievement of the main operational objectives of the Agency (e.g. the 24/7, uninterrupted operation of the large-scale IT systems it manages). However, the IAS concluded that processes and related controls needed further development in order to facilitate better the objectives of the Agency in relation to sound financial management and compliance with procedural requirements.

In this context, the IAS identified two very important issues related to the estimation of the contract value and the definition and documentation of the key controls throughout the procurement process. The IAS has also identified three

important findings.

The Agency, in agreement with the IAS recommendations, **has put in place an action plan** addressing the audit findings and recommendations.

ECA opinion (audit report on 2018 provisional accounts)

Opinion on the reliability of the accounts

In the Court's opinion, the annual accounts of the Agency present fairly, in all material respects, its financial position as at 31 December 2018 and the results of its operations and its cash flows for the year then ended, in accordance with the provisions of its financial regulation and the accounting rules adopted by the Commission's accounting officer.

Opinion on the legality and regularity of the transactions underlying the accounts

In the Court's opinion, the transactions underlying the annual accounts for the year ended 31 December 2018 are legal and regular in all material respects.

Building block 3: Follow-up of reservations from previous reporting periods

The declaration of assurance of the Authorising Officer in the Annual Activity Report 2017 did not contain any reservations.

Conclusion

Based on Parts II and III above, the conclusion can be drawn that there are no significant weaknesses in internal controls that might have an impact on the declaration of assurance.

4.2 Reservations (if applicable)

Based on the information provided above, the Authorising Officer did not issue any reservations.

4.3 Overall conclusion on assurance

I, the undersigned Krum Garkov, Executive Director of the European Union Agency for the Operational Management of Large-Scale IT Systems in the Area of Freedom, Security and Justice (eu-LISA),

In my capacity as Authorising Officer,

Declare that the information contained in this report gives a true and fair view of the activities of the Agency in 2018.

I 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-assessment, the audits of the Internal Audit Service, the audits of the Internal Audit Capability and the audits of the European Court of Auditors.

I confirm that I am not aware of anything not reported here which could harm the interests of the Agency or its stakeholders.

Tallinn, (signature)

Krum GARKOV

ANNEXES

Annex I. Corporate key performance indicators

KPI	Corporate key performance indicator	Target	Actual 2018
1	Security: number of identified critical shortcomings during security tests	0	3
2	Security: percentage of identified security risks treated by assured security controls	100 %	86.3 %
3	Eurodac central system availability	99.99 %	99.98 %
4	Eurodac central system response time	99.45 %	99.99 %
5	Wide Area Network availability (for SIS II and VIS systems)	99.99 %	99.99 %
6	SIS II central system availability	99.99 %	99.75 %
7	SIS II central system response time	99.50 %	99.9 %
8	VIS central system availability	99.99 %	99.94 %
9	VIS central system response time	100 %	97.17 %
10	Cancellation rate of carried-over payment appropriations	< 5 %	2.65 %
11	Rate (%) of budgetary commitments implementation	95-99 %	99.5 %
12	Rate (%) of payment implementation	> 95 %	100 %
14	HR: ratio (%) of administrative resources to operational resources	Administrative: 20 %	16 %
		Operational: 70 %	73 %
15	Ratio (%) of payments completed within statutory deadlines	90-100 %	91.12 %
16	Average square metres of office space per full-time equivalent member of staff	10 m ²	13.6 m ²
17	eu-LISA training course external participant satisfaction (1: highly unsuccessful, 2: unsuccessful, 3: slightly successful, 4: successful, 5: highly successful)	> 3	4.43/5
18	Procurement: compliance with the Agency's procurement and acquisition plan (standard deviation between the initially planned project and the value of the contract actually signed)	0.5-1.5	0.48
19	Procurement project management: % of main procurement projects on schedule	> 60 %	41 %
20	Customer satisfaction: % of Member State users satisfied or very satisfied with the overall service provided by eu-LISA Service Desk	> 80 %	96.33 %
21	Ratio (%) of activities identified in the annual work programme met or on schedule	90 %	90.2 %

22	Member State systems helpdesk performance	> 80 %	91 %
23	Project management: assessing completed projects against defined quality/cost/time parameters (% of deviation to the approved baseline)	< 10 %	9.56 %
24	Percentage of audit recommendations implemented within stipulated deadlines	80-100 %	42 %
25	HR: percentage of uncertified to certified absence days from work within reporting period	< 25 %	22 %
26	HR: annual percentage staff turnover	≤ 5 %	4.94 %
27	HR: staff performance index	Completed appraisals: 100 %	100 %
		Low performance: < 5 %	0 %
		High performance: > 10 %	1.5 %
28	HR: staff engagement level	≥ 80 %	87 %
29	External communication: eu-LISA web-based visibility	Unique visitors: open	10 1580
		Average visit duration: open	3 min 0 s
		Bounce rate (left after one page): open	39 %
		Actions per visit (average): open	3.5

Notes on the KPIs

KPI 13 Has been deleted by Management Board decision.

Security

KPI 1 The critical issues relate to patching, secure configuration and malware protection updates. Compensating controls are implemented to manage the effective exposure of the core business systems to these classes of vulnerabilities.

KPI 2 The issues identified in the controls implemented to treat the identified risks are reflected in the findings on KPI 1. Corrective action plans have been implemented to address the identified issues.

Systems availability

KPIs 3, 6, 8 The system availability **target** is not precisely defined in the legal instruments governing the systems. The target of 99.99 % has been established by the Agency considering that systems managed by it are defined as high-availability systems.

The **actual availability** of the systems includes switchover and switchback time, in the event of planned maintenance.

Response time

KPI 4 Average of the share of high-priority transactions answered in less than 1 hour and of the share of normal transactions answered in less than 24 hours.

KPI 7 Share of category 1 queries returned within 1 second, the rest within 3 seconds. Category 1 queries represent all single and multiple queries that can be classified as exact, because of exact information provided in search fields. The use of inexact or fuzzy information is excluded from that category.

KPI 9 Share of response times under the service-level targets for each business group representing asylum, border, consulates, law enforcement and territory.

Annex II. Statistics on financial management

Initial budget, transfers and amending budgets

The table below summarises at chapter level the internal budgetary transfers operated by the Agency for C1 funds in 2018 in millions of euros. The Management Board approved one amendment to the budget.

Budget chapter		Commitment appropriations				Payment appropriations			
		Initial budget	Transfers	Amending budget	Final budget	Initial budget	Transfers	Amending budget	Final budget
TITLE 1 — STAFF EXPENDITURE		20.4	-0.4	-2.2	17.8	20.4	-0.4	-2.2	17.8
A-11	Salaries and allowances	18.5	-0.4	-2.1	15.9	18.5	-0.4	-2.1	15.9
A-12	Expenditure related to recruitment	0.3	-0.2	0.0	0.2	0.3	-0.2	0.0	0.2
A-13	Mission expenses	0.4	0.1	0.0	0.5	0.4	0.1	0.0	0.5
A-14	Socio-medical infrastructure	0.7	0.1	0.0	0.8	0.7	0.1	0.0	0.8
A-15	Training for staff	0.5	0.0	0.0	0.5	0.5	0.0	0.0	0.5
TITLE 2 — INFRASTRUCTURE AND OPERATING EXPENDITURE		12.1	0.7	-1.7	11.1	12.1	0.7	-1.7	11.1
A-20	Expenditure for premises	1.4	-0.1	-0.3	1.0	1.4	-0.1	-0.3	1.0
A-21	Corporate IT and telecoms	1.5	1.2	-0.3	2.4	1.5	1.2	-0.3	2.4
A-22	Movable property and associated costs	0.3	0.4	0.0	0.6	0.3	0.4	0.0	0.6
A-23	Current administrative expenditure	0.8	-0.1	-0.1	0.6	0.8	-0.1	-0.1	0.6
A-24	Postage	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
A-25	Management Board	0.5	0.0	-0.3	0.2	0.5	0.0	-0.3	0.2
A-26	Information and publications	1.4	-0.5	-0.1	0.8	1.4	-0.5	-0.1	0.8
A-27	External support services	3.4	0.2	0.0	3.5	3.4	0.2	0.0	3.5
A-28	Security	2.7	-0.2	-0.6	1.9	2.7	-0.2	-0.6	1.9
TITLE 3 — OPERATIONAL EXPENDITURE		168.2	-0.3	5.3	173.2	135.5	-0.3	-70.5	64.7
B3-0	Shared system infrastructure (core systems)	13.5	-2.8	5.3	16.0	11.0	-5.9	3.8	9.0
B3-1	SIS II	31.8	0.0	0.0	31.8	13.5	3.5	-3.5	13.5
B3-2	VIS/BMS	20.1	0.6	0.0	20.6	21.4	9.0	0.0	30.3
B3-3	Eurodac	15.4	2.0	0.0	17.4	18.7	-4.7	-9.3	4.7
B3-4	EES	57.5	1.2	0.0	58.7	40.3	-0.4	-38.0	1.9
B3-5	ETIAS	23.5	0.0	0.0	23.5	23.5	0.0	-23.5	0.0
B3-6	External support services directly related to core systems	5.4	-1.5	0.0	3.9	6.0	-1.7	0.0	4.3
B3-7	Advisory groups	0.3	0.1	0.0	0.4	0.3	0.0	0.0	0.4
B3-8	Training directly related to operations	0.8	0.2	0.0	0.9	0.8	0.0	0.0	0.7
TOTAL		200.7	0.0	1.5	202.1	167.9	0.0	-74.3	93.6

Implementation of the budget for the year (funding source C1)

As far as the 2018 appropriations (funding source C1) are concerned, the Agency reached a high level of budget implementation of 99.5 % in commitments and 100.0 % in payment appropriations, taking into consideration the automatic and non-automatic carry-over of commitment appropriations related to new tasks.

BUDGET TITLE	COMMITMENTS (C1)			PAYMENTS (C1)		
	Budgeted (EUR million)	Consumed (EUR million)	%	Budgeted (EUR million)	Consumed (EUR million)	%
Title 1 — Staff expenditure	17.8	17.8	100.0 %	17.8	17.8	100.0 %
<i>of which, executed</i>		17.8	100.0 %		17.4	97.5 %
<i>of which, automatic carry-forward</i>		—	—		0.4	2.5 %
Title 2 — Infrastructure and operating expenditure	11.1	11.1	100.0 %	11.1	11.1	100.0 %
<i>of which, executed</i>		11.1	100.0 %		6.0	54.2 %
<i>of which, automatic carry-forward</i>		—	—		5.1	45.8 %
Title 3 — Operational expenditure	173.2	172.2	99.4 %	64.7	64.7	100.0 %
<i>of which, non-automatic carry-over</i>		49.2	28.4 %			0.0 %
TOTAL	202.1	201.1	99.5 %	93.6	93.6	100.0 %
<i>of which, executed</i>		152.0	75.2 %		88.1	94.1 %
<i>of which, automatic carry-forward</i>		0.0			5.5	5.9 %
<i>of which, non-automatic carry-over</i>		49.2	24.3 %			

Implementation of the budget for other funding sources

In addition to the budget for the year (funding source C1), the Agency implemented appropriations:

- from internal assigned revenue (funding source C4);
- from internal assigned revenue carried over (funding source C5);
- carry-forward of commitments (differentiated in Title 3 and non-differentiated in Titles 1 and 2 and the corresponding payment appropriations (non-differentiated only) from previous years (funding source C8);
- from external assigned revenue, as contribution from the associated countries pursuant to Article 32(1)(b) of the establishing regulation (funding source Ro, Title 3 only).

Budget title	Funding source	Commitment			Payment		
		Budgeted (EUR million)	Consumed (EUR million)	% Commit	Budgeted (EUR million)	Consumed (EUR million) ^a	% Payment
A-1 Staff expenditure	C1	17.8	17.8	100.0 %	17.8	17.4	97.5 %
	C4	0.0	0.0	100.0 %	0.0	0.0	56.3 %
	C8	0.4	0.3	73.2 %	0.4	0.3	73.2 %
	Subtotal	18.3	18.1	99.4 %	18.3	17.7	96.9 %
A-2 Infrastructure and operating expenditure	C1	11.1	11.1	100.0 %	11.1	6.0	54.2 %
	C4	0.1	0.1	100.0 %	0.1	0.1	93.7 %
	C8	5.3	4.5	85.0 %	5.3	4.5	85.0 %
	Subtotal	16.5	15.7	95.1 %	16.5	10.6	64.3 %

Budget title	Funding source	Commitment			Payment		
		Budgeted (EUR million)	Consumed (EUR million)	% Commit	Budgeted (EUR million)	Consumed (EUR million) ^a	% Payment
Bo-3 Operational expenditure	C1 ^b	173.2	172.2	99.4 %	64.7	64.7	100.0 %
	C4	0.0	0.0	100.0 %	0.0	0.0	100.0 %
	C5	0.7	0.7	100.0 %	0.0	0.0	
	C8	161.0	147.4	91.5 %	0.0	0.0	
	R0	7.8	1.3	16.8 %	7.8	0.6	7.2 %
	Subtotal		342.7	321.6	93.9%	72.5	65.3
ALL	TOTAL	377.5	355.5	94.2%	107.3	93.6	87.3%

^a For Title 3, EUR 5 million was used for payments for commitments for the year. The remainder, amounting to EUR 58.9 million was used to cover commitments from previous years

^b Commitment consumed includes non-automatic carry-over of EUR 49.2 million.

List of budgetary transfers

During 2018, the following internal transfer operations were performed under Article 27 of the Agency's financial regulation.

BUDGETARY TRANSFERS in 2018 (in EUR)					
Budgetary Transfer No	Reference	Date	Budget line	Commitment appropriation	Payment appropriation
1	LIS.1791	28.4.2018	A01100 TA basic salary	-573,498.00	-573,498.00
			A01110 CA salary	300,000.00	300,000.00
			A01124 Daily allowance	6,000.00	6,000.00
			A01125 Monthly allowance	20,000.00	20,000.00
			A01184 Daily subsistence allowance	11,000.00	11,000.00
			A01190 Weightings	108,000.00	108,000.00
			A01402 European school	128,498.00	128,498.00
			A02100 Corporate IT and telecoms	378,000.00	378,000.00
			A02210 Furniture and office equipment	400,000.00	400,000.00
			A02320 Legal expenses	22,000.00	22,000.00
			A02800 Corporate security	-100,000.00	-100,000.00
			B03000 Shared system infrastructure (core systems)	-270,000.00	-270,000.00
			B03200 VIS/BMS MWO	-400,000.00	-400,000.00
			B03300 Eurodac MWO	-300,000.00	-300,000.00
			B03730 Other meetings and missions	50,000.00	50,000.00
B03800 Training directly related to operations	220,000.00	220,000.00			
2	LIS.1795	29.6.2018	A02320 Legal expenses	8,150.00	8,150.00
			A02700 External support services	31,850.00	31,850.00
			A02800 Corporate security	-40,000.00	-40,000.00
3	LIS.1797	27.7.2018	A01100 TA basic salary	-782,000.00	-782,000.00
			A01105 TA overtime shifts and on-call duty	50,000.00	50,000.00
			A01110 CA salary	300,000.00	300,000.00
			A01124 Daily allowance	140,000.00	140,000.00
			A01125 Monthly allowance	20,000.00	20,000.00

BUDGETARY TRANSFERS in 2018 (in EUR)					
Budgetary Transfer No	Reference	Date	Budget line	Commitment appropriation	Payment appropriation
			A01130 Insurance against sickness	55,000.00	55,000.00
			A01132 Unemployment insurance	20,000.00	20,000.00
			A01183 Removal expenses	7,000.00	7,000.00
			A01184 Daily subsistence allowance	20,000.00	20,000.00
			A01190 Weightings	70,000.00	70,000.00
			A01301 Mission expenses	100,000.00	100,000.00
			A02010 Expenditure for premises FR	-300,000.00	-300,000.00
			A02100 Corporate IT and telecoms	300,000.00	300,000.00
			A02210 Furniture and office equipment	300,000.00	300,000.00
			A02700 External support services	300,000.00	300,000.00
			B03001 System security and business continuity	-650,000.00	-650,000.00
			B03730 Other meetings and missions	50,000.00	50,000.00
			4	LIS.1799	25.9.2018
B03100 SIS II MWO	0.00	1,500,000.00			
B03200 VIS/BMS MWO	0.00	3,400,000.00			
B03600 External support services directly related to core systems	0.00	-1,500,000.00			
5	LIS.1802	30.10.2018	A01301 Mission expenses	-6,000.00	-6,000.00
			A01403 Social activities	6,000.00	6,000.00
			A02320 Legal expenses	25,000.00	25,000.00
			A02330 Other running costs	-25,000.00	-25,000.00
			B03001 System security and business continuity	-70,000.00	0.00
			B03100 SIS II MWO	0.00	2,000,000.00
			B03200 VIS/BMS MWO	0.00	1,700,000.00
			B03300 Eurodac MWO	0.00	-3,700,000.00
B03710 Advisory groups	70,000.00	0.00			
6	LIS.1846	30.11.2018	A01100 TA basic salary	-140,000.00	-140,000.00
			A01101 Household allowance	11,000.00	11,000.00
			A01102 Dependent child allowance	16,000.00	16,000.00
			A01103 Education allowance	-45,000.00	-45,000.00
			A01124 Daily allowance	-16,500.00	-16,500.00
			A01184 Daily subsistence allowance	5,000.00	5,000.00
			A01190 Weightings	113,000.00	113,000.00
			A01200 Travel expenses	-15,400.00	-15,400.00
			A01201 Other expenses	-36,600.00	-36,600.00
			A01301 Mission expenses	54,215.00	54,215.00
			A01400 Annual medical check-ups	-15,500.00	-15,500.00
			A01401 Nursery allowance	-34,000.00	-34,000.00
			A01402 European school	22,785.00	22,785.00
			A01403 Social activities	79,000.00	79,000.00
			A01500 Training for staff	2,000.00	2,000.00
			A02100 Corporate IT and telecoms	613,264.30	613,264.30
			A02200 Other technical equipment and installation	-12,726.96	-12,726.96
			A02300 Office supplies	12,726.96	12,726.96

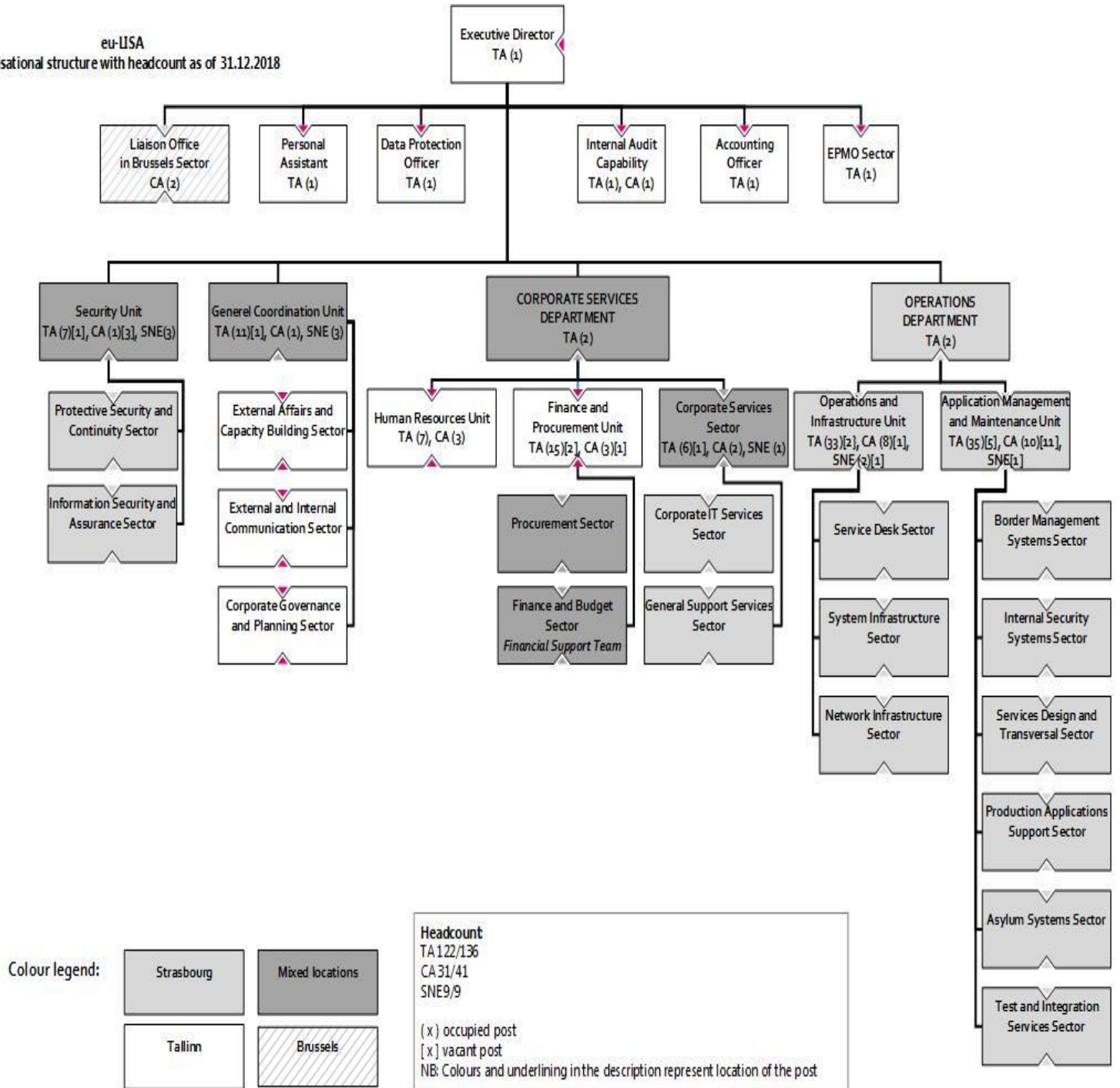
BUDGETARY TRANSFERS in 2018 (in EUR)					
Budgetary Transfer No	Reference	Date	Budget line	Commitment appropriation	Payment appropriation
			A02330 Other running costs	-89,922.44	-89,922.44
			A02600 Information and publications	-523,341.86	-523,341.86
			B03300 Eurodac MWO	430,909.67	0.00
			B03600 External support services directly related to core systems	-430,909.67	0.00
			B03800 Training directly related to operations	0.00	-270.65
			B03810 Training for Member States	0.00	270.65
7	LIS.1848	7.12.2018	A02010 Expenditure for premises FR	255,000.00	255,000.00
			A02210 Furniture and office equipment	-255,560.88	-255,560.88
			A02330 Other running costs	560.88	560.88
			B03000 Shared system infrastructure (core systems)	0.00	-1,000,000.00
			B03001 System security and business continuity	0.00	-150,000.00
			B03100 SIS II MWO	0.00	800,000.00
			B03200 VIS/BMS MWO	0.00	1,850,000.00
			B03300 Eurodac MWO	0.00	-1,000,000.00
			B03400 EES MWO	0.00	-300,000.00
			B03800 Training directly related to operations	0.00	-200,000.00
8	LIS.1861	18.12.2018	A01100 TA basic salary	-4,378.65	-4,378.65
			A01101 Household allowance	-1,018.83	-1,018.83
			A01102 Dependent child allowance	-1,254.53	-1,254.53
			A01103 Education allowance	-6,745.63	-6,745.63
			A01104 Expatriation and foreign residence allowances	-8,557.74	-8,557.74
			A01105 TA overtime shifts and on-call duty	-28,442.43	-28,442.43
			A01110 CA salary	-19,418.31	-19,418.31
			A01124 Daily allowance	-20,140.01	-20,140.01
			A01125 Monthly allowance	-6,573.05	-6,573.05
			A01130 Insurance against sickness	-2,759.96	-2,759.96
			A01131 Insurance against accidents occupational disease	-4,727.53	-4,727.53
			A01132 Unemployment insurance	-673.93	-673.93
			A01140 Birth and death allowances	-1,803.38	-1,803.38
			A01141 Travel expenses for annual leave	-12,580.01	-12,580.01
			A01144 Other allowances	-5,655.05	-5,655.05
			A01181 Travel expenses (taking up duties)	-969.46	-969.46
			A01182 Installation and reassignment allowance	-526.00	-526.00
			A01183 Removal expenses	-19,287.40	-19,287.40
			A01184 Daily subsistence allowance	-1,538.99	-1,538.99
			A01190 Weightings	-1,438.99	-1,438.99
			A01200 Travel expenses	-117,219.65	-117,219.65
			A01201 Other expenses	-33.00	-33.00
A01301 Mission expenses	-12,968.00	-12,968.00			
A01400 Annual medical check-ups	-7,200.00	-7,200.00			
A01401 Nursery allowance	-37,900.00	-37,900.00			
A01402 European school	-4.44	-4.44			
A01403 Social activities	-22,319.11	-22,319.11			

BUDGETARY TRANSFERS in 2018 (in EUR)					
Budgetary Transfer No	Reference	Date	Budget line	Commitment appropriation	Payment appropriation
			A01500 Training for staff	-37,105.38	-37,105.38
			A02000 Expenditure for premises EE	-72,207.78	-72,207.78
			A02010 Expenditure for premises FR	-35,598.60	-35,598.60
			A02100 Corporate IT and telecoms	-84,681.03	-84,681.03
			A02200 Other technical equipment and installation	-27,485.50	-27,485.50
			A02210 Furniture and office equipment	-22,695.26	-22,695.26
			A02330 Other running costs	-350.00	-350.00
			A02331 HR fees and charges	-25,209.60	-25,209.60
			A02400 Postage	-2,000.00	-2,000.00
			A02500 MB meetings	-23,124.86	-23,124.86
			A02510 Other meetings	-14,625.17	-14,625.17
			A02600 Information and publications	-14,761.56	-14,761.56
			A02700 External support services	-101,660.17	-101,660.17
			A02800 Corporate security	-99,216.39	-99,216.39
			B03000 Shared system infrastructure (core systems)	-1,479,872.92	-339,953.90
			B03001 System security and business continuity	-333,570.62	-51,590.32
			B03100 SIS II MWO	-15,982.75	-839,307.31
			B03200 VIS/BMS MWO	906,855.38	2,544,395.55
			B03300 EURODAC MWO	1,845,496.04	0.00
			B03400 EES MWO	1,234,767.53	-106,501.42
			B03600 External support services directly related to core systems	-1,099,162.34	-227,100.35
			B03710 Advisory groups	-49,315.11	-41,246.13
			B03730 Other meetings and missions	-64,117.81	-41,093.38
			B03800 Training directly related to operations	-4,808.45	149.74
			B03810 Training for Member States	-33,433.57	9,102.90
9	LIS.1867	20.12.2018	A01403 Social activities	-8,864.52	-8,864.52
			A02010 Expenditure for premises FR	12,000.00	12,000.00
			A02700 External support services	-72,139.84	-72,139.84
			B03200 VIS/BMS MWO	69,004.36	-143,827.50
			B03300 Eurodac MWO	0.00	291,588.42
			B03710 Advisory groups	0.00	-0.72
			B03800 Training directly related to operations	0.00	-78,755.84

Annex III. Organisational chart

In 2018, the total number of posts at eu-LISA consisted of 186 posts for the following contract types: 136 TA, 41 CA and 9 SNE. The organisational chart shows the situation on 31 December 2018, presenting the departments, units and sectors, as well as the individual posts subordinate to the Executive Director of eu-LISA, with the headcount.

eu-LISA
Organisational structure with headcount as of 31.12.2018



Annex IV. Establishment plan

eu-LISA's 2018 establishment plan

The 2018 establishment plan consisted of 136 posts for temporary agents.

Category and grade	Establishment plan authorised under the Union budget 2018	
	Officials	TAs
AD 16	0	0
AD 15	0	1
AD 14	0	1
AD 13	0	2
AD 12	0	3
AD 11	0	5
AD 10	0	8
AD 9	0	13
AD 8	0	17
AD 7	0	21
AD 6	0	12
AD 5	0	11
Total AD	0	94
AST 11	0	0
AST 10	0	0
AST 9	0	1
AST 8	0	2
AST 7	0	4
AST 6	0	9
AST 5	0	14
AST 4	0	11
AST 3	0	1
AST 2	0	0
AST 1	0	0
Total AST	0	42
TOTAL	0	136

Information on entry level for each type of post: indicative table

The table below presents the levels at which the key functions listed by the European Commission are represented in

eu-LISA. The job titles used in the Agency are listed where there are differences between the Commission's and the Agency's terminology. It should be noted that the entry grades that are higher than those mentioned in Article 53 of the Conditions of Employment of Other Servants of the European Union are a result of recruitment processes organised during the start-up phase of the Agency, when the higher grades were specified in eu-LISA's establishment plan.

Key functions	Type of contract (official, TA or CA)	Function group (FG), grade of recruitment (or bottom of the brackets if published in brackets)	Indication of whether the function is dedicated to administrative support or operations (subject to definitions used in screening methodology)
Head of Department — level 2	TA	AD 12	Administration/operations
Head of Unit — level 3	TA	AD 9, AD 10	Administration/operations
Head of Sector — level 4	TA, CA	AD 5, AD 7, AD 8, AD 9, AD 10, FG IV	Administration/operations
Senior Officer	TA	AD 8, AD 9	Administration/operations
Officer	TA, CA	AD 6, AD 7, AD 8, FG IV	Administration/operations
Junior Officer	TA, CA	AD 5, FG IV	Administration/operations
Senior Assistant	n/a	n/a	n/a
Junior Assistant	TA, CA	AST 3, FG III	Administration/operations
Head of Corporate Services Department	TA	AD 12	Administration
Head of Human Resources Unit	TA	AD 9	Administration
Head of Finance and Procurement Unit	TA	AD 10	Neutral
Head of IT	n/a	n/a	n/a
Secretary ^a /Assistant	TA, CA	AST 3, FG III	Administration/operations
Mail Clerk	n/a	n/a	n/a
Webmaster/Web Editor	n/a	n/a	n/a
Data Protection Officer	TA	AD 10	Administration
Accounting Officer	TA	AD 9	Neutral
Head of Internal Audit Capability	TA	AD 9	Administration/neutral
Personal Assistant to the Executive Director ^b	TA	AST 5 ^b	Administration

^a eu-LISA's establishment plan does not include posts for secretaries or clerical functions. With the entry into force of the new staff regulations on 1 January 2014, eu-LISA decided to keep the grades approved in the establishment plan and to augment the tasks of the staff hired at grades AST 2 and AST 3 for the assistants in a particular field (HR, IT, etc.) or the administrative assistants. In addition, when necessary, external service providers (*intra muros*) perform secretarial work.

^b This entry grade was established on the creation of the Agency in 2012.

Benchmarking against previous year's results

At the end of 2018, eu-LISA conducted its fifth benchmarking exercise performed according to the methodology agreed by the Heads of Administration of the European agencies. The screening was applied to all the eu-LISA posts. The results of this screening are presented in the tables below.

Results of the eu-LISA benchmarking exercise in 2018 — staff members

<i>Job type (sub)category</i>	2017 (%)	2018 (%)
Administrative support and coordination	17	16
<i>Administrative support</i>	13	12.5
<i>Coordination</i>	3	3.5
Operational	72	73
<i>General operational</i>	58	59
<i>Programme management</i>	6	6
<i>Top-level operational coordination</i>	8	8
<i>Evaluation and impact assessment</i>	0	0
Neutral	11	11
<i>Finance</i>	11	11
<i>Control</i>	n/a	n/a

In 2018, the Agency also screened the posts occupied by external service providers (*intra muros*), with the following results.

Results of the eu-LISA benchmarking exercise in 2018 — external service providers (*intra muros*)

<i>Job type (sub)category</i>	2017 (%)	2018 (%)
Administrative support and coordination	46.42	47.5
<i>Administrative support</i>	44.33	44.5
<i>Coordination</i>	2.09	3
Operational	47.16	48.5
<i>General operational</i>	37.01	41
<i>Programme management</i>	7.16	3
<i>Top-level operational coordination</i>	1.49	2.5
<i>Evaluation and impact assessment</i>	1.49	2
Neutral	6.42	4
<i>Finance</i>	6.42	4
<i>Control</i>	n/a	n/a

Annex V. Human and financial resources by activity

Human resources

In accordance with our action plan following the evaluation of the Agency, activity-based budgeting will be introduced by the end of 2019.

In 2018, of a total of 162 full-time equivalent (FTE) staff members available, 118 FTE (73 % of staff) were used for operational activities and 18 FTE (11 % of staff) for related procurement and financial activities. Twenty-six FTE (16 % of staff) were used for horizontal activities (general coordination and administrative support). Owing to the structure of the activities of the Agency, most of which are not repetitive, a further breakdown cannot be given at the time of writing.

Expenditures according to activity-based costing

In 2018, the Agency developed an activity-based costing methodology, making it possible to identify the total costs of each system managed by eu-LISA.

The total system expenditures consist of:

- direct expenditure, covering maintenance and project costs;
- network expenditure;
- horizontal expenditure, including operational costs for shared infrastructure and system security, as well as corporate and horizontal expenditures, mainly staff and running costs.

The reallocation of corporate and operational horizontal expenditure is based on the following cost drivers:

- direct system expenditures;
- time allocated to the systems (cost of human resources);
- asset value of the system at year-end.

During the reporting year, the Agency implemented a budget of EUR 86 million,⁴⁸ of which:

- 66 % was spent on operational expenditure (48 % direct expenditure on the systems and 18 % operational horizontal costs⁴⁹);
- 34 % represented corporate horizontal costs.

The total system costs are summarised in the table below:

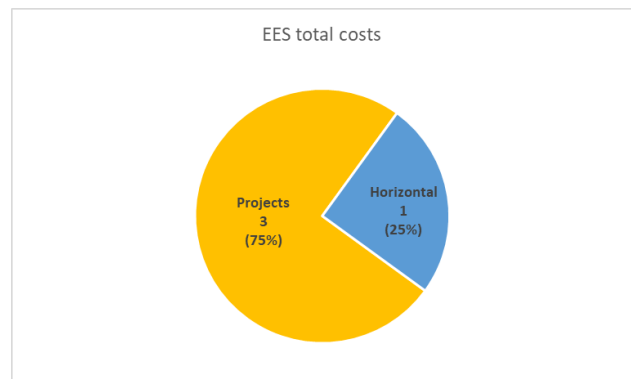
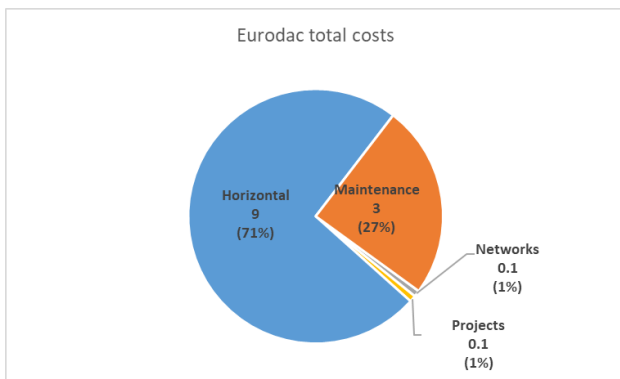
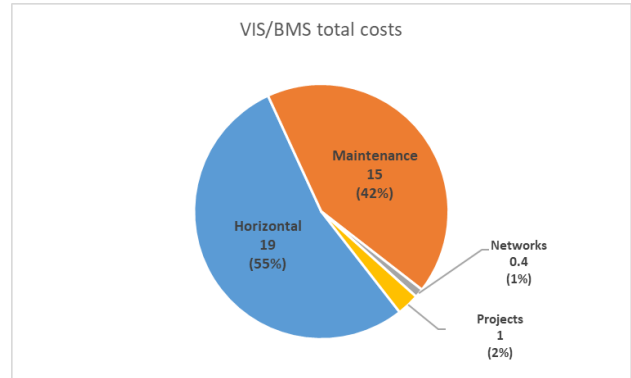
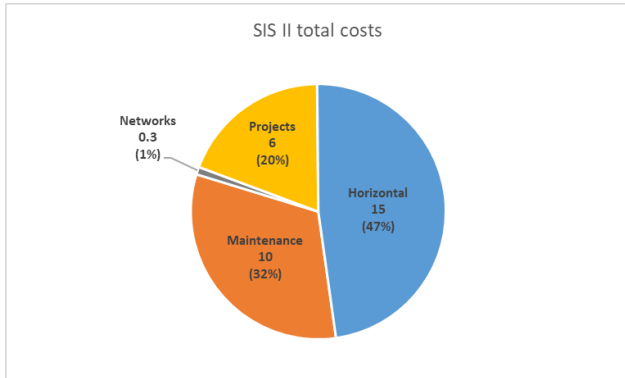
Systems	Total costs (in EUR millions)	% of total costs
SIS II	31	36 %
VIS/BMS	35	41 %
Eurodac	13	15 %
EES	4	5 %
ETIAS	3	3 %
Grand total	86	100 %

⁴⁸ Amount of L2 budgetary commitments in 2018.

⁴⁹ Including expenditures for system security and shared infrastructure.

It should be noted that the most of the core activities of the Agency are not repetitive, but project-based. Therefore, their costs cannot be standardised as in a standard process-based business model.

The following figures provide the cost breakdown for each system in millions of euros and as percentage of the total system costs.



Annex VI. List of training sessions delivered to Member States

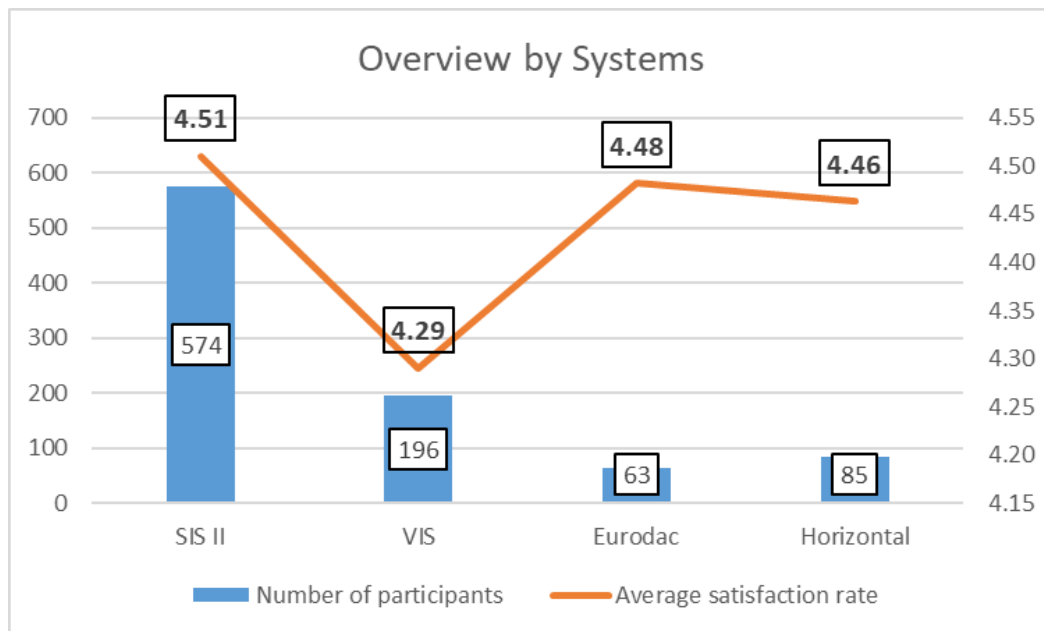
The full list of system training sessions that were delivered to Member States throughout 2018 is as follows:

- SIS II Central System Simulator 1
- VIS Operational Training — Intermediate Level (L2)
- SIS II Central System Simulator 2
- Webinar AFIS in SIS II — Session 1*
- Webinar AFIS in SIS II — Session 2*
- SIS II Central System Simulator 3
- Webinar: Schengen Evaluation (Switzerland)
- SIS II Operational Training — Entry Level (L1)
- VIS Operational Training — Advanced Level (L3)
- Webinar: Schengen Evaluation (Latvia)
- SIS II Operational Training — Intermediate Level (L2)
- SIS II Central System Simulator 4
- Schengen Evaluation SIS II and SIRENE*
- SIS II Operational Training — Advanced Level (L3)
- Webinar: Schengen Evaluation (Finland)
- Webinar: VIS Business Analytics
- Train the Trainer — SIS II, VIS, Eurodac for IT Operators (jointly with CEPOL)
- AFIS in SIS II — Technical Focus
- AFIS — Management Focus
- Eurodac National Access Point (NAP) On-Site Visit (Malta)
- CEPOL: SIRENE Officers Level I*
- Webinar: SIS II Searches
- Webinar: Schengen Evaluation (Estonia)
- Webinar: Eurodac Basics
- VIS Data Quality
- SIS II Newcomer Training for Ireland (On-Site Visit)
- Eurodac Operational Training — Entry Level (L1)
- SIS II for SIRENE (jointly with CEPOL and the Commission)
- Eurodac and SIS II — Combating Facilitating Illegal Immigration (in cooperation with EMPACT/ the Commission)
- Eurodac Operational Training — Intermediate Level (L2)

- Eurodac Operational Training — Advanced Level (L3)
- Webinar Schengen Evaluation SIS II/SIRENE (Lithuania)
- VIS Operational Training — Entry Level (L1)
- Train the Trainer — SIS II, VIS, Eurodac for IT Operators (jointly with CEPOL)
- Webinar VIS ICD
- Webinar VIS Search Functions
- Webinar VIS Best Practices
- Webinar: SIS II CS Simulator
- CEPOL: SIRENE Officers Level II*

*CEPOL course. eu-LISA provided trainer/technical support.

Member State systems training implementation report 2018: average satisfaction rate by training topic category



The satisfaction rate is measured with marks out of 5, with the following levels: 1: highly unsuccessful, 2: unsuccessful, 3: slightly successful, 4: successful, 5: highly successful.

Annex VII. Specific annex related to Part II

Not required.

Annex VIII. Specific annex related to Part III

Identified risks

As an outcome of the 2017/2018 risk assessment efforts, the following table shows the ranking of the top three corporate risks for eu-LISA monitored during the year.

Ranking	Risk
Risk 1	Targeted and successful external cyberattack on the eu-LISA infrastructure
Risk 2	Lack of sufficient and appropriate security and change controls in corporate IT
Risk 3	Challenging staff management in relation to complex requirements for new initiatives, systems and environment. In addition, present market competition endangers opportunities for eu-LISA to hire the right talent

Internal control standards

Number	Title	Summary of major actions undertaken towards compliance in 2018	Implementation status at year-end (full/in progress)	Summary of major actions carried forward to/planned for 2019
ICS 1	Mission	Mission statements have been updated where required and communicated within the organisation	Full	A full update exercise with regard to the Agency's and entities' mission statements will be carried out as part of implementation of the new organisational structure of the Agency.
ICS 2	Ethical and organisational values	Regular staff awareness sessions on following the elements of the ethical framework have been organised. Efforts have been made to update the ethical framework	In progress	A whistleblowing procedure will be fully implemented, staff will recognise the ethical framework formally, an Ethical Advisor will be appointed.
ICS 3	Staff allocation and mobility	Contributions from managers to align staff planning with eu-LISA's objectives and priorities have been provided, and an internal vacancy mechanism for recruitment has been applied to provide mobility opportunities with the Agency	In progress	The competency framework is to be further enhanced to accommodate job families and career paths. Job descriptions will also be updated as part of implementation of the new organisational structure
ICS 4	Staff evaluation and development	The 2017 annual appraisal exercise has been finalised (including recording training needs of staff)	Full	The 2018 annual appraisal exercise is to be performed
ICS 5	Objectives and performance indicators	The eu-LISA Programming Document has been prepared by the Agency in accordance with applicable guidance and	Full	The Agency aims to prepare the Programming Document in accordance with the establishing regulation and its

Number	Title	Summary of major actions undertaken towards compliance in 2018	Implementation status at year-end (full/in progress)	Summary of major actions carried forward to/planned for 2019
		based on a dialogue between management and staff of the Agency as well as with the Member States in the margins of the Management Board and Advisory Groups. The Annual Activity Report has been provided, with all details required, to eu-LISA's stakeholders. The Agency maintained the corporate KPIs, as agreed with the Management Board		internal processes with regard to time, scope and quality
ICS 6	Risk management process	The corporate risk management framework has been applied and the 2017 risk management exercise concluded	Full	The 2019 corporate risk management exercise is to be carried out
ICS 7	Operational structure	The operational structure of the Agency has been amended accordingly where required, e.g. by reallocation of tasks among entities or by introduction of sectors as entities below the units. A resourcing strategy has been completed followed by a corporate IT strategy. The Executive Director's decision on delegation of authority has been revised where necessary	In progress	The Agency will continue implementation of its internal transformation programme.
ICS 8	Processes and procedures	An activity to update the Corporate Service Catalogue to reflect new/changed services and/or business needs has been initiated. A fully established register of exceptions/deviations and related processes is maintained	In progress	The activity to update and maintain the Corporate Service Catalogue will be continued in 2019. Wherever possible, the Agency will further support business processes by implementing automation and IT features
ICS 9	Management supervision	Entities (departments, units, sectors) have implemented the Programming Document in a structured way following a consistent process. A dedicated reporting process is in place to measure progress achieved	Full	As per minimum requirements set and if required, the Executive Director will inform the Management Board of any potentially significant issues related to internal control and audit and OLAF investigations as well as material budgetary and financial issues that might have an impact on the

Number	Title	Summary of major actions undertaken towards compliance in 2018	Implementation status at year-end (full/in progress)	Summary of major actions carried forward to/planned for 2019
				Agency's operations or on sound financial management or which could hamper the achievement of the Agency's objectives.
ICS 10	Business continuity	A business continuity plan for the Agency has been developed and tested, and there is regular reporting on business continuity matters at management level. Annual training on appropriate behaviour if the business continuity plan is invoked has been carried out	Full	Documentation on business continuity for the Agency will be developed further and updated if necessary, and the applicable revision process for the business continuity plans for the large-scale IT systems will be carried out
ICS 11	Document management	Instructions and training to staff entering the Agency on document and filing management is provided, and a filing plan and archiving policy are in place. A corporate document management system (ARES) has been implemented	Full	Use of the electronic document management system will continue and will be extended to increase the efficiency of internal processes through electronic workflows
ICS 12	Information and communication	Internal and external communication strategies and action plans have been updated where required; a satisfaction survey has been carried out for this purpose. Copyright provisions are respected in all external communication efforts and this is sufficiently documented. The internal communication strategy and annual action plan have been implemented. An IT security plan has been created by the Security Sector, being approved and maintained in accordance with requirements. Meetings with staff have been arranged on at least a quarterly basis by the Executive Director to speak about relevant issues	Full	Internal newsletters will be further maintained and developed in accordance with staff needs. Generally, internal and external communication strategies and efforts will be amended in accordance with business needs and applicable regulations. Meetings with staff will be maintained on a quarterly basis by the Executive Director to speak about relevant issues
ICS 13	Accounting and financial reporting	The ICS manual for the control of accounting data is in place	Full	The ICS manual for the control of accounting data will be maintained and updated as required. Authorising Officers will

Number	Title	Summary of major actions undertaken towards compliance in 2018	Implementation status at year-end (full/in progress)	Summary of major actions carried forward to/planned for 2019
				receive special training to provide them with up-to-date knowledge on relevant regulations and processes
ICS 14	Evaluation of activities	The Agency's evaluation based on Article 31 of the establishing regulation ⁵⁰ has been concluded	Full	An action plan based on Article 31 is in the process of implementation. Its implementation will be finalised by the end of 2019.
ICS 15	Assessment of internal control systems	Awareness of the ICS framework including mechanisms for reporting control weaknesses and handling of exceptions/non-compliance events has been raised among staff. A survey/self-assessment exercise has been carried out among managers on the effectiveness of eu-LISA's internal control systems, and the results are presented in the CAAR	Full	Staff awareness of the ICS framework including mechanisms for reporting control weaknesses and handling of exceptions/non-compliance events will continue to be raised. The new ICF will be implemented. It was adopted by the MB in March 2019.
ICS 16	Internal Audit Capability	The Internal Audit Capability is in operation and coordinating its work with the Internal Audit Service. The annual audit work plan and annual internal audit report are in place	Full	The Internal Audit Capability will continue to operate and coordinate its work with IAS. Annual audit work plan and annual internal audit report will be created.

⁵⁰ Regulation (EU) No 1077/2011 (repealed).

Annex IX. Financial accounts

Balance sheet (EUR)

A.I. NON-CURRENT ASSETS	2018	2017	Variation
Computer software	22,419,631	29,788,751	(7,369,120)
Intangible assets under construction	9,879,120	2,315,077	7,564,042
A.I.1. Intangible assets	32,298,751	32,103,828	194,922
Land and buildings	33,291,494	2,318,408	30,973,086
Plant and equipment	856	1,300	(444)
Furniture and vehicles	127,473	133,236	(5,763)
Computer hardware	11,020,577	9,516,101	1,504,476
Other fixtures and fittings	447,069	506,456	(59,387)
Buildings under construction	—	14,997,770	(14,997,770)
A.I.2. Property, plant and equipment	44,887,469	27,473,271	17,414,198
A.I. TOTAL NON-CURRENT ASSETS	77,186,220	59,577,099	17,609,120
A.II. CURRENT ASSETS			
Current pre-financing	2,546,822	6,536,474	(3,989,652)
A.II.2. Current pre-financing	2,546,822	6,536,474	(3,989,652)
Deferred charges	1,631,816	2,109,084	(477,268)
Sundry receivables	12,528,534	10,239,035	2,289,499
Receivables from customers	878	—	878
Other current receivables	(213)	(546)	333
A.II.3.1. Current exchange receivables	14,161,015	12,347,573	1,813,442
Receivables from Member States (VAT)	466,023	451,639	14,384
Contributions from associated countries	2,242,936	3,530,919	(1,287,983)
A.II.3.2 Non-exchange receivables	2,708,959	3,982,558	(1,273,599)
A.II. TOTAL CURRENT ASSETS	19,416,796	22,866,605	(3,449,809)
TOTAL ASSETS	96,603,016	82,443,705	14,159,311
P.III. NET ASSETS			
P.III.2 Accumulated surplus	65,085,597	67,282,902	(2,197,305)
P.III.3. Economic result of the year (+ profit)	12,034,041	—	12,034,041
P.III.3. Economic result of the year (– loss)	—	(2,197,305)	2,197,305
P.III. NET ASSETS	77,119,638	65,085,597	12,034,041
P.II. CURRENT LIABILITIES			
Current payables	2,810,192	3,042,475	(232,283)
Accounts payables with consolidated entities	920,267	1,341,491	(421,224)
P.II.4. Accounts payable	3,730,459	4,383,966	(653,507)
Accrued charges	15,752,918	12,974,141	2,778,777
P.II.5. Accrued charges	15,752,918	12,974,141	2,778,777
P.II. TOTAL CURRENT LIABILITIES	19,483,377	17,358,107	2,125,270
TOTAL LIABILITIES	96,603,016	82,443,705	14,159,311

Statement of financial performance (EUR)

II.1. REVENUE	2018	2017	Variation
Subsidy from the Commission	92,718,169	66,392,709	26,325,460
Contributions from associated countries	2,242,936	4,621,210	(2,378,274)
Non-exchange revenue — transfer of assets	12,868,730	—	12,868,730
II.1.1. Non-exchange revenues	107,829,835	71,013,919	36,815,916
Fixed asset-related revenues	146	0	146
Miscellaneous income	22,664	—	22,664
Administrative revenues with consolidated entities	35,158	16,082	19,076
Other exchange revenues	22	149	(127)
II.1.2. Exchange revenues	57,990	16,231	41,759
II.1. Total revenues	107,887,826	71,030,150	36,857,675
II.2. EXPENSES			
Operational expenses	(46,391,721)	(31,466,845)	(14,924,876)
Operational expenses	(46,391,721)	(31,466,845)	(14,924,876)
Staff expenses	(16,230,091)	(14,428,242)	(1,801,850)
Finance costs on late payment	(5,695)	(960)	(4,735)
Administrative and IT expenses	(5,538,753)	(4,001,175)	(1,537,578)
Other external service provider expenses	(2,986,458)	(2,455,120)	(531,338)
Expenses with consolidated entities	(1,747,654)	(1,646,598)	(101,056)
Fixed asset-related expenses	(22,847,458)	(19,095,605)	(3,751,852)
Operating lease expenses	(105,937)	(133,008)	27,071
Exchange losses	(17)	99	(115)
Administrative expenses	(49,462,063)	(41,760,610)	(7,701,453)
II.2. Total expenses	(95,853,784)	(73,227,456)	(22,626,329)
ECONOMIC RESULT FOR THE YEAR	12,034,041	(2,197,305)	14,231,347

Cash flow statement — indirect method (EUR)

Cash flows from ordinary activities	2018	2017
Surplus/(deficit) from ordinary activities	12,034,041	(2,197,305)
Operating activities		
Amortisation of intangible fixed assets	15,258,740	13,247,923
Depreciation of tangible fixed assets	5,513,004	4,094,157
(Increase)/decrease in short-term receivables	3,449,809	13,113,094
Increase/(decrease) in accounts payable and accrued charges	2,546,494	5,422,400
Increase/(decrease) in liabilities related to consolidated EU entities	(421,224)	(8,158,538)
Net cash flow from operating activities	38,380,864	25,521,731
Cash flows from investing activities		
(Increase in) tangible and intangible fixed assets	(38,380,864)	(25,521,731)
Net cash flow from investing activities	(38,380,864)	(25,521,731)
Net increase/(decrease) in cash and cash equivalents	-	-

Annex X. Annual activities and indicators

No	Ref.	2018 outcome (as per the Programming Document (PD) 2018-2020)	2018 annual activity	Specific annual outcome delivered? (yes/no/partially/ongoing)	If not (or only partially) delivered, brief explanation why	Performance indicator (PI)	PI annual target achieved? (on track/achieved/overachieved/behind)	If behind, brief explanation why
1	2.3.1.1	VIS behaves as per requirements. Events preventing the system from behaving appropriately are managed in a timely manner so that performance remains within the SLA with the end-users	VIS maintenance	Yes	n/a	Adherence to the VIS SLA (please refer to Annex XI).	Achieved	n/a
2	2.3.1.4	BMS behaves as per requirements, and events preventing the system from behaving appropriately are managed in a timely manner so that performance remains within the SLA with the end-users	BMS maintenance	Yes	n/a	Adherence to the BMS SLA (please refer to Annex XI)	Achieved	n/a
3	2.3.1.5	SIS II behaves as per requirements, and events preventing the system from behaving appropriately are managed in a timely manner so that performance remains within the SLA with the end-users	SIS II maintenance	Yes	n/a	Adherence to the SIS II legislative framework and SLA (please refer to Annex XI)	Achieved	n/a
4	2.3.1.6	Knowledge is transferred to the new contractor and setup is effected	Operational management of SIS II (transition to the new SIS II MWO contract, continuation from 2017)	Yes	n/a	Conformity to the SIS II SLA after the transition	On track	n/a

No	Ref.	2018 outcome (as per the Programming Document (PD) 2018-2020)	2018 annual activity	Specific annual outcome delivered? (yes/no/partially/ongoing)	If not (or only partially) delivered, brief explanation why	Performance indicator (PI)	PI annual target achieved? (on track/achieved/overachieved/behind)	If behind, brief explanation why
5	2.3.1.7	Member States are provided with sufficient support for their use of SIS II	Support for Member States (SIS II)	Yes	n/a	Percentage of test case scenarios passed 100 % at the end of the test phase	On track	n/a
6	2.3.1.8	Eurodac behaves as per requirements. Events preventing the system from behaving appropriately are managed in a timely manner so that performance remains within the SLA with end-users	Eurodac maintenance	Yes	n/a	Adherence to the Eurodac SLA indicators (please refer to Annex XI)	Achieved	n/a
7	2.3.1.9	eu-LISA fulfils its legal obligation with regard to the activities related to VIS Mail by providing the expected support to Member States	VIS Mail maintenance/business support	Yes	n/a	Adherence to the VIS SLA (please refer to Annex XI)	Achieved	n/a
8	2.3.1.12	eu-LISA assumes full operational responsibility for DubliNet. Support model aligned with the other systems	DubliNet operational management	Yes	n/a	Setup of and adherence to the DubliNet operational SLA indicators upon adoption of the legislation and the creation of the relevant SLA	Achieved	n/a
9	2.4.1.7	The study will help in defining a project that will aim to implement a standard data-quality control add-on for the systems managed by eu-LISA	Conducting an automated data-quality control study followed by a test	No	Activity is on hold	Activities performed in accordance with the terms of reference (which will be drawn up at the start of the study), i.e. all the outputs of the activity are delivered. Study report and report on the execution of the test phase project delivered and of the agreed level of quality. Documents supporting the activities delivered in	n/a	Further implementation has been delayed to align the results of the study with development of the new systems entrusted to the Agency i.e. EES, ETIAS and interoperability

No	Ref.	2018 outcome (as per the Programming Document (PD) 2018-2020)	2018 annual activity	Specific annual outcome delivered? (yes/no/partially/ongoing)	If not (or only partially) delivered, brief explanation why	Performance indicator (PI)	PI annual target achieved? (on track/achieved/overachieved/behind)	If behind, brief explanation why
						accordance with the level of quality defined in the terms of reference		
10	2.4.1.8	VIS and BMS are improved and upgraded to adapt to business needs and legislative changes	BMS database increase (continuation from 2017)	Yes	n/a	Adherence to the required quality, budget, time and scope	On track	n/a
11	2.4.1.9	eu-LISA is able to maintain further upgrades of the existing and new applications	BMS 1.0 decommissioning	Yes	n/a	Amount of BMS 1.0 hardware equipment (including cabling) left after the execution of the activity	Achieved	n/a
12	2.4.1.10	VIS and BMS are improved and upgraded to adapt to business needs and legislative changes	Implementation of VIS/BMS end-to-end testing platform (continuation from 2017)	Ongoing	n/a	Adherence to the required quality, budget, time and scope	On track	n/a
13	2.4.1.11	VIS and BMS are improved and upgraded to adapt to business needs and legislative changes	Tuning of VIS transactional throughput (continuation from 2017)	Yes	n/a	Adherence to the required quality, budget, time and scope	On track	n/a
14	2.4.1.12	VIS and BMS are improved and upgraded to adapt to business needs and legislative changes	Tuning of BMS transactional throughput (continuation from 2017)	Yes	n/a	Adherence to the required quality, budget, time and scope	On track	n/a
15	2.4.1.13	This activity results in: <ul style="list-style-type: none"> the delivery of a fingerprint quality-standard document with which all Member States using custom acquisition tools will have to comply; the delivery of a customised MorphoKit with the required central support for its national release 	User software kit renewal	Ongoing	In order to look for synergies and taking the future interoperability regulation into account, eu-LISA decided to perform a horizontal study to identify the best tool on the market with the required extended scope	Adherence to the required quality, budget, time and scope	Behind	To look for synergies and taking the future EES and shared Biometric Matching Service into account, eu-LISA decided to perform a horizontal study to identify the best tool on the market with the required extended scope.

No	Ref.	2018 outcome (as per the Programming Document (PD) 2018-2020)	2018 annual activity	Specific annual outcome delivered? (yes/no/partially/ongoing)	If not (or only partially) delivered, brief explanation why	Performance indicator (PI)	PI annual target achieved? (on track/achieved/overachieved/behind)	If behind, brief explanation why
16	2.4.1.14	VIS capacity is compliant with the needs of Member States	VIS database increase from 60 million to 100 million records (continuation)	Yes	n/a	Adherence to the required quality, budget, time and scope	Achieved	n/a
17	2.4.1.15	Results in an improved testing infrastructure on which eu-LISA can satisfactorily perform the qualification of production capacity upgrades. As part of the activity, a new (upgraded) VIS background database and a new BMS noise database will be delivered. In addition to flat fingerprint templates, a data set of 60 million fingerprint images will also be provided, with the aim of reusing it both for future upgrades and outside the scope of VIS/BMS	Reinforcement of the VIS/BMS infrastructure (continuation)	Partially	Owing to several quality issues with the deliverables, the project schedule had to be extended by 6 months	Adherence to the required quality, budget, time and scope	Behind	Owing to several quality issues with the deliverables, the project schedule had to be extended by 6 months. The project will continue in 2019 and it is expected to finish by end Q1/2019.
18	2.4.1.16	The goal of service-oriented architecture is to bring the benefits of loose coupling and encapsulation to integration at enterprise level; it will also facilitate the reuse of existing functionality for future developments, saving effort, time and budget	Conducting a study on implementing service-oriented architecture	n/a	Activity was reprioritised	Completeness of study	n/a	n/a
19	2.4.1.17	The testing can be done with the new test tool. Full coverage analysis. A higher level of independence from	Evolution of common test tools	Ongoing	n/a	Adherence to the required project scope, budget and time	On track	n/a

No	Ref.	2018 outcome (as per the Programming Document (PD) 2018-2020)	2018 annual activity	Specific annual outcome delivered? (yes/no/partially/ongoing)	If not (or only partially) delivered, brief explanation why	Performance indicator (PI)	PI annual target achieved? (on track/achieved/overachieved/behind)	If behind, brief explanation why
		vendor-specific tools is gained						
20	2.4.1.19	AFIS runs smoothly for all Member States. Necessary adjustments are made. Readiness for implementation of the second phase	SIS II AFIS consolidation and preparation for implementation of Phase 2	Ongoing	n/a	AFIS properly maintained and adapted (e.g. Oracle) immediately after rollout. Phase 2 project initiation documents delivered in time, budget and scope	On track	It was discussed and accepted that the project should be merged with the SIS II recast
21	2.4.1.20	SIS II enhanced system is aligned with the revised SIS II legislation	SIS II evolutions	Ongoing	n/a	Projects delivered in time, budget, scope	Achieved	n/a
22	2.4.1.21	Additional functionalities are available for Member States	SIS II recast	n/a	The legal basis for this activity entered into force on 27.12.18	Project delivered in time, budget, scope	n/a	The legal basis for this activity entered into force on 27.12.18
23	2.4.1.22	It is possible to introduce return decisions into SIS II	SIS II return decisions	n/a	The legal basis for this activity entered into force on 27.12.18.	Project delivered in time, budget, scope	n/a	The legal basis for this activity entered into force on 27.12.18.
24	2.4.1.23	Eurodac converges with the shared service standards applicable throughout the organisation	Eurodac integration with shared service architecture standards	Ongoing	n/a	Number of Eurodac services aligned with plan	Behind	The project started and testing was partially completed. Owing to operational dependencies, the actual deployment will be performed in 2019 as part of release 1 of the annual Eurodac release plan.
25	2.4.1.24	Eurodac is in line with the new legal provisions. Eurodac is sized properly to cope with the new legal provisions	Eurodac reform: functional changes and capacity upgrade	n/a	n/a	Adherence to the project scope, budget, timeline	n/a	The Eurodac recast proposal is not yet approved
26	2.4.1.25	Economies of scale and standardisation across the EU are achieved	Impact assessment for software as a service	Ongoing	This assessment was replaced with a more urgent split study (preparation for future interoperability)	Adherence to the project scope, budget, timeline	On track	Phase 1 is completed; Phase 2 will be completed in 2019
27	2.4.1.30	Visibility and analytic business understanding of the applications managed by eu-LISA that foster the	Data warehouse implementation to improve automated reporting and statistics	n/a	Activity reprioritised in 2018 because of dependencies with other activities related to	Adherence to the required project scope, budget and timeline. Number of existing reports managed	n/a	n/a

No	Ref.	2018 outcome (as per the Programming Document (PD) 2018-2020)	2018 annual activity	Specific annual outcome delivered? (yes/no/partially/ongoing)	If not (or only partially) delivered, brief explanation why	Performance indicator (PI)	PI annual target achieved? (on track/achieved/overachieved/behind)	If behind, brief explanation why
		decision process. Reports and statistics are managed centrally in a standard and application-agnostic way. Member States, the Commission, relevant JHA agencies, and eu-LISA's management and teams have more information on the use and functioning of the applications (SIS II, VIS/BMS, Eurodac, etc.) through an easy interface. There is an efficient solution for quickly developing new reporting solutions. This is to be the preliminary step before considering business analytic solutions	generation Phase 2 (continuation from 2017)		interoperability proposals, and other activities to implement the new systems entrusted to the Agency, i.e. EES and ETIAS	using this solution. Number of reports produced. Time to implement new reports. Use of the remote capability to produce reports		
28	2.4.1.31	The Member States are supported in achieving smarter and more efficient border management	EES implementation	Ongoing	n/a	Adherence to the required project scope, budget and timeline	On track	n/a
29	2.4.1.32	The Member States are supported in achieving more secure border management	Development of ETIAS	n/a	The legal basis entered into force at the end of 2018	Start of the project, compliance with agreed schedule	n/a	The Agency performed the necessary activities for the implementation of ETIAS
30	2.4.1.33	New system is in operation	Development of new system for the Dublin allocation mechanism follow-up	n/a	The Dublin recast proposal has not yet been adopted	Adherence to the required project scope, budget and timeline	n/a	The Dublin recast proposal has not yet been adopted
31	2.4.1.34	The Member States achieve smarter and more secure border management	ECRIS-TCN implementation	n/a	The legal basis was not adopted in 2018	Adherence to the required project scope, budget and timeline	n/a	The legal basis was not adopted in 2018

No	Ref.	2018 outcome (as per the Programming Document (PD) 2018-2020)	2018 annual activity	Specific annual outcome delivered? (yes/no/partially/ongoing)	If not (or only partially) delivered, brief explanation why	Performance indicator (PI)	PI annual target achieved? (on track/achieved/overachieved/behind)	If behind, brief explanation why
32	2.4.2.4	The final solution should guarantee cross-tool visibility to ensure end-to-end compatibility, traceability and configuration control for each new requirement or change. The ultimate aim is to centralise the tools, and external contractors will have to use eu-LISA's repository and comply with the system development life-cycle process	Implementation of additional system development life cycles	Ongoing	n/a	Adherence to the required project scope, budget and timeline	On track	n/a
33	Additional task: not included in the PD	New system is in operation/preparation	Preparatory activities (participation with technical expertise in study executed by the Commission for the new system on the Dublin allocation mechanism follow-up)	Yes	n/a	Adherence to the required project scope, budget and timeline	Achieved	n/a
34	Additional task: operational emergency (project under Specific Contract 8, covering Eurodac evolutions, technical upgrades and related services)	Eurodac behaves as per requirements. Events preventing the system from behaving appropriately are managed in a timely manner so that performance /availability remain within the SLA with end users	Eurodac release 1 — change 1 — Eurodac mail service configuration	Yes	n/a	Adherence to the agreed Eurodac service levels (ensure no data loss)	Achieved	n/a
35	Eurodac release 1 — Change 2 — increase in maximum number of returned candidates (hits) for 10-print searches		Yes	n/a	Adherence to the agreed Eurodac service levels (increased regulatory compliance with an increase in the possible hits returned)	Achieved	n/a	
36	Eurodac release 1 — change 3 — functional upgrade to Eurodac test environment		Yes	n/a	Adherence to the agreed Eurodac service levels (ensure performance within the SLA targets for all latent searches)	Achieved	n/a	

No	Ref.	2018 outcome (as per the Programming Document (PD) 2018-2020)	2018 annual activity	Specific annual outcome delivered? (yes/no/partially/ongoing)	If not (or only partially) delivered, brief explanation why	Performance indicator (PI)	PI annual target achieved? (on track/achieved/overachieved/behind)	If behind, brief explanation why
37	Additional task: activity delayed from 2017 due to delay in concluding the procurement process for the new MWO contract	Initiation of the new maintenance contract in such a way as to ensure a smooth and seamless transition	New MWO contract Initiation and takeover	Yes	n/a	Adherence to the project scope, budget, timeline	Achieved	n/a
38	2.3.1.2	Member States receive a reliable service from the core business systems	Ensure uninterrupted and high-quality operation of the core business systems	Yes	n/a	Conformity with the SLA	On track	n/a
39	2.3.1.3	Member States receive a reliable service from the core business systems	Operate, manage and maintain the backup data centre and backup technical site in St Johann im Pongau, Austria	Yes	n/a	Number of issues with eu-LISA's BCU infrastructure that interrupt the services of the core business systems to Member States	On track	n/a
40	2.3.1.10	Member States receive a reliable service from the core business systems	Level 2 management of the IT infrastructure of the core business systems	Yes	n/a	Conformity with the SLA. Please see Annexes XI and XII	On track	n/a
41	2.3.1.11	Communication infrastructure behaves as per requirements. Events preventing the system from behaving properly are managed in a timely manner so that performance remains within the SLAs	Regular operational management of the communication infrastructure contracts (budget execution, acquisition, renewal, contract management)	Ongoing	n/a	Adherence to communication SLAs	On track	n/a
42	2.4.1.1	Results in having clear guidelines in place (technical tender specifications) whenever	Develop reference technical tender specifications for calls for	Yes		Delivery and acceptance of a set of documents	Achieved	n/a

No	Ref.	2018 outcome (as per the Programming Document (PD) 2018-2020)	2018 annual activity	Specific annual outcome delivered? (yes/no/partially/ongoing)	If not (or only partially) delivered, brief explanation why	Performance indicator (PI)	PI annual target achieved? (on track/achieved/overachieved/behind)	If behind, brief explanation why
		there is a need to draft a call for tenders	tenders for large-scale IT systems					
43	2.4.1.2	An integrated solution for all existing core business system monitoring tools, based on the relevant event management process, is implemented in order to significantly facilitate and improve everyday supervision and control, and realise economies of scale. This will contribute to an overall reduction in the technical management and operational workload (workload savings) and a reduction in the contractual management workload and scope for core business system contracts (combination of workload and financial savings — no more individual monitoring tool implementation)	Core business system integrated monitoring	Ongoing	n/a	Analysis report delivery and agreement	On track	n/a
44	2.4.1.3	Service Desk performance is proven and possible improvements suggested, as part of the continual service improvement register	Performance of Service Desk benchmarking	No	Owing to lack of resources	Adherence to the required project scope, budget and timeline	Behind	Owing to lack of resources
45	2.4.1.4	Cost/efficiency of the target solution in compliance with the legal basis is confirmed	Conducting a study on virtual desktops for administrators	n/a	Activity reprioritised in 2018	Adherence to the required project scope, budget and timeline	n/a	n/a
46	2.4.1.5	Shared services are in place	Implementation of the second phase of shared	Yes	n/a	Number of shared services implemented	On track	n/a

No	Ref.	2018 outcome (as per the Programming Document (PD) 2018-2020)	2018 annual activity	Specific annual outcome delivered? (yes/no/partially/ongoing)	If not (or only partially) delivered, brief explanation why	Performance indicator (PI)	PI annual target achieved? (on track/achieved/overachieved/behind)	If behind, brief explanation why
			services (continuation from 2017)					
47	2.4.1.6	A new licensing model is in place and the core business systems contract updated (the existing maintenance costs have been removed from existing core business system MWO contracts)	Centralise Oracle licensing	Yes	n/a	Adherence to the required project scope, budget and timeline	On track	n/a
48	2.4.1.18	The virtualised infrastructure put in place as part of common shared services implementation is extended to host a test phase (to be defined between SIS II, VIS, BMS and Eurodac). Selected application is virtualised and its behaviour validated	Implementation of a virtualisation test phase	Yes	n/a	Adherence to the required project scope, budget and timeline	Achieved	n/a
49	2.4.1.26	The management of the Agency understands the possible improvements and possible changes in regulation	Conducting a unified network test phase	Ongoing	The preceding unified network study phase took longer than planned (procurement issue: the offer from the first bidder was rejected as not meeting the technical specifications (timeline), and the second bidder in the cascade refused to provide an offer. The procurement process had to be repeated)	Adherence to the required project scope, budget and timeline	On track	n/a
50	2.4.1.27	The procurement for TESTA-ng second generation covers eu-LISA core business systems' needs	Preparation for TESTA-ng second generation	Ongoing	In 2018, strategic alignment with other stakeholders (DG DIGIT, DG TAXUD, Europol, the Council) was achieved and the drafting of the call for tenders by DIGIT with	Delivery date and coverage of eu-LISA core business system specifics	On track	n/a

No	Ref.	2018 outcome (as per the Programming Document (PD) 2018-2020)	2018 annual activity	Specific annual outcome delivered? (yes/no/partially/ongoing)	If not (or only partially) delivered, brief explanation why	Performance indicator (PI)	PI annual target achieved? (on track/achieved/overachieved/behind)	If behind, brief explanation why
					contributions from eu-LISA began			
51	2.4.1.28	Core business systems and Member States receive a reliable service from the communication infrastructure and related communication systems	Operational management of the systems communication infrastructure and related communication systems	Yes	n/a	Conformity with the communication infrastructure SLAs	Achieved	n/a
52	2.4.1.29	DG HOME produces handover report. Roles and responsibilities are described, and an organigram illustrates the contractual management of the communication infrastructure	Handover of the activities related to implementation of the budget, acquisition, renewal and contractual matters of the VIS and SIS II communication infrastructure	Ongoing	The contracts were transferred to eu-LISA in time, but the budgetary transfer was completed in March 2019, as agreed by all parties	Adherence to the required project scope, budget and timeline	Achieved	The contracts were transferred to eu-LISA in time, but the budgetary transfer was completed in March 2019, as agreed by all parties
53	2.4.2.1	Efficiency of the communication infrastructure supervision increases. The information needed to make decisions based on the performance of the communication infrastructure is available	Introduction of advanced network statistics (continuation from 2017)	Ongoing	Delay in the signature of the final offer	Delivery date of the test phase; start date of the implementation	Behind	Delay in the signature of the final offer
54	2.4.2.2	Based on the already established clear definition of eu-LISA services' metrics and tree (a continuous service improvement outcome planned for 2017), advanced reporting on processes' KPIs and SLAs/OLAs (operational level agreements) are implemented that enable full measurement and evaluation (integrated and in real time) of all	Implementation of advanced reporting mechanism for ITSM processes, KPIs and SLAs/OLAs (WP 2017 ref.: 2.2.2)	Ongoing	n/a	Percentage of the agreed KPIs that are measured by the solution. Increased customer satisfaction	Behind	Phase 1 — study completed in mid-2018

No	Ref.	2018 outcome (as per the Programming Document (PD) 2018-2020)	2018 annual activity	Specific annual outcome delivered? (yes/no/partially/ongoing)	If not (or only partially) delivered, brief explanation why	Performance indicator (PI)	PI annual target achieved? (on track/achieved/overachieved/behind)	If behind, brief explanation why
		processes and system-/application-related activities						
55	2.4.2.3	Preparation for ISO 20 000 certification as an IT service provider; eu-LISA's maturity level is increased	Implementation of maturity assessment model	No	The project is postponed	Adherence to the required project scope, budget and timeline	Behind	Activity is expected to take place in 2020 as part of the scheduled process and services regular review (part of the continuous service improvement process)
56	WP 2017 ref.: 2.2.7	Continuous application of ITIL best practices, guaranteeing a stable trend in services, improved delivery and increased customer satisfaction	eu-LISA ITSM Phase 2 processes definition and implementation	Ongoing	n/a	Adherence to the required project scope, budget and timeline	On track	n/a
57	Management Committee (MC) decision April 2017	Up-to-date eu-LISA Service Catalogue, organised more efficiently, and including service-service and service-process maps	eu-LISA Service Catalogue review and update	Yes	n/a	Adherence to the required project scope, budget and timeline	Achieved	n/a
58	MC decision April 2017	Significantly increased efficiency and effectiveness of incident, problem and change management	Access to eu-LISA ITSM tool for eu-LISA contractors	Yes	n/a	Adherence to the required project scope, budget and timeline	Achieved	n/a
59	2.1	The Agency is able to execute its tasks related to its core functions as well as any necessary development projects in line with the applicable legal framework	Planning, drafting and adoption of PD	Yes	n/a	First draft of the annual work programme (AWP) 2020 delivered on time; second draft AWP 2020 delivered on time; Management Board finally adopts the AWP 2020 without major amendments in 2019; Management Board finally adopts the AWP 2019 without major amendments in 2018	Achieved	n/a

No	Ref.	2018 outcome (as per the Programming Document (PD) 2018-2020)	2018 annual activity	Specific annual outcome delivered? (yes/no/partially/ongoing)	If not (or only partially) delivered, brief explanation why	Performance indicator (PI)	PI annual target achieved? (on track/achieved/overachieved/behind)	If behind, brief explanation why
60	2.	eu-LISA provides its stakeholders with sufficient information on the execution of the tasks entrusted to the Agency and its performance, thus ensuring a high level of confidence.	Drafting progress and annual activity reports including reporting of corporate KPIs	Ongoing	n/a	Timely submission of the reports. Management Board adopts the Annual Activity Report 2017 without major amendments. Time of providing the KPIs report. KPI data quality.	On track	n/a
61	2.1	The Agency's ICS framework is applied in accordance with defined elements and requirements, which facilitates good governance, and periodical monitoring supports the implementation of defined measures adhering to the required scope, quality and timeline	Facilitation of ICS management 2018	Ongoing	n/a	Internal control register and monitoring reports produced on time, with scope and quality as required	On track	n/a
62	2.1	Quality progress reports are provided based on quarterly progress review meetings	Facilitation of implementation of quality measures as outcomes of the quality management exercise completed in 2017	Ongoing	n/a	Quality progress reports based on quality monitoring exercises performed, informing on status of quality measures implemented and including proposals for adjustment (if necessary)	On track	n/a
63	2.1	The Management Board performs its duties effectively	Timely administrative support for the Management Board	Yes	n/a	Meetings delivered as planned. Stakeholder overall satisfaction rate as measured in satisfaction survey.	Achieved	n/a
64	2.1	The Advisory Groups perform their duties effectively	Timely administrative support for the Advisory Groups	Yes	n/a	Meetings delivered as planned. Stakeholder overall satisfaction rate as measured in stakeholder satisfaction survey.	Achieved	n/a

No	Ref.	2018 outcome (as per the Programming Document (PD) 2018-2020)	2018 annual activity	Specific annual outcome delivered? (yes/no/partially/ongoing)	If not (or only partially) delivered, brief explanation why	Performance indicator (PI)	PI annual target achieved? (on track/achieved/overachieved/behind)	If behind, brief explanation why
65	2.1	eu-LISA complies with applicable regulations	Provision of legal advice to eu-LISA	Yes	n/a	Provision of legal advice and opinions	Achieved	n/a
66	2.1	Decision-making at Agency level is informed	Policy analysis and facilitation of policy implementation	Ongoing	n/a	Preparation of meetings and availability of briefing notes to eu-LISA staff for their meetings with EU institutional stakeholders	Achieved	n/a
67	2.1	The stakeholders and public are more aware of, and know more about, the role and tasks of the Agency for the benefit of citizens. The stakeholders and public have easy access to relevant information allowing them to be better informed on the performance of the Agency. The Agency regularly liaises with key partners and provides effective two-way communication	Implementation of the external communication action plan	Yes	n/a	Ensure that content production follows the approved editorial workflow and quality standards, print and online production requirements are met by the contractors and performance is carried out in compliance with the set quarterly milestones of the 2018 annual external communication action plan. eu-LISA web-based visibility is measured through web analytics. Satisfaction rate of participants with event management.	Achieved	n/a
68	2.1	The staff at all the Agency's sites are informed and engaged at the corporate level, allowing them to make informed decisions regarding their professional tasks, and have access to internal communication tools for information sharing and feedback	Implementation of the internal communication action plan	Yes	n/a	Compliance of the annual internal communication action plan with the set milestones and time schedule	Achieved	n/a
69	2.1	Significant support by the Agency for the	Partnerships with institutions, agencies	Ongoing	n/a	The number of joint meetings to exchange	Achieved	n/a

No	Ref.	2018 outcome (as per the Programming Document (PD) 2018-2020)	2018 annual activity	Specific annual outcome delivered? (yes/no/partially/ongoing)	If not (or only partially) delivered, brief explanation why	Performance indicator (PI)	PI annual target achieved? (on track/achieved/overachieved/behind)	If behind, brief explanation why
		implementation of EU policies in the area of JHA	and/or Member State authorities			experiences and best practices and the number of common projects		
70	2.1	Improved internal knowledge on topics of relevance and a boost to the culture of learning within the organisation	Administration of the eu-LISA library	Ongoing	n/a	Awareness of and use of the library materials	Achieved	n/a
71	2.2.4.1	Corporate governance model, consisting of elements such as risk management, internal control management, quality management and other capabilities, implemented and operated by the Agency in accordance with its definitions and requirements	Translation of outcomes of governance model review into refinement proposals	n/a	n/a	Dedicated report with outcomes based on agreed findings of the 2017 exercise to review the corporate governance model of eu-LISA	Postponed	Reprioritisation of tasks
72	2.2.4.2	eu-LISA is capable of ensuring a high quality of planning	Increasing the Agency's planning capabilities	Yes	n/a	Number of concerned staff trained. Guide updated	Achieved	n/a
73	2.3.1.13	All reporting obligations are fulfilled as outlined in the establishing regulation and legal bases for systems under management	Drafting technical reports, aggregating statistics and publishing updated list of authorities	Yes	n/a	Submission to the EU institutions of: - the 2017 SIS II annual statistics; - the report on the technical functioning of VIS; - the annual report including the technical functioning of Eurodac. Publication of: - the update to the list of authorities/N.SIS/SIRENE for SIS II in the <i>Official Journal of the European Union</i>	Achieved	n/a

No	Ref.	2018 outcome (as per the Programming Document (PD) 2018-2020)	2018 annual activity	Specific annual outcome delivered? (yes/no/partially/ongoing)	If not (or only partially) delivered, brief explanation why	Performance indicator (PI)	PI annual target achieved? (on track/achieved/overachieved/behind)	If behind, brief explanation why
						- update of the list of authorities (asylum) for Eurodac on the website		
74	2.3.1.14	The knowledge of the Member States on the technical functioning and use of the systems is enhanced and applied	Providing training on the technical use of the systems to the Member States	Yes	n/a	Satisfaction rate (scale 1-6, 1 lowest, 6 highest)	Achieved	n/a
75	2.3.2.1	Stakeholders are more aware of developments in technologies of relevance to system development and evolution and therefore better able to make informed decisions	Implementation of research and technology monitoring roadmap	Ongoing	n/a	Activities set out in the research and technology monitoring roadmap delivered in a timely manner. High level of satisfaction from attendees subsequent to their participation in events; repeat attendance at annual events	On track	n/a
76	2.3.3.1	Member States are provided with continuous support for the Schengen evaluation process (SIS/SIRENE and common visa policy evaluations)	Planning, coordination and participation of the Agency as an observer in the Schengen evaluation missions	Yes	n/a	Participation of eu-LISA staff in Schengen evaluation missions (SIS/SIRENE and common visa policy) as requested	Achieved	n/a
77	New	The EES PMB performs its duties effectively	Timely administrative support for the EES PMB	Yes	n/a	Meetings delivered as planned	Achieved	n/a
78	2.1	eu-LISA fulfils its obligations towards its staff in accordance with the regulatory framework	Consolidation of HR processes and services in the areas of recruitment, staff development, personnel administration and payroll	Ongoing	n/a	Compliance with the rules. Reports on the subject submitted within the set deadlines. Payroll verification finalised on third day of simulation	Behind	Owing to other, more urgent business needs (organising selection procedures as an ultimate priority for the implementation of the new legal basis for eu-LISA) and the limited number of staff dealing with recruitment, it is expected that one of the subactivities, namely the submission of the updated version of the recruitment guidelines to the MC, will be finalised by June 2019

No	Ref.	2018 outcome (as per the Programming Document (PD) 2018-2020)	2018 annual activity	Specific annual outcome delivered? (yes/no/partially/ongoing)	If not (or only partially) delivered, brief explanation why	Performance indicator (PI)	PI annual target achieved? (on track/achieved/overachieved/behind)	If behind, brief explanation why
79	2.1	eu-LISA develops its staff in order to create an efficient and agile organisation	Learning development and	Yes	n/a	Activities performed in accordance with the learning needs analysis carried out, and annual learning plan adopted	Achieved	n/a
80	2.2.4.13	eu-LISA's obligations towards its staff fulfilled in a structured way and with sound planning	Monitoring implementation of HR strategy and staff retention policy	Yes	n/a	Percentage of actions listed in the human resources strategy and staff retention policy roadmaps for 2018 completed	On track	Actions listed in the roadmap have been performed and the objectives achieved, although there are some delays in comparison with the deadlines set in the roadmap. The reasons for delays are mainly high workload due to preparations for the implementation of the new organisational structure of the Agency
81	2.2.4.14	As an employer, eu-LISA meets its obligations in the area of occupational health and safety	Implementation of health and safety policy	Ongoing	n/a	Activities performed in accordance with the plan or adopted roadmap	Behind	Technical specifications for the tender submitted to the Finance and Procurement Unit with a delay due to a high workload related to increased recruitment following the new establishing regulation of the Agency and the new systems
82	2.2.4.15	eu-LISA ensures sound implementation of the regulatory framework (Article 59 of the Staff Regulations)	Contracting an eu-LISA medical service	Ongoing	n/a	Technical specifications for the tender submitted to the Finance and Procurement Unit	Achieved	n/a
83	2.2.4.16	The activity supports efficiency gains in terms of HR management	HR IT tools developed and implemented or in production (Allegro, Sysper II and/or dedicated application for time management)	Yes	n/a	Transfer of personal data to Sysper II finalised. Rollout of the tool to all staff members or training for the staff members initiated. For e-recruitment: number of identified mistakes in the process of publishing vacancies and receiving applications is below two per published call/vacancy	Achieved	n/a

No	Ref.	2018 outcome (as per the Programming Document (PD) 2018-2020)	2018 annual activity	Specific annual outcome delivered? (yes/no/partially/ongoing)	If not (or only partially) delivered, brief explanation why	Performance indicator (PI)	PI annual target achieved? (on track/achieved/overachieved/behind)	If behind, brief explanation why
84	2.3.4.1	eu-LISA's staff are able to perform better and will be acquainted with the best practices in the field of technology	Training for eu-LISA staff related to operations	Yes	n/a	Number of training days per year. General satisfaction level	Achieved	n/a
85	2.1	High-quality and timely budgetary, procurement and financial services in support of the Agency are provided throughout the year. Processes are re-engineered to improve efficiency and effectiveness, wherever possible through dematerialisation	Execution of the procurement and acquisition plan	Ongoing	n/a	Delay (in calendar days) from planned date of signature of major contracts relating to Title 3 of the Agency's budget	On track	n/a
86	2.1	High-quality and timely budgetary, procurement and financial services in support of the Agency are provided throughout the year. Processes are re-engineered to improve efficiency and effectiveness, wherever possible through dematerialisation	Timely delivery of services related to budgetary, procurement and financial management	Yes	n/a	No major disruption of services attributable to internal organisational issues. Budget execution (commitment and payment appropriations — C1 credits)	Achieved	n/a
87	2.2.4.3	High-quality and timely budgetary, procurement and financial services in support of the Agency are provided throughout the year. Processes are re-engineered to improve efficiency and effectiveness, wherever possible through dematerialisation	Introduction of activity-based budgeting	Yes	n/a	Budget execution (commitment and payment appropriations — C1 credits)	On track	n/a

No	Ref.	2018 outcome (as per the Programming Document (PD) 2018-2020)	2018 annual activity	Specific annual outcome delivered? (yes/no/partially/ongoing)	If not (or only partially) delivered, brief explanation why	Performance indicator (PI)	PI annual target achieved? (on track/achieved/overachieved/behind)	If behind, brief explanation why
88	2.1	The Agency acquires resilience in its operational management	Operate, plan and develop the business continuity/disaster recovery/emergency response aspects of security and continuity management	Ongoing	n/a	Business impact analysis coverage of urgent activities; business continuity/disaster recovery coverage of the Agency and all systems; business continuity awareness session; 100 % of the business continuity procedures are tested; business continuity and security exercise for SIS II	On track	n/a
89	2.1	The Agency has a governance framework and outreach capability that satisfy the internal users and the external stakeholders (including the European Commission and the Council of the European Union)	Maintaining and improving the security policy framework and delivering reports	Yes	n/a	Policies framework adopted by the MB/MC; organisation of the Security Officers' Network Meeting	Achieved	n/a
90	2.1	The Agency guarantees the safety and security of the people and assets in its premises	Develop, plan and operate the protective elements of security and continuity management	Yes	n/a	Perform guarding management for both eu-LISA main sites; implementation of protective security measures for eu-LISA premises	Achieved	n/a
91	2.1	The Agency ensures the security of the large-scale IT systems, the communication infrastructure, and the corporate IT network	Operate, plan and develop the information security elements of security and continuity management	Yes	n/a	Percentage of identified security risks treated by assured security controls; number of identified critical shortcomings during security tests; percentage of ISMS requirements fulfilled	Achieved	n/a
92	2.2.1.1	The Agency guarantees the safety and security of	Implementation of an enterprise IT solution for managing eu-LISA	Ongoing	Following market assessment, identified business needs and	Level of compliance of the internal processes of the personnel security	Behind	Following market assessment, identified business needs and integration with existing tools, for

No	Ref.	2018 outcome (as per the Programming Document (PD) 2018-2020)	2018 annual activity	Specific annual outcome delivered? (yes/no/partially/ongoing)	If not (or only partially) delivered, brief explanation why	Performance indicator (PI)	PI annual target achieved? (on track/achieved/overachieved/behind)	If behind, brief explanation why
		the people and assets in its premises	personnel's security processes and the fulfilment of security requirements for contractors		integration with existing tools, for increased cost-effectiveness and long-term benefits, the project implementation has been changed in the direction of outsourcing the coding, as opposed to the initial planned purchase of a commercial off-the-shelf solution. The project is currently close to its final stage	clearance for eu-LISA personnel and security. Level of compliance of eu-LISA contractors with the specific rules and regulations		increased cost-effectiveness and long-term benefits, the project implementation has been changed in the direction of outsourcing the coding, as opposed to the initial planned purchase of a commercial off-the-shelf solution. The project is currently close to its final stage
93	2.2.1.2	The Agency guarantees the safety and security of the people and assets in its premises	Physical security improvement in Tallinn	Yes	n/a	Compliance of the physical security measures with legislation, the risk assessment outcomes and ISO standards	On track	The planned upgrades for 2018 have been implemented. For 2019, additional upgrades are planned.
94	2.2.1.3	The Agency guarantees the safety and security of the people and assets in its premises	Physical security improvement in Strasbourg	Ongoing	n/a	Compliance of the physical security measures with legislation, the risk assessment outcomes and ISO standards	Behind	n/a
95	2.4.1.35	Shared security services are implemented	Common infrastructure implementation phase	Ongoing	Negotiation of the contract took more time than expected and there is a direct dependency on common shared infrastructure WPO3, which provides the platform for the solution	Percentage of planned common shared security services implemented	Behind	Negotiation of the contract took more time than expected and there is a direct dependency on common shared infrastructure WPO3, which provides the platform for the solution
96	2.4.1.36	Agency personnel, property and information are protected by creating a safe, secure working environment	Implementation of an EU-restricted information exchange system (continuation from 2017)	Ongoing	The agency is waiting for the European Commission (the Directorate-General for Human Resources and Security) to be ready to provide the RUE system service to EU agencies. Temporarily, eu-LISA has	Conformity with the time schedule	Behind	The agency is waiting for the European Commission (the Directorate-General for Human Resources and Security) to be ready to provide the RUE system service to EU agencies. Temporarily, eu-LISA has designed and

No	Ref.	2018 outcome (as per the Programming Document (PD) 2018-2020)	2018 annual activity	Specific annual outcome delivered? (yes/no/partially/ongoing)	If not (or only partially) delivered, brief explanation why	Performance indicator (PI)	PI annual target achieved? (on track/achieved/overachieved/behind)	If behind, brief explanation why
					designed and implemented a proof-of-concept solution			implemented a proof-of-concept solution
97	2.4.1.9.	The risk to the corporate IT endpoints and infrastructure from malware and drive-by attacks from websites visited by staff is reduced	Implementing a secure, isolated web-browsing infrastructure for corporate IT	Ongoing	During the implementation of the pilot, it was ascertained that the selected solution was not compatible with the configuration of the endpoint platform	Project deliverables implemented	Behind	The activity will be continued in 2019
98	2.2.4.4	Improved working conditions for staff	Establishment of corporate and other services in the new headquarters	Ongoing	n/a	All the rooms are furnished according to current needs; conformity with applicable standards.	Achieved	n/a
99	2.2.4.6	Improved working conditions for staff and ability to use the new headquarters effectively	Logistical and organisational operations for final occupation of the newly constructed headquarters building in Tallinn	Yes	n/a	Removal and takeover on schedule and in scope	Achieved	n/a
100	2.2.4.8	Services in the field of corporate IT management; improved working conditions for staff; enhanced communication abilities	Maintenance and development of corporate network architecture	Ongoing	n/a	Adherence to the required project scope, budget and timeline	Behind	Start was delayed (Q4 2018), as all resources were being used for the relocation project in Tallinn; expected completion Q4 2019
101	2.2.4.9	Services in the field of corporate IT management; improved working conditions for staff; enhanced communication abilities	Maintenance and development of system and storage architecture	Ongoing	n/a	Adherence to the required project scope, budget and timeline	Behind	Start was delayed (Q4 2018), as all resources were being used for the relocation project in Tallinn; expected completion Q4 2019
102	2.2.4.10	IT Infrastructure in place in the new headquarters in Tallinn	Development of corporate IT infrastructure in the new headquarters	Yes	n/a	Adherence to the required project scope, budget and timeline	Achieved	n/a
103	2.2.4.11	Enhanced capabilities of the Agency's SharePoint platform;	Corporate applications enhancement	Yes	n/a	Adherence to the required project scope, budget and timeline	Achieved	n/a

No	Ref.	2018 outcome (as per the Programming Document (PD) 2018-2020)	2018 annual activity	Specific annual outcome delivered? (yes/no/partially/ongoing)	If not (or only partially) delivered, brief explanation why	Performance indicator (PI)	PI annual target achieved? (on track/achieved/overachieved/behind)	If behind, brief explanation why
		capabilities of the Agency's direct messaging platform; enhanced capabilities of the Agency's HR platform						
104	2.2.4.12	A holistic view of the relationship between IT and business	Further development of enterprise architecture	Yes	n/a	Adherence to the required project scope, budget and timeline	Achieved	n/a
105	2.2.4.5	Improved working conditions for staff and contractors to allow more efficient workflows	Logistical and organisational operations for final occupation of the newly constructed or refurbished buildings in Strasbourg	Ongoing	Final occupation not complete	Removal and takeover on schedule and in scope	Behind	Final occupation postponed to 2019
106	2.2.4.7	Improved working conditions for staff and contractors to allow more efficient and improved workflows	Establishment of corporate and other services in new Strasbourg building	Yes	n/a	Adherence of corporate and other services to the plans and specifications	Achieved	n/a
107	2.4.5	Effective and efficient risk management, control and governance processes and procedures are in place to enable eu-LISA achieve its objectives	Implementation of the annual internal audit plan	Yes	n/a	80 % level of implementation of annual internal audit plan	Overachieved (i.e. 91 %)	n/a
108	2.1	MB is informed on the level of compliance as regards data protection	Drafting the 2017 annual work report	Yes	n/a	Deliver the documents on time as per organisation of MB meetings	Achieved	n/a
109	2.1	Staff comply with data protection requirements	Data protection awareness	Yes	n/a	Number of staff awareness sessions carried out on data protection and personal data breaches. Number of data protection newsletters issued	Achieved	n/a
110	2.1	An efficient public notification procedure and privacy notices are established, with relevant	Monitor closely the notification of processing operations	Yes	n/a	The notification register and inventory register produced in time, with	Achieved	n/a

No	Ref.	2018 outcome (as per the Programming Document (PD) 2018-2020)	2018 annual activity	Specific annual outcome delivered? (yes/no/partially/ongoing)	If not (or only partially) delivered, brief explanation why	Performance indicator (PI)	PI annual target achieved? (on track/achieved/overachieved/behind)	If behind, brief explanation why
		information for the data subjects				scope and quality as required		
111	2.1	eu-LISA instructs the staff and supports the staff during the inspection, checking that the inspection activities do not go beyond the inspectors' mandate, and manages/coordinates the comments phase of the inspection	Support the Agency with the European Data Protection Supervisor (EDPS) inspections	Yes	n/a	Information requested by the EDPS in advance provided in a timely manner. Lack of issues on the organisational side of the inspection. Comments to the inspection report provided to the EDPS as agreed	Achieved	n/a
112	2.2.1.4	Recommendations on data protection compliance are implemented in order to increase the data protection compliance of the Agency	Annual data protection survey	No	Priorities did not allow the allocation of enough human resources (and bandwidth) to the task. The Agency is currently appointing a new DPO	Time of carrying out a survey; adherence to the required quality, timeline and scope	n/a	n/a
113	2.2.1.5	Recommendations on data protection are implemented in order to increase the data protection compliance of the Agency	Provide privacy-by-design guidance	Yes	n/a	Number of projects with a privacy impact assessment and privacy-by-design report.	Achieved	n/a
114	2.2.3.1	Provision of support to other agencies when requested in the data protection area, by sharing good practices, awareness sessions and relevant documentation such as the data protection newsletter	Share services on data protection with other relevant agencies	Yes	n/a	Number of collaborative events	Achieved	n/a
115	2.1	Presenting the annual accounts so that they represent fairly and transparently the financial position of the Agency,	Maintaining the accounts of the Agency	Yes	n/a	Timely delivery of provisional, consolidated, final accounts. Timely follow-up of audit recommendations	Achieved	n/a

No	Ref.	2018 outcome (as per the Programming Document (PD) 2018-2020)	2018 annual activity	Specific annual outcome delivered? (yes/no/partially/ongoing)	If not (or only partially) delivered, brief explanation why	Performance indicator (PI)	PI annual target achieved? (on track/achieved/overachieved/behind)	If behind, brief explanation why
		facilitating the discharge procedure						
116	New	By performing the corporate risk management process, eu-LISA is sufficiently managing its identified corporate risks	Implementation of corporate risk management process in 2018	Yes	n/a	Adherence to the required project scope, budget and timeline	Achieved	n/a

Annex XI. Report on public access to documents

During 2018, the Agency received one request to access documents. The request, received on 16 January 2018, referred to the travel expenses of eu-LISA's Executive Director for the period from 1 January 2016 to 31 December 2016.

The applicant requested in particular, for each trip, details on the place of origin and destination, the amount spent on travel, transportation, accommodation, subsistence and possible miscellaneous costs, the exact dates and durations of the trips and, if applicable, details of other travellers (names and job titles).

The Agency replied accordingly, attaching a document containing all the relevant information regarding the Executive Director's travel expenses, including the departure date, the purpose of the mission, the number of days spent on mission, the destination and a specific description of the nature of the expenses (transport, allowance, hotel, miscellaneous costs and others).

Legal basis

According to Article 17 of the MB Decision of 28 June 2012, which reflects the wording of Article 17 of Regulation (EC) No 1049/2001 on access to documents, and in accordance with the Agency's establishing regulation, a report on access to documents shall be annexed by eu-LISA to the annual report. The report shall include the number of cases in which the institution refused to grant access to documents and the reason for such refusals.