

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

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CONSOLIDATED **ANNUAL ACTIVITY REPORT**

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Adopted by the eu-LISA Management Board on 29 June 2021

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Abbreviations and acronyms

ACFC Audit, Compliance and Finance Committee

AFIS Automated Fingerprint Identification System

AG Advisory group

AI Artificial intelligence

ALM Application lifecycle management

BC Business continuity

BCU Backup central unit (backup centre in St Johann im Pongau)

BMS Biometric Matching System

CA Contract agent

CAAR Consolidated annual activity report

CBS Core business systems

CEPOL European Union Agency for Law Enforcement Training

CIR Common Identity Repository

CRRS Central Repository for Reporting and Statistics

CSI Common shared infrastructure

DG DIGIT Directorate-General for Informatics

DG HOME Directorate-General for Migration and Home Affairs

DPIA Data protection impact assessment

DPO Data Protection Officer

DTS Detailed technical specifications

DubliNet Dublin electronic communications network

EASO European Asylum Support Office

ECA European Commission
ECA European Court of Auditors

ECRIS European Criminal Records Information System

ECRIS RI European Criminal Records Information System Reference Implementation
ECRIS-TCN European Criminal Records Information System — Third-country Nationals

e-CODEX e-Justice Communication via Online Data Exchange

ED Executive Director of eu-LISA

EDPS European Data Protection Supervisor

EES Entry/Exit System

ENISA European Union Agency for Cybersecurity

EP European Parliament

EPMO Enterprise Project Management Office

ESP European Search Portal

ETIAS European Travel Information and Authorisation System

EU European Union

EUAN European Union Agencies Network

European Asylum Dactyloscopy Database

European Union Agency for Criminal Justice Cooperation

European Union Agency for Law Enforcement Cooperation

FRA European Union Agency for Fundamental Rights

Frontex European Border and Coast Guard Agency

HR Human resources

IA Impact assessment

IAC Internal Audit Capability

IAS Internal Audit Service of the European Commission

ICD Interface control document
ICF Internal control framework

ICT Information and communication technology
ISMS Information security management system

IT Information technology

ITIL Information Technology Infrastructure Library

ITSM IT service management

JHA Justice and Home Affairs

JHAAN Justice and Home Affairs Agencies Network

KPI Key performance indicator

MB Management Board

MID Multiple-Identity Detector

MS Member States

NUI National uniform interface

OJ Official Journal of the European Union
PMB Programme Management Board
PPM Project portfolio management
SBMS Shared Biometric Matching Service

SIRENE Supplementary Information Request at the National Entries

SIS Schengen Information System

SIS II Second-generation Schengen Information System

SLA Service-level agreement
SNE Seconded national expert

TA Temporary agent
TAP Turnkey access point

TEF Transversal Engineering Framework

TESTA-ng Trans European Services for Telematics between Administrations – new generation

TOF Transversal Operations Framework
TTS Technical tender specifications

USK User software kit

VIS Visa Information System
WAN Wide-area network

Management Board's analysis and assessment



Zsolt Szolnoki Chairperson of the eu-LISA Management Board

Image credit: personal archive

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) has analysed and assessed the Agency's Consolidated Annual Activity Report on the achievements and results for 2020. The Board acknowledges the Agency's performance and makes the following observations.

General observations

The Management Board:

- considers that eu-LISA has achieved its objectives for 2020 as set out in its establishing regulation, progressed towards the goals and objectives established in the Agency's long-term strategy for 2018–2022 and delivered the results defined in the 2020 Annual Work Programme included in the Agency's Single Programming Document for 2020–2022, both in terms of outcomes and performance;
- acknowledges the crucial role performed by eu-LISA in ensuring the normal functioning of the Schengen area, the freedom of movement and the efficient implementation of EU policies in the area of freedom, security and justice;
- emphasises the challenges faced by the Agency in 2020 with the COVID-19 pandemic, and notes with great
 satisfaction the Agency's efficient and timely response to the crisis; notes that the Agency ensured continuous
 availability of the large-scale IT systems entrusted to it (i.e. SIS, VIS and Eurodac) and at the same time made
 substantial progress with the implementation of the new initiatives entrusted to the Agency;
- emphasises the importance of the support provided by the Agency to the Member States and the European Commission in the implementation of the EES, ETIAS and the Interoperability package, and the transparent and efficient cooperation between them;
- acknowledges that despite the pandemic, the Agency managed to grow significantly in terms of staff numbers, budget and scope of activities; highlights the importance of this achievement in a very difficult context and notes that the Agency managed to operate with agility and with a high-level commitment from its managers and staff;
- acknowledges the Agency's low staff turnover rate and emphasises the need for eu-LISA to continue its commendable efforts to ensure staff retention and professional development within the Agency;

- welcomes the signature of the Transversal Engineering Framework (TEF) contract, and recognises the Agency's efforts to further increase the efficiency of its contractual architecture and vendor ecosystem;
- acknowledges the eu-LISA's continuous efforts to ensure sufficient capacity for its operational facilities in Strasbourg and the progress made by the Agency with the project for building the new extension, including the deployment of necessary temporary measures;
- acknowledges the Agency's progress in strengthening its Internal Control Framework (ICF); notes with satisfaction the improvements related to the management of the Agency's budget, which resulted in substantial reduction in carry-overs as compared to 2019;
- welcomes the progress in the implementation of the Agency's transformation programme (eu-LISA 2.0), and
 the strengthening of its capabilities in the areas of programme and portfolio management, product
 management, as well as vendor and contract management;
- acknowledges the efforts made in the systematic and regular monitoring and follow-up of audit recommendations and their implementation;
- notes with satisfaction the discharge granted by the European Parliament for the 2019 budget year.

Observations on the Agency's operational achievements

The Management Board:

- acknowledges that the Agency successfully ensured the continuous availability of SIS, VIS/BMS and Eurodac; considers that the actions performed by the Agency to manage the SIS, VIS/BMS and Eurodac are in line with its mandate and have successfully contributed to the achievement of the objectives and tasks set out in the relevant legal instruments;
- acknowledges the Agency's continuous efforts to improve the efficiency of its operational activities, as evidenced by the positive results of the stakeholder satisfaction survey;
- notes with satisfaction the timely progress made by eu-LISA in the implementation of the SIS Recast Regulation; and welcomes the Agency's efforts to prepare timely the implementation of the Eurodac Recast Regulation, ahead of the adoption of the New Pact on Asylum and Migration;
- emphasises the importance of AFIS for SIS, recognises the efforts deployed by the Agency to support the Member States with their connection to AFIS, and notes the progress made by the Agency in implementing the second phase of the AFIS project;
- emphasises the great importance of EES, ETIAS, ECRIS-TCN and the new interoperability architecture for strengthening border management and internal security in the EU, expresses its great satisfaction at the substantial progress made in 2020 and encourages the Agency to continue its efforts towards the full implementation of the systems, in close collaboration with the governing bodies, the Member States as well as the relevant EU institutions and agencies;
- notes with concern the substantial delay in the adoption of the ETIAS Consequential Amendments and its possible effects on the implementation of ETIAS and the Interoperability package;
- welcomes the further development of the Agency's internal capabilities with regard to planning, as well as the
 proactive management of budget execution and sound financial management, with high overall execution
 levels for commitments and payments (99.1 % and 99.0 %, respectively, against a target of 95 %);
- expresses satisfaction with the efficient functioning of the Agency's internal control system, as acknowledged in the regular external and internal audits.

Assessment of the management of the Agency

The Management Board acknowledges the results delivered by the Agency in 2020 and, considering the positive outcomes of the internal and external audits undertaken in 2020, and the detailed information regularly shared with the Agency's governing bodies, expresses its satisfaction with the quality of the management of the Agency in 2020.

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

The Management Board:

- considers this report provides sufficient assurance that resources (staff and budget) are used by the Agency in line with their intended purpose as set out in the 2020 Annual Work Programme included in the Single Programming Document 2020–2022;
- considers that the variations in the use of resources are not significant and justified, given the results achieved by the Agency and the outcomes of the audits performed in 2020;
- emphasises the importance of providing the Agency with the necessary amount of human and financial resources to match the tasks entrusted to the Agency in the 2021–2027 programming period.

Key performance indicators

The Management Board acknowledges the very good level of achievement of the Agency's key performance indicators for 2020.

Risk and control environment

The Management Board:

- acknowledges that the Agency's internal controls have been effective, considering the results achieved by the Agency and the results of the internal and external audits;
- acknowledges the efficient functioning of the Internal Control Framework (ICF); takes note of the report on its effectiveness and encourages the Agency to continue with the implementation and monitoring of the ICF;
- welcomes the appointment of eu-LISA's Deputy Executive Director as the Manager in charge of risk management and internal control;
- acknowledges that the main risks to the organisation have been identified and assessed, and adequate response plans were put in place in 2020.

Recommendations for 2021

The Management Board, taking into consideration the information provided in this report, encourages the Agency to:

- continue delivering its mandate, with sustained efficiency and effectiveness;
- continue the implementation of the EES, ETIAS, ECRIS-TCN and interoperability components at the highest possible pace, with a strong focus on guaranteeing the quality and robustness of the new systems;
- establish synergies in the use of allocated human and financial resources where possible;
- continue with the project for building the extension for the Agency's operational site in Strasbourg without delay;

- continue the Agency's close, efficient and transparent collaboration with the Member States, the European
 Commission and the relevant EU Agencies to ensure the timely and qualitative implementation of the new
 systems and the interoperability components;
- finalise the recruitment for all posts provided in the Agency's establishment plan without delay;
- finalise without delay the development of the Agency's sourcing strategy.

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.

Conclusion

The Management Board is very satisfied with eu-LISA's overall performance in 2020 and with its achievements throughout the year, that are in line with the goals and objectives set out in its 2020 Annual Work Programme. The Management Board is also satisfied with the adequacy and level of utilisation of available human and financial resources. However, the Board emphasises that the considerable pressure on the Agency's staff, due to multiple complex projects that are executed in parallel, remains a concern, and emphasises the need for the Agency to be further reinforced with additional human resources, both in its operational as well as horizontal and cross-organisational functions.

The Management Board invites the Agency to continue its commendable efforts to implement its mandate and to keep the high pace of the work on the new initiatives entrusted to it, namely EES, ETIAS, ECRIS-TCN and the Interoperability package. At the same time, the Board acknowledges the interdependencies between the Agency's work at the central level and that of the Member States at the national level, and invites eu-LISA to continue its close and efficient cooperation with them and the European Commission to ensure the final success of the implementation of the new systems.

The Management Board acknowledges the strategic importance of the second extension of the Agency's technical site in Strasbourg in order to ensure adequate working conditions for its staff and on-site contractors. It is also necessary to ensure that there is sufficient data centre capacity for the deployment and management of both new and already existing systems in an efficient and sustainable manner while continuing to guarantee the uninterrupted availability and timely evolution of all systems. The Board invites the Agency to continue with this project without delay.

The Management Board expresses its appreciation to the Agency's Executive Director, as well as eu-LISA's management and staff for their commitment and achievements throughout this incredibly challenging year, and wishes to thank them for their professional and generous collaboration.

Zsolt Szolnoki, Chairperson of the Management Board

Foreword



Krum Garkov

Executive Director

Image credit: Aigar Lusti

The year 2020 was an extraordinary year for eu-LISA. The COVID-19 pandemic caused a worldwide crisis that put the economic, social, and health systems under enormous pressure. A high number of people were directly affected, leading to a devastatingly high number of deaths and a wide range of negative effects on the daily lives of billions of people around the world. The crisis impacted deeply all European Union member states, prompting numerous emergency measures to curb the outbreak and minimise health risks for their citizens.

During this precarious time, it was of utmost importance to maintain coordination and cooperation between the Member States in the field of internal security, border and migration management. To that end, the uninterrupted availability of the existing large-scale IT systems (SIS, VIS, Eurodac) and the further progress with the implementation of EES, ETIAS and the interoperability package were of paramount importance.

I am confident that eu-LISA has successfully addressed those challenges. The Agency managed to swiftly adapt its operational model and ensured the business continuity and availability of the existing large-scale IT systems, implementing a number of mitigation measures. At the same time, the Agency successfully managed to weather the disruptions caused by the COVID-19 crisis to the planned activities, in particular considering the implementation of the new systems entrusted to it (EES, ETIAS, ECRIS-TCN, Interoperability, SIS Recast, etc.), and reduced the negative impact to the possible minimum. This was achieved in close and constructive cooperation with the Member States and the European Commission.

Throughout the entire year, eu-LISA had to continuously look for the optimal use of available human and financial resources to ensure the day-to-day operations and progress with its new tasks. What is more, in 2020, the Agency also continued to pursue its internal transformation programme, despite of the difficulties arising from the COVID-19 crisis.

In this incredibly challenging year, the whole Agency, its teams and staff proved their resilience, agility and ability to timely deliver and manage change. eu-LISA remained committed to its mandate by sustaining its operations, 24 hours per day, every day of the year. It supported its stakeholders with the swift deployment of new working procedures, by increasing the communication on the status of operations and developments and also by proactively measuring and mitigating the impacts of the pandemic. By doing that, eu-LISA confirmed that it is a strong, reliable and trustworthy partner for the Member States.

In 2020, our work was built around the following three priorities:

- 1) Focus on the core operations: the operational management and evolution of the systems entrusted to the Agency, considering their importance for internal security, border and migration management in the EU;
- 2) Progress with the implementation of the new tasks entrusted to the Agency: the development of EES, ETIAS, ECRIS-TCN and the interoperability package and at the highest possible pace;

3) Continue the organisational transformation programme that is intended to service as the catalyst for the Agency's successful and sustainable development in the long-term.

The evolution of political priorities in Justice and Home Affairs throughout the year, the large number of activities carried out in parallel by eu-LISA, and high expectations of the Agency's stakeholders, in the context of the pandemic, contributed to create a very challenging environment. Nevertheless, I am confident that eu-LISA was successful in addressing all challenges that arose during 2020, and this report provides plenty of solid evidence to corroborate that claim. In particular, I would like to highlight the following:

- The Agency ensured the uninterrupted availability of the systems entrusted to it, despite the challenging operational circumstances.
- The Agency made considerable progress with the implementation of EES, ETIAS, ECRIS-TCN and the interoperability package.
- The Agency's internal transformation programme continued successfully.
- The Agency managed to further improve its profile as a trusted partner and advisor to the EU institutions.
- The Agency was successful in maintaining a high level of engagement and commitment among the staff, while also retaining a low turnover rate.

These achievements provide once again to its stakeholders the assurance that the Agency is able to meet their expectations and to deliver its objectives successfully. Considering the challenges faced throughout 2020, and the agility demonstrated by eu-LISA, I am confident that the Agency is standing on a solid foundation to sustain and further improve its successful contribution to the Member States and the EU as a whole.

All this was the result of a joint endeavour. Owing to that, I would like to thank the Member States, the governments of the countries hosting the Agency's sites, the European Commission, the European Parliament, the Council of the EU, and all our partner EU Agencies, for their unwavering support and constructive cooperation throughout the year. I would also like to thank all my colleagues at eu-LISA for their commitment, hard work, and resilience in delivering the Agency's objectives and meeting the expectations of its stakeholders, despite the extraordinary challenges and obstacles we all faced.

The year 2020 taught us to expect the unexpected and to handle uncertainty better. COVID-19 forced us to change our daily routines and adapt our operating models to a new reality. I am proud to say that, despite the challenges, the Agency showed high resilience, agility and focus on its mission: to contribute to the efforts of the Member States to make Europe safer.

Next year and beyond will be no less demanding than 2020. The Agency will continue to operate in an extremely dynamic and challenging environment. Nevertheless, rest assured that regardless of the challenges and the circumstances, eu-LISA will not lose sight of its primary purpose: to contribute to the efforts of the Member States in making Europe safer and stronger. In order to be successful in this endeavour, the Agency will keep its stakeholders and their needs at the heart of all of its efforts, striving to deliver its services efficiently, with unwavering commitment as well as passion for excellence and agility.

Krum Garkov, Executive Director

Executive summary

The eu-LISA Consolidated Annual Activity Report (CAAR) 2020 provides a structured overview of the activities performed and objectives achieved in 2020 by the European Union Agency for the Operational Management of Large-Scale IT Systems in the Area of Freedom, Security and Justice (eu-LISA). In accordance with eu-LISA's establishing regulation, the CAAR is assessed by the Management Board after consultation with the Advisory Groups, in particular, by comparing the results achieved with the objectives set out in the Annual Work Programme for 2020 (Single Programming Document 2020–2022). After adoption by the Management Board, the CAAR is sent by 1 July of each year to the European Parliament, the Council, the Commission and the Court of Auditors, and published.

The Agency's Annual Work Programme for 2020 was based on the following operational priorities:

- maintaining the systems' high-level performance and availability;
- implementing the requirements stemming from the SIS Recast Regulations;
- developing new systems (EES, ETIAS and ECRIS-TCN);
- developing the components outlined in the interoperability regulations;
- executing the second phase of the extension of the Agency's technical site in Strasbourg, including the data centre.

The Agency's overall performance in 2020 demonstrated that eu-LISA has remained a steadfast and reliable partner in the area of Justice and Home Affairs, with a solid organisational structure and a highly qualified staff. Throughout the year, eu-LISA proved to be a central element of the Schengen architecture, facilitating the safe and secure exercise of one of the fundamental rights of EU citizens – the freedom of movement. What is more, the Agency managed to deliver on its objectives despite the challenges that arose in the unique context of the global pandemic.

Along with the rest of the world, eu-LISA was affected by the containment measures introduced to curb the pandemic. From the onset of the crisis, the Agency implemented necessary measures to ensure the health and safety of its staff and on-site contractors, to safeguard the continuous and uninterrupted service of the large-scale IT systems under eu-LISA's operational management, and to minimise the impact of the situation on the development activities. These special arrangements ensured the continuous delivery of the services to the Member States. Throughout the pandemic, both the technical site in Strasbourg and the back-up site in Sankt Johann im Pongau remained operational. As a result, no major interruption or incident affected the availability of the SIS, VIS or Eurodac to the Member States. New development activities were affected by the pandemic in several ways, particularly due to travel restrictions and data centre access constraints. The Agency, however, in cooperation with the Commission and Member States developed effective mitigation measures to reduce the impact of the pandemic on the development of new systems.

Evolution of the legal framework

The year 2020 brought significant changes to the legal environment in which eu-LISA operates:

- On 23 September 2020, the European Commission submitted its proposal for the **recast Eurodac regulation** in the framework of its new Pact on Migration and Asylum, covering all of the elements for a comprehensive European approach to migration. The proposal aims to establish improved and faster procedures throughout the asylum and migration system, and sets in balance the principles of fair sharing of responsibility and solidarity.
- 2020 saw the continuation of negotiations on the VIS Recast Regulation, including the VIS Consequential Amendments. A political agreement was reached at the end of the year and the legislative act reached the final stage of adoption. The new regulation will foster the security of the short-stay visa procedure, include long-stay visas and residence permits in the database and ensure interoperability between VIS and other relevant EU systems and databases.

- Negotiations continued also on the ETIAS Consequential Amendments, but their adoption was not finalised by the end of the year. Nevertheless, the Agency has already taken into account the requirements indicated in the relevant documentation for all affected systems, namely EES, ETIAS and ECRIS-TCN.
- On 2 December 2020, the Commission tabled a proposal on **e-CODEX** (e-Justice Communication via Online Data Exchange) as part of a package to modernise the EU justice systems and speed up their digitalisation. e-CODEX is the main instrument for secure cross-border cooperation in civil, commercial and criminal proceedings. According to the proposal, the operational management of this system shall be entrusted to eu-LISA as of 1 July 2023.
- On 19 February 2020, the European Commission presented its **White Paper on Artificial Intelligence** *A European Approach to Excellence and Trust*. In this context, eu-LISA is exploring options of potential deployment of dedicated AI elements in the systems under its management.
- On 24 July 2020, the European Commission presented the **EU Security Union Strategy** initiative for the period from 2020 to 2025. The strategy outlines four strategic priorities and eu-LISA contributes to the delivery of all of them, in particular to priority 4 a strong European security ecosystem.
- On 16 December 2020, the European Commission issued a communication on the EU Cybersecurity Strategy for the Digital Decade. In its area of expertise, eu-LISA contributes to ensuring world-class solutions and standards of cybersecurity for critical infrastructures, as well as the development and application of new technologies.

Implementation of new systems and innovation

In 2020, eu-LISA continued its work on the implementation of the new systems entrusted to the Agency (EES, ETIAS and ECRIS-TCN), as well as the development of interoperability between the new and existing systems. These large-scale initiatives have been organised as internal programmes to ensure synergies and efficiently use the available human and financial resources.

EES: In 2020, major efforts were undertaken by eu-LISA to ensure the implementation of EES according to the planned schedule, and to mitigate the impact of the COVID-19 pandemic. In August, the Agency achieved a key milestone with the closing of the requirements and specifications phase. The Agency developed and delivered the central system simulator to the users, and provided remote training to the Member States. The installation of the national uniform interface (NUI) and the upgrade of the VIS communication infrastructure (needed for EES and ETIAS in each Member States) was completed almost fully, despite restrictions on access to technical sites due to the pandemic. Altogether, the Agency installed 57 out of 64 NUIs, and network upgrades were completed in 56 out of 65 technical sites in various Member States.

The EES BMS/sBMS framework contract was signed in April, commencing the development process. Additionally, the Agency completed development work related to the EES interoperability with VIS and adopted the technical specifications for the development of the EES-ETIAS web service, another essential structural component of the system.

On 14 December 2020, the Justice and Home Affairs (JHA) Council decided to postpone the EES entry into operation by two months, from March to May 2022, in order to absorb the impact of the pandemic and to allow the Member States more time to prepare.

• ETIAS: In 2020, the development of ETIAS continued, in close cooperation with the Member States and the Commission. Despite the COVID-19 pandemic, the Agency managed to proceed with the implementation of the system as planned. In September, the Management Board adopted the technical tender specifications for the development of ETIAS, and the tender was subsequently launched as part of the Transversal Engineering Framework (TEF). The ETIAS implementation timeline was not affected by the pandemic.

- Interoperability: During the first half of 2020, the Agency prepared the technical tender specifications for the ESP, CIR, MID and CRRS.¹ The review and adoption procedures of the specifications for the various interoperability components started in July and the review was finalised in November. The formal conclusion of the process is expected in 2021, subject to a favourable opinion of the Commission. The tender for the development of the interoperability components was initiated as part of the TEF in December. The implementation timelines of interoperability components have not been affected by the pandemic.
- ECRIS: In 2020, eu-LISA stepped up its engagement with the EU justice community. On 14 April 2020, eu-LISA took charge of the maintenance of the ECRIS Reference Implementation. The Agency successfully managed to upgrade the communication protocol and committed to implement ten optional evolutive changes with high priority. In addition, eu-LISA continued the development of ECRIS-TCN as planned and the draft technical tender specifications were submitted for review in November.
- Moving away from the silo approach in the development of large-scale IT systems, the Agency launched in 2020 its first Transversal Engineering Framework (TEF). The TEF aims to set up a contractual shell for the design, development, testing and implementation of new IT systems. The Agency considers this to be a major milestone, and thus far it is the largest tender ever signed by eu-LISA. The TEF was also used to procure the services necessary for the development of ETIAS, the interoperability components and ECRIS-TCN.
- Owing to the recent expansion of eu-LISA's mandate, the Agency increased its efforts in the area of research
 and innovation and published a report on 'Artificial Intelligence in the Operational Management of Large-Scale
 IT Systems'. In addition, the Agency launched a project to develop and test a prototype of the EU online visa
 application portal, actively supported the EU Innovation Hub for Internal Security (an initiative launched by the
 Council of the EU) and drafted the roadmap for standardisation that was adopted by the Council in December.

Operational management and evolution of the existing systems

During the reporting period, the performance and availability of SIS, VIS/BMS and Eurodac were in accordance with the relevant service-level agreements. Despite the pandemic's impact, all systems remained available at all times, and the Agency's two technical sites maintained continuous operation as confirmed by the key performance indicators for the operational management of the systems (i.e. system availability and response times). The availability of SIS was 99.94 %, VIS 99.93 % and that of Eurodac was 99.87 %. Due to the COVID-19 pandemic, the traffic on all systems declined significantly from March onwards.

In 2020, the Agency made significant progress on the implementation of the SIS Recast. In January, two new features were deployed to the system. One to add a new functionality to the Automated Fingerprint Identification System (AFIS) and the other to establish connections to the SIS for the European Union Agency for Law Enforcement Cooperation (Europol), European Union Agency for Criminal Justice Cooperation (Eurojust) and European Border and Coast Guard Agency (Frontex). Additionally, the Agency proceeded with the development of the two main intermediate releases of the project related to changes to alerts on persons and on objects. In December, eu-LISA delivered an updated version of the system's technical documentation (i.e. Interface control document (ICD)/detailed technical specifications (DTS)) for review by the Member States. The updated documentation covers the system's biometric elements, and changes stemming from both AFIS and recast regulations. What is more, the Agency continued the development works related to AFIS phase 2 and to enable increased query capacity. The integration of Ireland into SIS progressed with the successful rehearsal of the entry into operation in January 2020; the final entry into operation is scheduled for 15 March 2021. The integration of Cyprus also progressed, with several testing phases completed over the course of 2020.

With regard to the VIS/BMS, the Agency was successful in increasing the capacity of the BMS to 85 million records, ensuring that it has sufficient capacity to meet the growing needs of the Member States, stemming from the

¹ European search portal (ESP), common identity repository (CIR), multiple-identity detector (MID) and central repository for reporting and statistics (CRRS)

implementation of the EU's common visa policy. The Agency also worked on the integration of new users (i.e. Europol, as well as granting passive access for Bulgaria and Romania). The VIS system is technically ready to be used by the new users. The evolutions of VIS/BMS have been strongly influenced by the future VIS-EES interconnection. What is more, eu-LISA also contributed to the preparation of the new VIS regulation.

In 2020, only specific technical evolutions took place for **Eurodac**, while the functional evolutions of the system were kept on hold, pending the adoption of the relevant legislation. During the second half of 2020, eu-LISA started the preparations for the Eurodac redesign, which will allow the Agency to guarantee the mid-term availability of the system for the Member States, while also ensuring that new functionalities will be developed and implemented timely, once adopted.

Infrastructure and networks

Throughout 2020, eu-LISA ensured the operational management and daily operation of its infrastructure, both at the main technical site in Strasbourg, France, and at the backup site in St Johann im Pongau, Austria.

The Agency also managed the SIS and VIS communication infrastructure whose performance was in line with the legal and operational requirements, with the SIS communication infrastructure reaching an availability of 99.9997 %, and the VIS communication infrastructure 99.9865 %; the SIS II second encryption layer reached an availability of 100 %.

In addition, the Agency continued with the upgrade the SIS communication infrastructure, to ensure that the Member States can efficiently use the system's new functionalities, stemming from the recast and AFIS projects. The upgrade of the VIS communication infrastructure was carried out as part of the EES programme, to deliver the bandwidth needed for the future operation of EES and ETIAS.

Cooperation with stakeholders

In 2020, eu-LISA continued its close, transparent and constructive collaboration with its Management Board, the Programme Management Boards (for EES, ETIAS, Interoperability and ECRIS-TCN) and the Advisory Groups (for SIS, VIS, Eurodac, EES-ETIAS, Interoperability and ECRIS-TCN). The Agency also supported ongoing discussions with the Commission, the Council and the European Parliament, regarding both existing and new large-scale IT systems, as well as the interoperability architecture.

Additionally, eu-LISA continued its participation in the Schengen evaluation mechanism by helping to monitor the application of the Schengen $\alpha cquis$ with a focus on the SIS areas of use and the implementation of the EU's common visa policy.

The Agency's seventh Annual Conference – 'Interoperability - Building Digital Resilience for the EU Justice and Home Affairs Community' – was organised on 26 November 2020 in cooperation with the German Presidency of the Council of the EU. It was the first time that the conference was held entirely online. The live broadcast, via a dedicated virtual platform, reached a broader audience than the usual face-to-face conferences, with over 500 registered participants.

eu-LISA's regular forum for interaction with industry – the Industry Roundtable 2020 – was also conducted entirely in a digital format in 2020. This year's event, under the title 'Data Quality and Interoperability: Addressing the Capability Gaps through Standardisation' was held from 3 to 5 November, with over 320 participants from more than 90 organisations and 35 countries.

In 2020, eu-LISA drafted and negotiated bilateral cooperation plans with several Justice and Home Affairs (JHA) Agencies. In September, eu-LISA concluded a cooperation plan for 2020–2022 with the European Asylum Support Office (EASO). On 12 November 2020, the Executive Directors of eu-LISA and the European Union Agency for Fundamental Rights (FRA) signed a cooperation plan for 2020–2022. In addition, eu-LISA and the European Union Agency for Cybersecurity (ENISA) negotiated a cooperation plan for the period 2021–2023, which was signed on 9 January 2021.

Furthermore, eu-LISA also maintained close contact with other partner agencies, for example with the European Union Agency for Law Enforcement Training (CEPOL) on training activities; with Frontex on SIS, EES, ETIAS and interoperability; with Europol on SIS, SIRENE, VIS, EES, ETIAS and interoperability; and with Eurojust on SIS and Eurodac. Additional active cooperation was also conducted in the framework of the JHA Agencies Network (JHAAN) and the EU Agencies Network (EUAN).

Organisational transformation

In 2019, the Agency launched a transformation programme that aims to deliver a new organisational structure to better accommodate eu-LISA's expanded mandate. This programme, commonly referred to as eu-LISA 2.0, was designed to ensure an open and transparent reorganisation process with active involvement of the Agency's staff. Throughout 2020, the Agency continued on the path of transformation and focused on the aspects of cultural change to support the implementation of the new organisation.

Operational sites

During the reporting period, eu-LISA made significant progress on the project for building a **second extension to its technical site** in Strasbourg. On 28 September, the Agency reached an important milestone with the formal land transfer, from French authorities to eu-LISA, of the 20 000 m² plot adjacent to its current building complex that will serve as the site for the new extension.

Budget implementation

In 2020, eu-LISA managed a budget of EUR 240.1 million in commitment appropriations and EUR 181.6 million in payment appropriations received from the EU general budget. Overall, the Agency achieved a high budget implementation rate:

- 99.1 % for commitment appropriations;²
- 99 % for payment appropriations.³

Main risks and issues reported to the Management Board

Throughout the year, the EES, ETIAS, Interoperability and ECRIS-TCN Advisory Groups and Programme Management Boards regularly notified the Management Board on the status of implementation, and submitted comprehensive reports, including overviews of the risks and issues in each particular programme. On several occasions the Board indicated the need for stronger involvement of the Member States to ensure the timely delivery of the programmes. In addition, the Board repeatedly addressed the issue of the pandemic's effects on the implementation timeline of EES, ETIAS and Interoperability programmes and the proposed mitigation measures.

The Advisory Groups for SIS, VIS and Eurodac reported directly to the Management Board on the status of their work, including the risks and issues associated with the operational management and evolution of the systems under their purview.

The 'Audit, Compliance and Finance Committee (ACFC)' of the Management Board contributed to providing assurance with respect to the Agency's risk management arrangements.

Furthermore, the Board received regular updates on the status of the negotiations regarding the new Multiannual Financial Framework for 2021–2027. In addition, the Board also closely followed progress on the project for building the second extension of eu-LISA technical site in Strasbourg and the risks associated with insufficient facilities to host new systems, staff and on-site contractors. The Board was also regularly updated on the status of implementing the Agency's

² Taking into account the non-automatic carry-over of commitment appropriations authorised by the MB on 15 February 2021 as summarised in Table 6.

³ Taking into account the carry-forward of administrative expenditure to 2021.

transformation programme (eu-LISA 2.0). With regards to audits, the Board received regular Monitoring Reports on the status of the implementation of audit recommendations.

Management's assessment of internal controls

The Agency's management has reasonable assurance that established internal controls are appropriate and functioning as intended. This position was further confirmed by the results of the internal and external audits.

Audit results

The Agency did not receive any critical recommendations in the framework of audits performed in 2020 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 and in 2020 the Agency made further progress with their implementation.

Risk management

Throughout the year, all major risks were appropriately identified and managed. In 2020, the Agency identified 12 major corporate risks and established a corporate risk response plan to address them. During the reporting period, two corporate risks were closed and three transformed into an issue.

Introduction

The purpose of the eu-LISA Consolidated Annual Activity Report is to give a structured overview of the activities performed and objectives achieved in 2020 as outlined in the Agency's Annual Work Programme for 2020 and in its Single Programming Document 2020–2022. The report follows the common structure set for all EU Agencies.

Chapter 1 provides a detailed overview of the most notable achievements in the operational management of existing large-scale IT systems, the development of new systems, as well as the Agency's other key areas of activity and in horizontal activities. Chapter 2 describes the main elements of eu-LISA's management, such as budget and human resources. Chapter 3 reviews the effectiveness of the internal control framework (ICF) and lists the major corporate risks for the reporting period. Chapters 4 and 5 provide the management's assurance and declaration of assurance.

Background information

The European Union Agency for the Operational Management of Large-Scale IT Systems in the Area of Freedom, Security and Justice (eu-LISA) was established in 2011 by Regulation (EU) No 1077/2011 and became operational on 1 December 2012. The Agency was established to provide a long-term solution at the EU-level for the operational management of existing and future large-scale IT systems in the area of freedom, security and justice. The current establishing Regulation⁴ entered into force on 11 December 2018, repealing the previous regulation and expanding the Agency's mandate. This new mandate strengthens the Agency's capacity to improve, design and develop information systems for European security, border management and migration, and broadens the scope of the Agency's work on research, innovation, testing and on the possibility to support the development of pilot projects and proofs of concept.

Currently, eu-LISA manages the Schengen Information System (SIS),⁵ the Visa Information System (VIS)⁶ and the European Asylum Dactyloscopy Database (Eurodac).⁷ These systems are the essential cornerstones for the smooth functioning of the Schengen area. At the EU's external borders, these IT systems are critical to ensure the efficiency of border management and the implementation of the EU's common asylum, migration and visa policies. Within the Schengen area, the continuous availability of these systems is integral in guaranteeing the freedom of movement of EU citizens, while also ensuring their security.

The Agency is also developing the Entry/Exit System (EES),⁸ the European Travel Information and Authorisation System (ETIAS),⁹ the centralised system for the identification of Member States holding conviction information on third-country nationals and stateless persons (ECRIS-TCN),¹⁰ and the new components that will shape the framework for the interoperability of the systems under eu-LISA's purview.¹¹

Throughout all operations, the Agency ensures a high level of data protection and the appropriate level of data and physical security, in accordance with applicable rules and provisions.

⁴ 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, OJ L 295, 21.11.2018, p. 99–137.

⁵ Regulation (EU) 2018/1860, Regulation (EU) 2018/1861 and Regulation (EU) 2018/1862, OJ L 312, 7.12.2018, p. 1-106; 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.

⁶ Regulation (EC) No 767/2008, OJ L 218, 13.8.2008, p. 60–81.

⁷ Regulation (EU) No 604/2013, OJ L 180, 29.6.2013, p. 31-59.

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

⁹ 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.

¹⁰ Regulation (EU) 2019/816, OJ L 135, 22.5.2019, p. 1-26.

¹¹ Regulation (EU) 2019/817 and Regulation (EU) 2019/818, OJ L 135, 22.5.2019, p. 27-135.

Mission, vision and core values

The Agency's mission is based on its legal mandate provided in Regulation (EU) 2018/1726 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 area of Justice and Home Affairs (JHA).

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

Location

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. In addition, eu-LISA also has a technical backup site in St Johann im Pongau, Austria, and a liaison office in Brussels, Belgium.

Legal background

Article 24(3)(g) of Regulation (EU) 2018/1726 requires the Executive Director to prepare and submit the draft of the Agency's CAAR 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 CAAR for the previous year, comparing, in particular, the results achieved with the objectives outlined in 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, while also ensuring that the Annual Activity Report is published.

1 Achievements of the year

In 2020, eu-LISA's role and importance for the Member States and the EU continued to grow. The Agency was among the key contributors to the process of implementing the EU's justice and home affairs policies. The Agency's contribution was also critical for all citizens living in or travelling to the EU, as its activities help safeguard fundamental rights, ensuring free movement across the Member States and offering a high level of security and protection.

In collaboration with its stakeholders, the Agency made key contributions toward the EU's priority of 'promoting the European way of life' by strengthening internal security across the EU. In particular, under the EU Security Union Strategy 'A new way forward', 12 the operation of existing systems overseen by the Agency, the new systems under development, and their interoperability are essential elements that contribute to the delivery of a solid European security ecosystem, across the area of justice and home affairs. These systems bolster the cooperation among the Member States, facilitate the necessary information exchange and efficient management of the EU's external borders. Under eu-LISA's new mandate, the Agency has also increased its contribution to security-related research and innovation in partnership with other EU Agencies.

The Agency provided its support and expertise to the Commission in the process of devising an effective framework for asylum and migration management and was a key contributor to the 'Pact on migration and asylum' from its inception. In addition, eu-LISA and its stakeholders have been working on the proposed amendments to the Recast Eurodac Regulation, which will play a key role in achieving the objectives outlined in the 'Common European Framework for migration and asylum'. The Agency also contributed to the 'integrated border management' priority, in particular with the progress made with the development of the interoperability of the large-scale IT systems operated by eu-LISA.

With regard to efforts towards the digitalisation of justice, eu-LISA provided valuable input to the discussions on the future of e-CODEX.

Although several EU strategies were reviewed or launched in 2020, they coincided with the mid-term of eu-LISA's long-term strategy (2018-2022)¹³. This strategy was prepared and adopted in 2017, together with the Member States and the European Commission. Reflecting the Agency's mandate, the strategy identified four strategic goals, providing guidance for eu-LISA's long-term action plans and providing the structure for multiannual programming:

Strategic Goal 1: Continue to grow as a contributor to and implementing partner for the relevant policies in the EU

Strategic Goal 2: Maintain and extend the role of the Agency as an EU ICT centre of excellence and service provider

Strategic Goal 3: Continue growing as the principal EU ICT technology hub

Strategic Goal 4: Continue to develop an efficient and agile organisation in compliance with the EU regulatory framework

1.1 New systems and innovation (strategic goal 1)

In 2020, the development of new large-scale IT systems was a key priority for eu-LISA. The Agency is responsible for the development of three new systems in the home affairs domain: EES, ETIAS and the interoperability components. The development and subsequent operation of these systems will constitute a major contribution of the Agency to the EU Security Union Strategy, and will offer strong support to the Member States in the areas of border management and internal security. It will also improve and streamline the border checks of the millions of people travelling annually to and from the EU from all around the globe. eu-LISA is also responsible for the development of one system in the justice domain, ECRIS-TCN, which will also contribute to the interoperability between EU information systems.

Communication from the Commission on the EU Security Union Strategy, COM/2020/605 final

¹³ https://www.eulisa.europa.eu/Publications/Corporate/eu-LISA %20Strategy %202018–2022.pdf

In 2020, the main challenge for the Agency was to ensure that its new development programmes could progress timely and effectively, despite the challenges brought about by the COVID-19 pandemic. The Agency managed to overcome this challenge successfully: work on all programmes progressed significantly and remained on track with only minor deviations to their overall schedule.

In line with the respective regulations, the governance of each new development programme is overseen by a dedicated programme management board (PMB), established by the eu-LISA Management Board (MB). The PMBs are responsible for overseeing the adequate management of the design and development phases of the new systems, and ensuring the consistency of the development of the central system with the developments of national systems. All PMBs report monthly to the eu-LISA MB on the progress of their respective programmes. In addition, the advisory groups (AG) for each system provide technical expertise to support the tasks of the PMB, and follow up on the state of preparation of the Member States. In 2020, due to the pandemic, online meetings replaced physical meetings for both PMBs and AGs from March onwards.

Furthermore, the Agency stepped up its efforts in the area of research and innovation. In 2020, eu-LISA launched a new approach to the procurement of engineering services. This step was an important milestone for eu-LISA, and it is expected to generate significant efficiency gains in the years to come. The Agency also continued to analyse technical solutions that will guarantee the highest level of availability for all large-scale IT systems, with significant implications for the architecture of the Agency's technical sites. The Agency also worked on the topic of artificial intelligence, and its potential applications, and commenced work on a prototype for an EU online visa application portal.

1.1.1 Home affairs

The development of new systems was initially entrusted to the Agency in the domain of home affairs, pursuant to the 'Smart borders' programme, originally proposed by the Commission in 2013. In the context of this programme, several proposals for the development of new systems were discussed and finally adopted, i.e. EES, ETIAS and the systems interoperability. In 2020, eu-LISA made significant progress with the development programmes of these new systems and components, constituting the most important activities of the Agency.



EES

The Entry/Exit System (EES) is a new large-scale IT system that will enable the recording of entry and exit of third-country nationals (TCN) to and from the Schengen Area. The system will replace the current practice of manual stamping of passports with an electronic registration in a central database of biographic and biometric information, as well as the date and place of entry/exit for visits up to 90 days. The system aims to modernise and increase automation at border controls, to strengthen internal security and fight terrorism and organised crime. This will support the Member States in dealing with ever-increasing flows of travellers, without having to increase the number of border guards. EES will also enable better monitoring of authorised stays and the identification of possible over-stayers.

The development of the EES started in January 2018 and in 2020, the Agency continued its work, in close cooperation with the Member States and the European Commission. Despite the COVID-19 pandemic, the Agency moved forward with the implementation of the system with minor deviations that only slightly affected the general timeline and key milestones.

In May 2020, the Agency submitted an impact assessment (IA) report to the MB, addressing the areas where the effects of the pandemic were most impactful, e.g. data centre preparations, travel restrictions, supply chains, productivity, product delivery and procurement procedures. Owing to those problems, the Agency conducted a study for mapping

alternative ways of providing services to the EES stakeholders. The study was finalised at the end of 2020 and will be further assessed by relevant stakeholders.

Taking into account the impact of the pandemic, all Member States were encouraged to continue working in close collaboration with the Agency to further refine the proposed scenarios for the continuation of the EES implementation (together with the ETIAS and Interoperability package). In this respect, the start of the pre-compliance testing phase was postponed from January to March 2021, while the EES entry into operation was moved from February to May 2022. This decision was endorsed by the JHA Council in December 2020, and these measures are expected to further support the Member States which are encountering difficulties to meet the agreed political targets.

Development of the central system

In August 2020, the Agency achieved a key programme milestone with the closing of the requirements and specifications development phase. This concluded many months of intensive work by the teams of the Agency, the Member States and the contractors. This phase of the programme was finalised with some delay, due to the effects of the pandemic. Thanks to the mitigation measures that the Agency put in place, the delay did not affect directly the overall programme schedule.

The central system simulator software was produced and delivered to the users in April. This software was an important contribution by the Agency, to assist the Member States in the development of their national systems. The Agency also provided all system users with remote training. In December, an updated version of the simulator was provided, aligned with the latest agreed update of the EES specifications.

Deployment of the national uniform interface

The EES regulation provides that a national uniform interface (NUI) must be installed in each Member State, to enable the secure connection of the national border infrastructures to the EES central system. The installation of the NUI constituted an important part of the work that the Agency carried out in 2020. It started in March with a pilot installation in Austria and Latvia. However, this undertaking was soon affected by the pandemic, due to access restrictions to data centres in various Member States. The deployment of the NUIs, originally planned to take place between May and September, was therefore delayed. Similarly, the pandemic affected the scheduled work in the Member States, and some data centres were not ready in time to organise the installation of the NUIs. By the end of 2020, the Agency managed to install 57 out of 64 NUIs. The plan foresees that the few remaining NUIs will be installed in the first months of 2021.

Development of the sBMS

On 16 April, the Agency signed the framework contract for the development of the Shared Biometric Matching Service (sBMS) and the migration of SIS, VIS and Eurodac to sBMS. This was a key milestone for the Agency, as the sBMS will be used by all systems operating within the interoperability architecture. Under this framework contract, specific contracts were subsequently signed in May and June for the programme setup, the development of requirements and specifications, the delivery of the user software kit (USK) and the planned migration of VIS to sBMS. Following the contract initiation, the activities started and were carried out according to the plan.

The first milestone was achieved in the development of the USK, a tool needed to ensure the quality of biometric data in the systems. The first full version of the USK was delivered to the Member States on 30 November, to start the initial (beta) testing campaign. In December, several Member States started capturing and processing biometric data for testing purposes.

Throughout the year, the Agency collaborated on sBMS technical topics with the Member States' and with the Commission's experts on biometrics within the biometric working group, started in 2019.

Interoperability with the VIS

To enable the interoperability between the EES and the VIS, a secure communication channel must be established between the two central systems. The Agency, in collaboration with the VIS contractor, assessed the impacts of the EES Regulation on the VIS. The definition of the functional specifications, which started already in April 2019, was completed at the beginning of 2020. Following the completion of this initial phase, the development phase started and was successfully completed. The compliance testing campaign was prepared and is expected to start in March 2021.

Upgrade of the VIS communication infrastructure

The VIS communication infrastructure, connecting national systems to the central system, must be upgraded to provide sufficient bandwidth to accommodate the needs of the EES and ETIAS. By the end of 2020, the network upgrade was completed for 59 out of 65 sites in the Member States. Like other activities that required physical access to data centres, the upgrade of the sites was affected by the pandemic. In particular, the delay in the preparation of local networks was the main reason behind the delayed upgrade of the eight remaining sites. However, a plan is already in place to ensure that the remaining sites will be upgraded by May 2021, as part of the next phase of the VIS communication infrastructure upgrade.

EES-ETIAS web service for third-country nationals and carriers

The EES web service will enable third-country nationals to verify online at any moment the status of their authorised stay in the EU. The web service will also be used by carriers to verify whether a traveller's visa has at least one remaining authorised entry. The development of the web service is a brand new exercise for the Agency, introducing new challenges to the EES programme.

The development of the web service began in January 2020, with outlining of technical specifications which were formally adopted by the MB on 7 September 2020. The work also progressed on the procurement of internet lines, and on the development of system tools, including the carrier interface simulator. The Agency made the assessment that the web services require a new secure infrastructure, isolated from EES, and that web services will cover both the EES and ETIAS. These new requirements will allow the development of a long-lasting infrastructure, supporting the needs of both the EES and ETIAS, as well as potential future services targeted at external users and stakeholders.



ETIAS

ETIAS is a new pre-travel online authorisation system for EU border management that will improve the security and safety aspects of travelling to or through the Schengen Area. Once operational, ETIAS will require that all visa-exempt third-country nationals planning to travel to the Schengen Area apply for their pre-travel authorisation online. ETIAS will reduce procedures and border-crossing times, strengthen border management and reinforce the EU's visa liberalisation policy. Furthermore, the system will allow the comparison of already collected information with both existing and future databases, enabling advance verification of potential security, migration and public health risks. ETIAS will be used by border guards at Schengen Area border crossing points and by carriers (i.e. air, land and sea) prior to boarding.

The development of ETIAS started in the end of 2018, and was structured in three distinct phases: the preparation phase, the procurement phase and the implementation phase. In 2020, the Agency continued the development of ETIAS, in close cooperation with the Member States and the European Commission. Despite the COVID-19 pandemic, the Agency advanced the implementation of the system in accordance with the planned schedule. The preparation phase was

almost completed by the end of 2020. The procurement phase started in Q_3 2019 and was expected to be completed by Q_1 2021, with the start of the implementation phase. The system will enter into operation in the end of 2022.

Preparation phase

The preparation phase began in 2018 and reached a major milestone in September 2020, with the adoption of the ETIAS technical tender specifications (TTS) by the MB. However, the preparation phase was extended to finalise the ETIAS watch list technical specifications, which is dependent upon the status of the corresponding implementing act.

As of December 2020, 100 % of the prioritised delegated and implementing acts were adopted. Although the ETIAS consequential amendments were not adopted in the expected timeframe, which had a negative impact on the programme, their adoption was scheduled to occur in the first half of 2021.

Once the new system is in place, the ETIAS National Units may, in exceptional cases, invite applicants for an interview, prior to departure. As part of this process, the ETIAS regulation provides that audio and video communication may be used to conduct the interview, in case consular services are located too far away from the applicant's place of residence. Following discussions on the corresponding implementing act, the Commission concluded that the audio and video tool should be completely separate from the ETIAS information system, without any integration. The Commission recommended that eu-LISA could provide a list of suitable tools to the Member States, after testing the tools against the requirements defined in the related implementing act. In November, the ETIAS PMB recommended to the MB to task the Agency, and the AG, to assess the possibility to have a centralised procurement for the ETIAS audio and video instrument. It was expected that this approach would generate significant economies of scale and operational benefits for the Member States. The Member States using such option will still be responsible for covering the costs of implementation and maintenance.

The first ETIAS data protection impact assessment (DPIA) exercise was launched in July 2020. Due to the complexity of the exercise, the initial timeline had to be extended to 2021. The DPIA will serve as an input for the elaboration of the ETIAS detailed technical specifications, to ensure that data protection is guaranteed.

Procurement phase

The procurement phase started in Q₃ 2019 with the setup of the Transversal Engineering Framework (TEF) procurement procedure, and will end with the signature of contracts and the kick-off of the design and development of the ETIAS in 2021. For a more detailed overview of the TEF procedure, please refer to page 31.

The tender for ETIAS development services was launched as part of the TEF on 29 September 2020, following the adoption of the ETIAS technical tender specifications. On 2 November 2020, three offers were submitted and underwent evaluation. The evaluation procedure had to be extended to allow due diligence for assessment of the submitted offers, with the aim of awarding a contract at the beginning of 2021, and proceeding with the first contracts related to the project setup, analysis and design.



Interoperability

Interoperability is the ability of information systems to exchange data and enable the sharing of information. The efficient management of Europe's border security and migration relies upon the interoperability of the existing and new information systems in the domains of justice and home affairs. To that end, eu-LISA is developing the necessary components that will ensure the interoperability of the relevant systems. These components are the following:

- the European search portal (ESP), enabling authorised users to conduct single searches and receive results from all the systems they are authorised to access;
- the shared biometric matching service (sBMS), allowing all users to search and cross-match data more efficiently;
- the common identity repository (CIR), enabling easy access to biographical information about third-country nationals, to ensure reliable identification;
- the multiple identity detector (MID), helping detect multiple identities with the dual purpose of ensuring the correct identification of bona fide travellers as well as combatting identity fraud.

The Agency is also developing a central repository for reporting and statistics (CRRS), to provide cross-system statistical data and analytical reporting for policy, operational and data quality purposes.

The interoperability programme was structured in three phases: the preparation phase, the procurement phase and the implementation phase. The preparation phase started in mid-2019 and is expected to be completed by Q2 2021. The procurement phase started in parallel in Q3 2019 and will continue until the start of the implementation phase, scheduled to start in Q2 2021. For a more detailed overview of the development of sBMS, please refer to the EES section on page 24.

Preparation phase

The Agency has been supporting the European Commission and Member States in the framework of the Interoperability Committee and Expert Group meetings, with the preparation of the relevant legal acts. In line with the planning established by the Commission with the support of eu-LISA, six acts were stable by the end of 2019 and five more by June 2020. The work progressed on two remaining implementing acts, while the acts pertaining to the entry into operation of the components are yet to be scheduled.

During the first half of 2020, the Agency worked on the preparation of the technical tender specifications (TTS) for the ESP, the CIR, the MID and the CRRS. The review and adoption procedures of the TTS¹⁴ for the different components started on 17 July 2020. The review was finalised in November 2020 and the formal conclusion of the process was expected in Q1 2021, subject to a favourable opinion of the Commission.

The Interoperability AG addressed the impact of the interoperability on the stakeholders' business processes and the possible scenarios for the migration of systems to the interoperability components. The AG also developed an integrated planning, involving the broader interoperability community, to support the Member States in the elaboration of their national plans.

Procurement phase

The tender for the development of the interoperability components was initiated as part of the TEF on 4 December 2020. It will cover the development of the CIR, the MID, the ESP and the CRRS. The award of the contracts is scheduled for the beginning of Q2 2021. For a more detailed overview of the TEF procedure, please refer to page 31.

1.1.2 Justice

ECRIS-TCN is the first large-scale IT system to be designed and developed by the Agency that primarily serves the justice domain. In this regard, this project is the first formal engagement of the Agency with the EU justice community. In 2020, eu-LISA started to work on the implementation of ECRIS-TCN in close cooperation with the Member States, the European Commission as well as JHA Agencies (Europol and Eurojust) and an EU body, the European Public Prosecutor's Office. In addition, the Agency also took over the responsibility for the maintenance of the ECRIS Reference Implementation, and contributed to the digitalisation of criminal justice initiative, in particular regarding the future evolution of the e-CODEX (e-Justice Communication via Online Data Exchange).

¹⁴ In accordance with Art. 54 of the Interoperability regulations



ECRIS Reference Implementation

ECRIS is a decentralised system for exchanging information between Member States on previous convictions. Under EU law, national courts are obliged to take into account convictions in other EU countries when they pass sentences in criminal cases. ECRIS became operational in 2012 to support this process, by improving the exchange of information on criminal records throughout the EU as all EU Member States are connected to ECRIS. The ECRIS Reference Implementation (ECRIS RI) is the list of functional, technical and security requirements that the Member States must follow for ECRIS to be operational. As of 14 April 2020, eu-LISA is in charge of the maintenance of the ECRIS RI. Since then, the Agency has been responsible for the collection and submission of monthly ECRIS statistics to the Commission. The Agency successfully managed to upgrade the communication protocol and committed to implement ten optional evolutive changes with high priority, as well as a mandatory legal change by February 2021. In addition, the Agency also streamlined the Member States' contact lists. As provided by the ECRIS-TCN Regulation, the ECRIS-TCN interface software will be integrated with the ECRIS RI, currently used by the Member States.

ECRIS-TCN

The ECRIS-TCN is a centralised hit/no-hit system, supplementing the existing ECRIS system with regard to the exchange of criminal records information on third-country nationals convicted in the EU. ECRIS and ECRIS-TCN will help judges, prosecutors and other relevant authorities obtain comprehensive information on a third-country national's criminal history, regardless of the Member State where that person was previously convicted. In this way, ECRIS-TCN will also contribute to implementing the principle of mutual recognition of sentences and judicial decisions in a common area of justice and security where people move freely, such as the Schengen Area. The system is scheduled to be ready alongside the development of the interoperability components.

In 2020, the Agency continued its work on the development of ECRIS-TCN, in close cooperation with the Member States and the European Commission. Despite the COVID-19 pandemic, the Agency advanced the implementation of the system in accordance with the planning.

The ECRIS-TCN programme was structured in three distinct phases: the preparation phase, the procurement phase and the implementation phase. By the end of 2020, the preparation phase was nearly completed. The procurement phase was also underway and scheduled to be completed by Q1 2021, with the start of the implementation phase.

Preparation phase

The preparation phase began in 2019 and is expected to be completed in Q2 2021. In the end of November 2020, eu-LISA submitted the draft technical tender specifications (TTS) to the PMB and the Commission for review. Once the TTS are adopted by the MB, subject to a favourable opinion of the Commission, the signature of ECRIS-TCN specific contracts under the TEF will proceed, commencing the implementation phase. For a more detailed overview of the TEF procedure, please refer to page 31.

Throughout 2020, the Agency collaborated closely with the Commission and the Member States by providing its continuous support to the preparation of the legal acts (i.e. implementing decisions) necessary for the technical development and implementation of the system. The first implementing decision deals with alphanumeric data and cover data quality, performance and availability of the system, logs and statistics. The initial draft was discussed at the ECRIS-TCN Committee on 10 February 2020 and following two revisions, the text has been 'stabilised'.

e-CODEX

e-CODEX provides for the European digital infrastructure for secure and interoperable cross-border communication in the area of justice. The e-CODEX system has been developed to overcome a fragmented and incompatible variety of national IT tools, and to ensure secure electronic transmission of information in cross-border justice proceedings, where such transmission is allowed under national law. The e-CODEX system has been in use since 2013, but only by a limited number of Member States, and only for piloting certain legal procedures. On 2 December 2020, the Commission adopted a 'Proposal for a Regulation on a computerised system for communication in cross-border civil and criminal proceedings (e-CODEX system)'. The proposal aims to entrust the further development and maintenance of e-CODEX to eu-LISA as of 2023. e-CODEX is a key technological enabler for modernising, through digitalisation, the communication in the context of cross-border judicial proceedings. Therefore, the Agency's involvement and engagement on this initiative should be seen as an important step towards increasing its contribution to the digitalisation of the justice domain.

1.1.3 Innovation, research and development

Research and technology monitoring

2020 was an important year in the implementation of the Agency's recently expanded research mandate. Within the scope of Article 14(2) of its establishing regulation, the Agency initiated the discussion with the Directorate-General for Migration and Home Affairs (DG HOME) on formalising its engagement in the EU Framework Programme for Research and Innovation. These discussions led to the preparation of Terms of Reference defining the modalities and objectives of eu-LISA's involvement in the implementation of the EU Framework Programme for Research & Innovation. In autumn 2020, for the first time, eu-LISA participated in the evaluation of project proposals, within the scope of the call for proposals titled 'Technologies to enhance border and external security' under the EU Framework Programme.

In July 2020, considering the importance of artificial intelligence (AI) in policy discussions, and its relevance in the operational management of large-scale IT systems, eu-LISA published a research and technology monitoring report titled "Artificial Intelligence in the Operational Management of Large-Scale IT Systems". The report was published on the eu-LISA website and distributed to the Agency's key stakeholders, including the Member States and relevant EU Institutions. In addition, the Agency also contributed to the study led by the Commission on the application opportunities for AI in border control, migration and security, in particular by identifying several use-cases for the implementation of AI in the context of eu-LISA's internal processes.¹⁸

In accordance with Article 16(3) of its establishing regulation, the Agency signed in July 2020 a service level agreement (SLA) with the European Commission to develop and test a prototype of the EU online visa application portal, that would contribute to the further digitalisation of visa processing, hence increasing the efficiency and the control of the process for applicants, consulates, ministries and border authorities. The project's results should provide an important evidence base for considering the feasibility of such visa application portal, as well as taking decisions on further steps, including possible legislative proposals. The project was initiated in September 2020 and the first phase of the project, the design phase, was completed in December 2020.

In February 2020, eu-LISA proposed to develop a Roadmap for Standardisation for Data Quality Purposes. The Agency identified that alongside the implementation of the interoperability architecture, the EU needed the development, endorsement and implementation of common standards applicable to the large-scale IT systems in the JHA area, and to the equipment and solutions used at central and national levels in conjunction with these systems. The purpose of

¹⁵ https://www.e-codex.eu/

Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on a computerised system for communication in cross-border civil and criminal proceedings (e-CODEX system), and amending Regulation (EU) 2018/1726, COM/2020/712 final

¹⁷ The terms of reference were signed on 16 March.

¹⁸ https://op.europa.eu/s/olUo

the Roadmap is to define the actions needed to achieve this objective, which will help the Member States maximise the operational benefits of the interoperability architecture. The roadmap was prepared over the course of the year and was adopted with the support of the German Presidency of the Council of the EU in December 2020. The Agency also became an observer to the ISO standardisation subcommittee on biometrics. Standards developed by this subcommittee support a wide range of applications that provide accurate and reliable verification and identification of individuals, including ones built by eu-LISA, such as the EES. Therefore, the close participation of the Agency in the subcommittee projects will ensure a proper alignment with those biometric standards that are of critical importance for eu-LISA.

The eu-LISA Industry Roundtable, organised back-to-back with the Agency's Annual Conference in November, focused on the capability gaps related to the implementation of the interoperability of the large-scale IT systems operated by eu-LISA, and in particular, on data quality assurance through standardisation. The Industry Roundtable brought together industry representatives, Member States' authorities, and EU institutions to discuss the developments facilitating the improvement of the quality of biometric and alphanumeric data. Due to the constraints imposed by the



Figure 1: eu-LISA Industry Roundtable visual

pandemic, the three-day event was organised online for the first time, bringing together over 320 participants from more than 90 organisations and 35 countries.

In addition, eu-LISA also actively supported the EU Innovation Hub for Internal Security, an initiative launched by the Council's Standing Committee on Operational Cooperation on Internal Security (COSI) under the coordination of Europol. The Hub is meant to operate as a collaborative network for innovation labs, aimed at ensuring the coordination and cooperation between EU and national stakeholders in the field of internal security. In the fourth quarter of 2020, eu-LISA contributed to the definition of the overall operational framework for the Hub, including the definition of priorities and scoping of the initial set of projects that could be undertaken by its members.

High availability of the large-scale IT systems

The systems entrusted to eu-LISA are of critical importance for border control, internal security and migration management in the EU. The Agency is thus expected to ensure their uninterrupted availability to the Member States. However, the existing systems (i.e. SIS, VIS and Eurodac) have been developed at different times and are based on different architectures, which affects their level of availability.

In accordance with Article 10 of its establishing regulation, and with Article 4(4) of the new SIS Regulation, the Agency started working in 2019 on an impact assessment (IA) on the technical solutions needed to ensure the uninterrupted availability of these large-scale IT systems. To ensure the consistency of the results of the IA across all systems and to maximise operational benefits, the IA was separated into two phases:

- The first phase, finalised in March 2020, delivered an overarching independent IA and cost-benefit analysis of the different options for uninterrupted availability of all systems entrusted to the Agency. It focused on the performance and high availability of the systems, looking at existing and future needs, including hosting capacity at the technical sites, risks related to the current operational setup, assessing and comparing high-level options to extend capacity and site redundancy.
- The second phase, launched in the second half of 2020, detailed the technical and architecture solutions for uninterrupted availability for the systems entrusted to the Agency, including a refined technical analysis and a cost-benefit analysis. The outcome provided the Agency with a comprehensive comparison of technical

¹⁹ ISO/IEC/JTC1/SC37

solutions, which will facilitate the identification of the preferred way forward. Furthermore, it took into account the architecture of the new systems (i.e. EES, ETIAS, interoperability components), which is defacto designed to support uninterrupted availability (active-active mode).

The final results of the IA will be presented to the eu-LISA Management Board in Q1 2021. However, the practical implementation of the new high availability architecture for these legacy systems may only start in 2022.

Transversal procurement framework

In 2020, as another innovative approach, the Agency launched in 2020 its first Transversal Engineering Framework (TEF) in order to move away from the silo approach in systems development and operation. Until now, eu-LISA contracted all tasks related to the development of a new system to one consortium under one large contract. The TEF is aimed at setting up a contractual shell for the design, development, testing and implementation of new systems. Under the TEF, several lots will be awarded to different economic operators. The signature of the TEF was a key achievement, and the largest tender ever signed by the Agency. The transversal procurement approach is a significant innovation to the operational sourcing model of the Agency, and it is expected to generate important gains in the vendor and contract management process, including better value for money, economies of scale, faster procurement processes, while also reducing the Agency's dependence on a small number of vendors (i.e. vendor lock-in).

The preparation of the specifications for the call for tenders related to the TEF was completed in January 2020. The procedure was launched on 29 January 2020 for four lots and associated services:

- Lot 1: design, coordination, quality assurance and integration support;
- Lot 2: development services;
- Lot 3: infrastructure (hardware, software, related services);
- Lot 4: testing and qualification.

The evaluation of TEF Lot 1 offers was completed and the framework contract was signed with the winning tenderer on 7 October 2020. The kick-off meeting took place on 24 November with the conclusion of the first three specific contracts.

The evaluation of TEF Lot 2 offers was completed at the end of June and the framework contracts were signed with the winning tenderers at the end of August. A pool of five contractors was selected for the second stage of the competition for procuring the development services for ETIAS, the interoperability components and ECRIS-TCN.

The specific contract covering the Lot 3 setup activities was signed on 9 December 2020. The finalisation of the Lot 4 evaluation (i.e. testing services) is expected in the first half of 2021.

Mirroring the approach for procurement of engineering services, the Agency is moving in the direction of transversal procurement in the area of systems operation as well, under the Transversal Operational Framework (TOF). With the TOF, eu-LISA will move away from the silo approach of contracting the systems maintenance to one service provider per system. The TOF will be used to contract the operation of existing systems, as well as that of new systems once they enter into operation. The baseline version of the future TOF call for tenders documentation was finalised at the end of Q4 2020. The final version of the tender documentation, defining the operational aspects, will be finalised in 2021. In parallel, the Agency has initiated a TOF roadmap to provide an overarching view of the timeline for the transition of the systems' operational and maintenance to the TOF.

1.2 Operational management and evolution of the systems managed by the Agency (strategic goal 1)

The operational management of large-scale IT systems is at the core of the Agency's mandate. 24 hours per day, every day of the year, the Agency ensures that the systems under its management (i.e. SIS, VIS and Eurodac) are available to all Member States. The operational management of the systems covers the constant monitoring of the systems, the operation of services defined in the Agency's IT service management (ITSM) framework, and the continuous interaction with the Member States. In addition, it also entails all tasks related to system maintenance.

In 2020, one of the main challenges for the Agency was to ensure the uninterrupted availability of the systems for all users, despite the multifaceted impact of the COVID-19 pandemic. Throughout the year, travel and access restrictions had major implications for the staff availability to work at the Agency's technical sites, the central unit (CU) in Strasbourg, and the backup central unit (BCU) in St Johann im Pongau. Despite those difficulties, the Agency and its staff deployed all possible efforts and ensured that all systems remained available at all times. This was a major achievement, confirmed by the very good results of the systems' availabilities and response times, which are the main key performance indicators for the operational management of the systems (Table 1). Compared to 2019, the performance improved for all indicators but one. Additionally, the Agency also ensured that its systems operation support services remained available 24/7. Those services are essential for the Member States, and the Agency ensured throughout the year that requests were answered and issues addressed timely and effectively. The 2020 'Customer satisfaction survey' confirmed that, despite the challenges, eu-LISA managed to uphold its level of service towards the Member States. What is more, since the pandemic had a significant impact on the system usage, the Agency started informing the Member States on this aspect on a monthly basis.

Table 1: Key performance indicators (KPIs) for the operational management of the systems

	Corporate key performance indicator	2019	2020	Targets	Target achieved
KPI ₃	Eurodac central system availability	99.55%	99.87 %	Green ≥ 99.99 % 99.99 %> Amber ≥ 99.50 % Red <99.50 %	
KPI 4	Eurodac central system response time	99.91%	99.95 %	Green ≥ 99.45 % 99.45 %> Amber ≥ 90 % Red < 90 %	
KPI 6	SIS central system availability	99.95%	99.94 %	Green ≥ 99.99 % 99.99 %> Amber ≥ 99.50 % Red <99.50 %	$\overline{\mathbf{Q}}$
KPI ₇	SIS central system response time	99.84 %	99.86 %	Green ≥ 99.5 %, 99.5 %> Amber ≥ 99 % Red <99 %	\square
KPI 8	VIS central system availability	99.65%	99.93 %	Green ≥ 99.99 % 99.99 %> Amber ≥ 99.50 % Red <99.50 %	\square
KPI 9	VIS central system response time	97.79 %	99.98%	Green = 100 % 100 %> Amber ≥ 90 % Red <90 %	$\overline{\mathbf{Q}}$
KPI 19	Customer satisfaction: percentage of Member States satisfied or very satisfied with the overall service provided by eu-LISA Service Desk	93.4 %	95 %	≥ 80 %	\square
KPI 20	Service Desk performance	90 %	99.9%	≥75%	\square

Reaching the highest availability target for the central systems availability KPIs (99.99 %, green target) will either require an overhaul of the systems, or an active-active architecture. The current active-passive architecture prevents the full

achievement of the high availability targets. For a more detailed overview on this topic, please refer to the dedicated section on page 30.

eu-LISA manages the operation of large-scale IT systems over their entire lifecycle, from development through operation to evolution, ensuring that over time, the systems are operated at the agreed levels of performance, and that the evolving needs of the end-users are always met. The legal basis for the continued evolution of these systems is ensured through the adoption of new legal acts. In 2020, eu-LISA worked on developments related to the SIS recast regulations that were adopted in 2018. The Agency also supported the European legislator and the Commission with the preparation of the new VIS and Eurodac regulations. The SIS and VIS/BMS also required some technical evolutions, to increase their capacity and availability.

The COVID-19 pandemic affected the development and deployment of systems evolutions in two significant ways. Firstly, by disrupting supply chains in the second half of the year. Secondly, due to travel and access restrictions, which prevented the availability of Agency staff and contractors to work on site, a requirement for the deployment of new releases. Notwithstanding those difficulties, the Agency made significant progress on key projects, such as the implementation of the SIS recast and on the AFIS phase 2, as well as on the integration of new users to SIS and VIS, and on preparations related to systems interoperability.



1.2.1 SIS

The Schengen Information System (SIS) is a large-scale IT system, which supports the exchange of information on persons and objects between national police, border control, customs, visa and judicial authorities. 2020 marked the 25th anniversary of its entry into operation, and it has become the most widely used and largest information sharing system for security and external border management in Europe. SIS is the key compensatory measure for the abolition of internal border controls, offering essential support to internal security across the Schengen area. SIS is a cornerstone of the Schengen acquis, facilitating the free movement of people within the Schengen area, supporting internal checks and border controls at the external borders, ensuring a high level of security and contributing to law enforcement and judicial cooperation across Europe. The second generation of SIS (SIS II) has been in operation since 2013. eu-LISA is in



Figure 2: SIS 25th anniversary visual

charge of the operational management of the central system and the communication infrastructure, ensures 24/7 operational monitoring support and is responsible for timely system evolution.

In 2018, eu-LISA launched the Automated Fingerprint Identification System (AFIS), which introduced a biometric search capability in SIS, allowing for the identification of persons of interest solely based on their fingerprints. By the end of December 2020, all Member States were under obligation to enable SIS—AFIS searches (see page 36). In December 2018, the adoption of the recast Regulations started a major phase of development of new functionalities for the SIS (see page 35).

Operations

During 2020, the overall performance of the SIS central system was within the agreed service-level agreement (SLA) specifications: the availability of the system was 99.94 % (KPI 6) and the response time performance indicator was 99.86 % (KPI 7). In 2020, only few minor incidents affected the system's availability:

- In April, a message server was down for one hour. No messages were lost, but it affected the processing time of transactions.
- On 17 September, an incident affected several components of the central system. The troubleshooting and complete restoration of services took more than 24 hours. During this time, queries were fully down for 40 minutes, transactions were fully down for 130 minutes, but no data was lost.
- An incident on the TESTA-ng (Trans European Services for Telematics between Administrations new generation) network²⁰ was observed in several Member States on 4 May between 12:00 and 13:00 CET. The incident occurred on the core network, affecting most Central and Eastern European countries. No data loss happened.

The SIS–AFIS was also operated and successfully maintained, with no major incident. According to the SIS Recast Regulations, all Member States had to enable SIS–AFIS searches by the end of 2020. This was a major objective for all Member States not yet connected to AFIS, and the Agency intensively supported them throughout the year in this process. In 2020, Bulgaria, Croatia, Denmark, Romania, Slovakia and Sweden successfully completed their connection to AFIS. By the end of 2020, 25 Member States were connected to AFIS. The usage of the AFIS continued to increase, proving its value to the European law enforcement community. Once biometric fingerprint information is added to a European Arrest Warrant, SIS–AFIS enables an even faster identification of wanted persons.

Due to the significant efforts of the Agency, the pandemic did not negatively affect the level of system maintenance and support to the Member States. However, the impact on traffic was noticeable, reaching between 10 and 20 % of its usual level in April 2020.

Throughout the year, the Agency worked continuously with the Member States to ensure the best functioning of the system. In February, an update improved the system's performance in the processing of messages from the Member States. Thanks to the strong involvement of the Member States, the performance of data consistency checks significantly improved in 2020. Data consistency checks are regularly required to ensure that the central system and national copies remain synchronised, for example following the temporary disconnection of a national system. The Agency also supported the Member States by ensuring the availability of the test and pre-production environments. From mid-March, owing to the COVID-19 pandemic, priority was given to keeping these environments highly available for the Member States and to supporting the execution of planned test and qualification campaigns.

In the second half of 2020, the Agency, together with the Commission and the Member States, focused intensely on the disconnection of the UK from the SIS. The Agency's objective was to complete this change seamlessly on 1 January 2021. The preparations included tests and several rehearsals. The disconnection started first with the technical disconnection at network level, followed by the implementation of a filter on the central system to block UK alerts which were then deleted altogether. Thanks to careful planning and the continuous coordination with the Commission, the disconnection of the UK from the SIS did not impact the other Member States.

System usage



The Member States accessed the SIS over 3.7 billion times – 44 % decrease from 2019.



At the end of 2020, 93.4 million alerts were stored in the central system.



In 2020, over **71 million** of the alerts in the system were related to **issued documents**.



The number of **searches** also decreased by 44 % compared to 2019, dropping to **3.71 billion**.



The SIRENE Bureaux processed nearly 210 000 hits on foreign alerts during the year.



The total number of **alerts on persons** was **964 720** – a 2 % decrease compared to 2019.

²⁰ The TESTA network service, operated by the European Commission, provides the backbone network for the connection between the central and the national systems.

The usage of SIS has grown steadily over the past few years. However, 2020 saw a sharp drop in the number of searches and hits for a considerable part of the year, due to the COVID-19-related travel restrictions imposed by most Member States, which led to a reduction in the number of border checks. While in 2019, the average number of daily searches reached 18 million, in 2020, the number dropped to 10 million. The pandemic-related restrictions also affected the average number of hits per day processed by the SIRENE (Supplementary Information Request at the National Entries) Bureaux.²¹ The total number of hits on foreign alerts (i.e. alerts issued by a Member State other than the one undertaking the search) also dropped: 209 178 hits on foreign alerts in total, a reduction of 27 % compared to 2019.

Figure 3: Member State searches performed in SIS II by year, 2016–2020

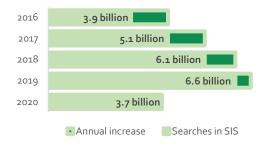


Figure 5: Average number of searches and hits per day, 2016–2020

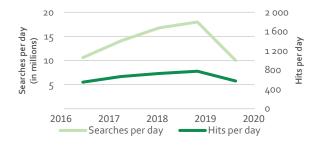
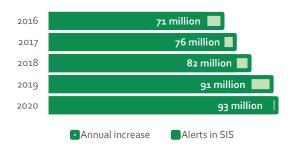


Figure 4: Alerts stored in SIS II by year, 2016–2020



The number of alerts increased by 3 %, which was slower than the annual increases in previous years, (between 8 % and 12 %). At the end of 2020, there were 93.4 million alerts stored in the system.

In March, the SIS II 2019 annual statistics report was adopted and published, together with a factsheet. ²² In June, the updated list of competent authorities, which are authorised to directly search the data contained in SIS II, and the list of national systems (N.SIS II) Offices and the national SIRENE Bureaux were published in the *Official Journal of the European Union*. ²³

System evolution

In 2020, the main efforts of eu-LISA concerning SIS evolution were focused on the timely implementation of the new SIS regulations, alongside the continuation of the AFIS phase 2 development. To answer the needs of the Member States and the continuous increase in the number of alerts, the Agency increased the system's capacity to 130 million alerts. The Agency also prepared the deployment of a new search engine which, once deployed in 2021, will increase the speed of searches by ten times and reduce significantly the system's unavailability during switches between the central unit and the backup central unit. In addition, the Agency also supported the integration of Ireland and Cyprus into the system.

SIS Recast

The SIS recast project can be considered one of eu-LISA's major contribution to the EU Security Union Strategy. The SIS recast regulations, adopted in November 2018, widened the scope of the system's applications and functionalities, a major evolution for SIS. Continuing the work started in 2019, the Agency progressed significantly on the implementation

²¹ Each EU country operating SIS has set up a national SIRENE Bureau that is responsible for any supplementary information exchange and coordination of activities connected to SIS alerts. More on: https://ec.europa.eu/home-affairs/what-we-do/policies/borders-and-visas/schengen-information-system/sirene-cooperation_en

https://www.eulisa.europa.eu/Publications/Reports/SIS %20II %20- %202019 %20- %20Statistics.pdf

 $^{{\}color{blue} \textbf{23}} \quad \underline{\textbf{https://www.eulisa.europa.eu/Publications/Reports/SIS%20II\%20-\%20List\%20of\%20competent\%20authorities\%202020.pdf} \\$

of the project, and in January 2020, a new release was successfully deployed. The new release contained the necessary features that enabled Europol, Eurojust and Frontex to query all relevant types of alerts in SIS, as well as conduct fingerprint and extended searches. In addition, the release contained a new AFIS functionality: the possibility to search using slap fingerprints that are collected by scanning four fingers of one hand simultaneously. As an alternative method of collecting flat fingerprints, slap fingerprints help prevent mistakes or fraud.

Furthermore, the Agency and the Member States worked intensively on a new version of the technical documentation (ICD/DTS) that was adopted in May. As a result, the first intermediate release (IR1) was developed, which included changes related to alerts on persons. The IR1 went through different test phases until the end of the year, with the participation of eight Member States. The Agency also began development of the second intermediate release (IR 2) which includes changes related to alerts on objects. During the second half of the year, eu-LISA prepared a second update of the technical documentation, which included all changes to the biometric elements of the system, stemming from both AFIS and SIS recast regulations. The documentation was delivered to the Member States for review by mid-December, which was an important milestone for the project.

As part of the SIS Recast project, eu-LISA was responsible for the update of the Data Exchange Between SIRENE Bureaux (DEBS) documentation, a set of technical specifications defining how SIRENE Bureaux exchange information. The project kicked off on 24 March. The Agency worked through the year together with the Commission and the Member States, and delivered the reviewed DEBS documentation in December. The updated DEBS documentation will ensure that the SIRENE Bureaux can exchange information on the new functionalities stemming from SIS Recast.

AFIS phase 2

The AFIS phase 2 project was launched in 2019 and covers the extension of the SIS biometric system. The project combines performance improvements to the existing AFIS with the new biometric functionalities identified in the SIS Recast, such as the extension of search capabilities with dactyloscopic data on palm prints and latent²⁴ prints. In 2020, the design was concluded and the user requirements were finalised with the Member States. The development started in February and continued through the year. The resulting release, planned for deployment in 2021, underwent acceptance testing at the end of the year. The new AFIS hardware was delivered and a technical study was conducted ahead of its installation at the technical site in Strasbourg. In addition, the Agency started work on the preparation of the migration from AFIS phase 1 to phase 2. Once available, the new features will support the Member States in confirming the identity of persons at border crossing points and in the framework of police investigations.

Increase of queries capacity

The increase of queries capacity was another major evolution of the SIS central system, addressing the increasing usage of the system and the continuous growth in the number of alerts. The project's objective is to increase the capacity of the system to 130 million alerts. The first release was deployed in June; however, the second release, including the implementation of the new search engine, was affected by the COVID-19 pandemic and hardware supply shortages. Therefore, although the development phase was finalised, the implementation was postponed to 2021.

Integration of new users

The integration of Ireland into SIS progressed with the successful rehearsal of the entry into operation in January 2020The entry into operation will be effective on 15 March 2021.

The integration of Cyprus also progressed with testing, with the compliance test campaign started in April. Performance and reliability testing followed during the summer and the final test report was approved at the end of the year.

²⁴ Latent prints are impressions of fingers or palms on a surface.



1.2.2 VIS/BMS

The Visa Information System (VIS) entered into operation in October 2011, and has been operational worldwide since February 2016. The VIS is at the core of the Schengen area, connecting Member States' consulates in non-EU countries and all external border-crossing points. It supports Member States' consular authorities in the management of applications and delivery of short-stay visas to visit or to transit through the Schengen Area. Using its biometric matching system (BMS), the subsystem responsible for biometric operations, the VIS allows Member States' border authorities to verify the identity of third-country nationals who travel to the EU. Furthermore, the VIS supports the fight against fraud and facilitates checks within the territory of the Member States, assisting in the identification of any person who may not or may no longer fulfil the conditions for entry, stay or residence on the territory of the Member States. In addition, the VIS supports the asylum applications process and contributes to the prevention of threats to internal security.

Operations

During 2020, the overall performance of the VIS central system was within the agreed targets outlined in the service-level agreement (SLA). The availability of the VIS central system was 99.93 % (KPI 8) and the response time performance indicator was 99.98 % (KPI 9). During the period, no major or critical issues affected the operation of VIS/BMS. Central system unavailabilities only occurred in the context of release deployments. In November, an incident caused the unavailability of one of the test environments during a weekend, which affected operations in the Member States, but the issue was promptly identified and solved.

The release plan for 2020 was affected by access restrictions to the Agency's technical facilities that were imposed on the staff in mid-March. The first release of the year was completed on 27 August and it included the capacity increase of the BMS, which constituted a major evolution of the system. The second release was launched in September and completed in October, including elements for the integration of new users, as well as improvements of the system's overall efficiency. Although the third release, containing non-critical upgrades for servers and networks components, was also finalised, its deployment was postponed to 2021, due to the pandemic's impact on resources.

In August 2020, the Report on the technical functioning of the VIS, ²⁵ covering the period from October 2017 until 30 September 2019, was published. The report provided information on the technical functioning of the VIS, including security aspects, and the use made by Member States of Article 4(2) of Council Decision 2008/633/JHA.²⁶

System usage



73 million visa applications stored in the VIS database by Member States.



66 million fingerprints stored in the VIS database by Member States.

Owing to the pandemic-related travel restrictions and subsequent decrease of border checks, the amount of stored visa applications and fingerprints in VIS decreased for the first time.

Consequently, the amount of visa applications processed during the year dropped to 3 million, compared to 17 million in 2019. The overall usage of VIS was at about 15 % of the expected amount, annual operations decreased by 75 %

https://www.eulisa.europa.eu/Publications/Reports/2019%20VIS%20Report.pdf

²⁶ Pursuant to the VIS Decision, Member States' designated authorities and Europol have been able to access the VIS for the purpose of prevention, detection and investigation of terrorist offences and other serious criminal offences since 1 September 2013.

compared to 2019. The year's peak of activity for border operations and visa issues was in January, before the introduction of the first COVID-19 restrictions.

Figure 6: Visa applications stored 2016-2020

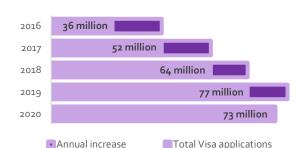
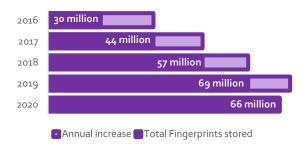


Figure 7: Fingerprints stored 2016-2020



In 2020, alphanumeric and biometric searches and biometric authentications also decreased. During the period, the system performed well, with operations for alphanumeric searches performed in less than 1 second (0.76 seconds on average) and biometric authentications in less than 2 seconds (1.44 seconds on average).

System evolution

In 2020, the Agency successfully increased the capacity of the BMS, worked on the integration of Europol and on granting passive access for Bulgaria and Romania. The VIS is now technically ready to be used by new users. The evolutions of the VIS/BMS have been strongly influenced by the need to establish an interconnection between VIS and EES. In addition, eu-LISA also contributed to the preparation of the new VIS regulation.

Capacity increase

Following the progress made in 2019, the Agency successfully increased the capacity of the BMS from 60 million to 85 million records to ensure that the system has sufficient capacity to meet the growing needs of the Member States, stemming from the implementation of the EU's common visa policy. The BMS capacity increase started in 2019, following a similar evolution for the VIS. The project was completed in July with a release deployment that was delayed by three-month delay due to the COVID-19 pandemic. This also resolved the issues caused by the virtualisation of the BMS in 2019. Overall, the Agency estimates that the increased capacity of the VIS and BMS should cover the long-term needs of the Member States.

Test environment

Responding to the needs of the Member States, the Management Board decided to introduce an update of the VIS/BMS new test environment to increase its availability, reliability and agility for operational support. This should lead to major improvements for incident resolution and service recovery time, which will be beneficial for all Member States.

Integration of new users

The Agency continued to prepare the VIS to allow the provision of passive access to Bulgaria and Romania. Passive access will allow the two Member States to consult the VIS in a read-only mode, without the right to enter, amend or delete data. The passive access to VIS is also a precondition for the two Member States to operate the EES at their borders. In 2020, the Agency worked closely with Bulgaria and Romania and successfully completed the compliance-testing phase. Owing to the COVID-19 pandemic, and following a decision of the Commission, Bulgaria and Romania will start querying the VIS in April 2021.

In Q1 2020, the Agency completed the connection of Europol to VIS. The service will be available in 2021, once Europol's access is completed on the national side.

Migration of VIS BMS to sBMS

In mid-2020, taking into consideration the need for the EES-VIS interconnection, the Agency started the project for the migration of VIS biometric data to sBMS, ahead of the original plan. During 2020, eu-LISA completed the analysis and design phase, and also implemented the first building blocks required for the migration process. The project is expected to be completed by mid-2022.



1.2.3 Eurodac

Eurodac, the European Asylum Dactyloscopy (fingerprints) database, has been operational since 2003. It supports the application of the Dublin Regulation as one of the instruments used to implement the Common European Asylum System (CEAS). As it enables the comparison of fingerprints, Eurodac assists in determining the country responsible for the assessment of asylum applications presented in one of the Member States. Since July 2015, Eurodac is also used by the Member States' law enforcement authorities and Europol. Since June 2013, eu-LISA is in charge of the operational management of Eurodac's central system.

Operations

In 2020, the performance of the Eurodac system was within the agreed SLA targets. The availability of the Eurodac central system was 99.87 % (KPI 3²⁷) and the response time performance indicator was 99.95 % (KPI 4). In June, Eurodac faced an unplanned downtime because of an incident caused by the mail relay, the component transferring emails. As a result, email processing was blocked for a few hours. The issue was fixed, and no transactions were lost during the incident. The Agency worked on a definitive solution to this problem, to be deployed in the first 2021 release. In September, following a release deployment, a malfunction of the messages broadcast component affected exchange of messages for the Member States for 27 hours. During this period, the system still registered all transactions properly and responded to searches coming from the Member States. Once the issue was fixed, the central system was able to send all queued messages to the Member States. The Agency also solved an issue with the test environment's biometric server, which improved its availability to the Member States.

In February, the main Eurodac servers were updated with the most recent security patches and the processes of switching between the CU and the BCU were optimised, resulting in decreased demand for human resources. This update will improve the overall system availability for the Member States. The release generated 3 hours of unavailability of the central system outside of office hours, when the traffic was very low, to minimise the impact on the operations of the Member States. Additional corrective maintenance elements for the biometric component were deployed in September, with some delay, owing to the pandemic.

The pandemic had a significant impact on Eurodac's maintenance, as the contractors were allowed to enter the Agency site only to handle critical incidents. As a result, less critical incidents and service requests were handled with some delays. During the second half of the year, as the situation slowly improved, the Agency teams worked hard to process the backlog of maintenance tasks, which was fully resolved by the end of the year.

In 2020, the Agency carried out a full update of the Eurodac security documentation, comprising a 'Security risk assessment', a 'Security plan', a 'Business continuity and disaster recovery plan' and a 'Privacy impact assessment'. The new documentation was adopted at the end of the year. These new documents addressed a recommendation made by

²⁷ Key performance indicators are summarised in Error! Reference source not found...

the European Data Protection Supervisor (EDPS) regarding Eurodac and will ensure that the Agency will react efficiently in case of security issues.

In the second half of 2020, the Agency made intensive preparations for the disconnection of the UK from Eurodac. The objective was to be able to complete this change seamlessly for the Brexit, on 1 January 2021. The preparations included tests and several rehearsals. The disconnection was carried out as planned during the night of 31 December, and was followed by the deletion of all UK data and records. During that operation, Eurodac was unavailable for 7.5 hours.

System usage



644 926 sets of fingerprints transmitted: a 30% decrease from 2019.



The number of fingerprints stored in Eurodac increased by 3 % in 2020 compared to 2019.

The overall usage of Eurodac was affected by the decrease in border checks and by travel restrictions imposed all over Europe as a result of the COVID-19 pandemic. The usage of the system decreased by around 30 % compared to 2019, although the number of fingerprints stored in Eurodac increased by 3 %. Category 1 (asylum application) transactions decreased by 32 %, category 2 (irregular crossing by a third-country national of an external border) transactions by 26 %, and category 3 (third-country national found illegally in a Member State) transactions by 24 %.

The Member States successfully transmitted 644 926 sets of fingerprints to the Eurodac central system during 2020, with asylum applications contributing 62 % of the amount. The second-largest category (25 %) were third-country nationals irregularly crossing the external border of the EU.

Figure 8: Traffic in the Eurodac Central System per categories by year, 2014–2020

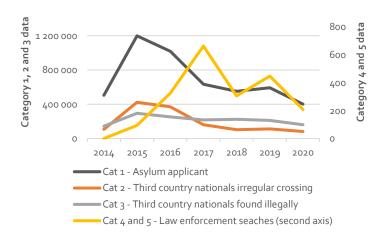
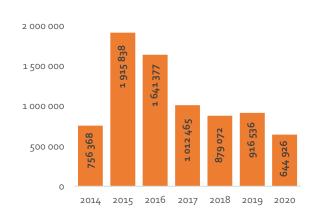


Figure 9: Total traffic in the Eurodac Central System by year, 2014–2020



The Eurodac annual statistics 2019 were published in March, together with a factsheet, ²⁸ and the annual report on the technical functioning of Eurodac central system was published in July. ²⁹ The updated list of designated national authorities for asylum, which have access to data recorded in the central system of Eurodac, was published in April on the Agency website.

Dublin electronic communications network (DubliNet) operations

DubliNet is a secure electronic network for the exchange of data between the national authorities dealing with asylum applications. In 2020, the maintenance of DubliNet was in conformity with the operational SLA and no service interruptions were observed. In January, the Agency conducted the regular renewal of the digital certificates used by

²⁸ https://www.eulisa.europa.eu/Publications/Reports/Eurodac %20- %202019 %20Statistics.pdf

²⁹ https://www.eulisa.europa.eu/Publications/Reports/Eurodac %20- %202019 %20Annual %20Report.pdf

the Member States to use the secure network. The renewal campaign was successfully completed in four days, and eu-LISA received positive feedback on the process improvement from the Member States.

Additionally, the Agency made the preparations for the disconnection of the UK from the DubliNet during the second half of 2020. On 1 January 2021, access to the network was blocked for all UK DubliNet-related domains and all UK certificates were revoked.

As customary, eu-LISA continued to participate in several meetings dedicated to the asylum domain under the Dublin regulation and contributed to the sessions focused specifically on the DubliNet. One of them was the Thematic Expert Meeting on DubliNet and Dublin Technical Systems held in November, where eu-LISA presented the DubliNet state of play, provided the report from the certificate renewal campaign, and gave a training session to the DubliNet community. Under leadership of EASO and in collaboration with a few experts from the Member States, the 'Recommendations on the operational and technical use of DubliNet' were published.

System evolution

In 2020, specific technical evolutions of Eurodac were planned and implemented. As the recast of the Eurodac Regulation was not adopted, the functional evolutions of the system remained on hold.

Eurodac and Dublin recast

In September 2020, the Commission published an amended legislative proposal to the 2016 Recast proposal, as part of the New Pact on Asylum and Migration. In the new proposal for a Regulation on asylum and migration management, the Dublin Automated System has been withdrawn. For a more detailed overview regarding the Eurodac and Dublin recast, please refer to section 2.2.2 on page 62.

Eurodac redesign

The efficient management of Eurodac evolution has been significantly hampered by the lengthy process related to the adoption of a new recast of the Eurodac Regulation. The architecture and the components of the systems started to reach the end of their lifecycle, which created significant challenges in terms of maintenance and support, in particular for the backup, database and AFIS components. All these challenges prompted the Agency to start redesigning Eurodac, ahead of the adoption of the new regulation. The preparations were carried out in the second half of 2020, for a planned start at the beginning of 2021. In the new design, Eurodac will be split into two parts: a core system, and an AFIS system, similar to the SIS and VIS. The new architecture of the system will be flexible, to facilitate the implementation and adaptation of the changes stemming from the new regulations, and to facilitate the further interconnection with the interoperability components, should it be decided by the legislator. The project will allow the Agency to guarantee the mid-term availability of the system for the Member States, while ensuring that new functionalities, once adopted, will be developed and implemented in due time.

1.2.4 Systems operation support

To ensure the continuous availability of the systems to their users, eu-LISA operates support services that are available 24/7. Despite the impact of the pandemic, the services provided to the Member States remained uninterrupted throughout the year. This was a key achievement for the Agency, largely due to the strong commitment of the teams and the agility of the organisation. In 2020, the performance of the service desk, operating the services, was excellent and the performance indicator reached 99.9 %, exceeding the target of 75 % (KPI 20). This indicator measures the ability of the Agency to provide end-users support for help requests and incident resolution through the availability of support (i.e. time to respond) and the performance of support (i.e. time to resolve). As a result, the indicator shows the percentage of requests completed within the target set in the SLA between eu-LISA and the Member States. In 2020, the Agency handled more than 3 628 tickets: 2 332 incidents and 1 296 service requests (Table 2). More than 1 000 tickets were submitted by the Member States, and 2 550 were submitted internally, either in the course of monitoring events

or by onsite contractors. The overall amount of incidents and service requests was lower in 2020 than in 2019, due to the decreased usage of the systems by the Member States during the pandemic.

Table 2: Number of incidents and service requests handled in 2020

	SIS	VIS	Eurodac	Total
Incidents	873	1 095	364	2 332
Opened by the MS	368	106	149	623
Opened internally	505	989	215	1 709
Service requests	967	217	112	1 296
Opened by the MS	280	114	61	455
Opened internally	687	103	51	841

Table 3: Breakdown of incidents by priority and system

Priority	SIS	VIS	Eurodac	Total
Low	160	464	96	720
Moderate	485	492	175	1 152
High	221	135	87	443
Critical	7	4	6	17
Total	873	1095	364	2 332

In 2020, eu-LISA made significant progress on problem management, with a positive impact on the system's availability. Problem management helps to identify the root causes of incidents as well as to determine possible solutions. In 2020, based on an audit recommendation, the Agency reviewed in 2020 its problem management process and its procedures, established new controls, and implemented an action plan. Overall, the Agency managed to reduce its problem backlog by 70 %. These actions contributed to the high availability of the systems for the Member States, mainly by minimising the impact of individual incidents.

Change management

The Agency collaborates closely with experts from the Member States through Change Management Groups (CMGs) to understand and evaluate the proposed changes, assess their impacts on national systems and on operational workflows, and also to plan and implement changes requested by users. The systems entrusted to eu-LISA have now reached a high level of stability. Consequently, the amount of proposals for changes submitted by the Member States has decreased in the past years, e.g. in 2020, only ten new change requests were submitted. However, the complexity of the submitted change requests has increased, as they are often related to the ongoing or future systems evolutions, i.e. system recasts and interoperability. The Change Management Group is in charge of identifying and agreeing on how to assess and plan for the implementation of requested and agreed upon changes.

All changes have to be approved by the respective advisory groups and the relevant committees. Generally, all changes are implemented within a planned release, or in case of more complex changes, within the forthcoming recasts of each application.

For the SIS, three new change requests were undertaken to enhance and update existing functionalities.

For the ${\it VIS}$, three new change requests were completed.

For Eurodac, four new change requests were undertaken in 2020, pertaining to minor adjustments.

Testing, release and deployment management

The deployment of releases allows the Agency to update the systems with the latest patches and functionalities needed, as part of the planned evolutions, while minimising the impact on the performance and availability of the systems. The release plans, approved at the beginning of 2020, were reviewed and significantly updated during the first half of the year, due to the impact of the pandemic, with the SIS and Eurodac release plans the most impacted. Nevertheless, the Agency managed to deploy several releases during 2020.

In addition, the Agency supported the Member States in a variety of testing activities, ensuring the proper functioning of all systems. A new working group called the Testing Expert Group was set up to support testing activities across all systems, by bringing together technical specialists from the Member States and by sharing valuable information.

Furthermore, the Agency progressed on its new approach to 'Application Lifecycle Management' (ALM), aiming at delivering IT components and applications faster and in a more agile manner. The reuse of common components, as well as the interconnectivity and interoperability of new systems introduced additional complexity over the application lifecycles. The ALM approach provides a comprehensive governance and enables the automation of the lifecycle management process. In 2020, eu-LISA carried out a study to identify the existing capabilities and gaps, and to define a roadmap for the implementation of the application lifecycle governance.

1.3 Infrastructure and networks (strategic goal 1)

1.3.1 Networks

Operational management of the communication infrastructure

In 2020, the SIS and VIS communication infrastructure using the TESTA-ng services framework contract³⁰ performed in accordance with the requirements established in the legal instruments of the respective systems. The SIS communication infrastructure reached an availability of 99.9997 %, and the VIS communication infrastructure 99.9865 %. The SIS II second encryption layer ensured the security of the SIS II and SireneMail business data, reaching an availability of 100 %.

Additionally, the Agency contributed to the technical evaluation of the offers for the new TESTA framework contract, under the leadership of the Commission. By the end of 2020, the evaluation was 80 % completed, with a three-month delay.

Evolution of the communication infrastructure

The communication infrastructures of the SIS and VIS were upgraded during the reporting period, to ensure that the bandwidth of the respective networks could accommodate the planned evolutions of the systems.

The Agency continued to upgrade the SIS communication infrastructure, to ensure that the Member States could efficiently use the new functionalities of the system, stemming from the SIS recast and AFIS projects. The SIS II sites have been gradually upgraded from 10 Mbps to 50 Mbps, with an option to upgrade them to 100 Mbps in the second phase. Throughout the year, and despite the COVID-19 restrictions, the Agency worked with the Member States on the replacements of the turnkey access points (TAPs), the components linking the national systems to the SIS network.

What is more, the SIS second encryption layer is being replaced to accommodate the higher bandwidth needs and at the same time ensure replacement of the hardware to avoid issues with vendor support. By the end of 2020, the encryption layer in the CU and the BCU were successfully replaced, together with 50 % of the sites in the Member States.

³⁰ The TESTA network service, operated by the European Commission, provides a European backbone network for data exchange between a wide variety of public administrations.

In 2020, the Agency upgraded the VIS communication infrastructure to provide the increased bandwidth needed for the operation of the EES and ETIAS. For a more detailed overview, please refer to the EES programme section on page 25.

1.3.2 Data centres

The Agency's data centres are the infrastructure that physically hosts all large-scale IT systems, as well as all other operational and non-operational systems needed for tasks such as developments or tests. To improve the efficiency of the management of such critical assets, a dedicated sector was created as part of the eu-LISA 2.0 organisational transformation.

In 2020, the Agency took all measures necessary to ensure that the data centres located at both technical sites remained continuously operational. This successful achievement contributed to the high level of performance of the systems, in particular their availability.

In addition, a key objective for the Agency was to keep improving the performance of all data centre components and configurations, in order to optimise the costs and risks related to their operation. This is particularly important in the context of systems development and evolution, both ongoing and planned, as they require significant changes to the infrastructure of data centres. In addition, the pandemic demonstrated that physical access to data centres can become a major bottleneck for operational tasks, hence the need for the Agency to invest in the deployment of remote services.

In 2020, the Agency proceeded with the implementation of new data centre services, with the objective of managing its data centres 'as-a-service' across the organisation. These services will ensure the integration of IT with infrastructure management, helping to centralise monitoring, operational management and intelligent capacity planning of critical systems of all data centres. To support this approach, the Agency started the implementation of a data centre infrastructure management (DCIM) tool. The 'data-centre-as-a-service' approach will also facilitate the remote access for the management of the data centres, hence reducing the dependence on physical access.

In addition, eu-LISA carried out a study to identify the capacity needs of the Agency's data centres for the coming years. It was an important contribution to the project on the extension of the eu-LISA technical site in Strasbourg, in particular to the decision to procure a temporary modular data centre (for more, see page 57).

1.3.3 Common shared infrastructure

The Agency is gradually implementing a common shared infrastructure (CSI) programme for all large-scale IT systems, aiming to create a scalable, agile and standardised infrastructure, ready to serve as the technical foundation for systems interoperability, and generating efficiency gains in terms of administration and maintenance of all systems, once they are all hosted on the CSI.

In 2020, eu-LISA completed the implementation of the base environment for the CSI. It was deployed in March 2020, hosting a number of operational systems or their elements. For example, both VIS storage and Eurodac backup hardware were migrated into the CSI during 2020. The migration of other system components started during in 2020, and will be completed in 2021.

In 2020, eu-LISA concluded a contract for the implementation of the central backup system, which will replace the outdated backup system of the current large-scale systems, and will later also be used by the new systems.

1.4 Security and business continuity (strategic goal 1)

In 2020, eu-LISA's security function continued to maintain and upgrade the security measures concerning physical, personnel, information and systems security and resilience, a critical element in order to ensure the fulfilment of the Agency's mandate.

In April 2020, the MB adopted the 'Security Rules for the Protection of Communication and Information Systems in eu-LISA'³¹ that supports the implementation of the Information Security Management System. To further enhance information security aspects, the Agency also adopted in June the 'Information Assessment and Classification Policy' that supports the 'Security Rules on the Protection of Sensitive Non-Classified Information'³² and defines the rules for assessing the security needs of information within the Agency, ensuring that information is properly categorised and handled, while reducing the risks of unauthorised access to information. In addition, eu-LISA focused on the development and adoption of a number of implementing rules on the handling of EU Classified Information (EUCI), as required by the Security Rules on the Protection of EUCI³³.

In addition, eu-LISA continued to strengthen and upgrade its security framework and procedures, also for the systems under its management and for the relevant communication networks. The Agency also started the updating process of the security plans and business continuity plans for the SIS, Eurodac, sBMS, for the communications infrastructure and for the CSI.

The security function continued the implementation of a large number of security recommendations from the last EDPS report on the SIS and VIS inspection. The Agency also collaborated with the Internal Audit Services (IAS) of the Commission, who ran an IT Security audit on the large-scale IT systems under eu-LISA's purview.

Throughout the year, the Agency conducted continuous monitoring and management of residual security risks to provide assurance that the appropriate security controls for the IT systems under eu-LISA management are effective, properly implemented and managed. This included, for example, an ongoing self-assessment review of the status of eu-LISA's information security management system (ISMS), as well as vulnerability assessment and penetration testing of the large-scale systems and the corporate infrastructure carried out in Q4 2020.

Following the Eurodac security and business continuity exercise that took place in 2019, the MB adopted the exercise report with 39 recommendations aimed to increase the security and resilience of the system.

In 2020, security activities focused also on the preparation and execution of a multi-system exercise, involving the SIS II, VIS and Eurodac systems. The exercise included eu-LISA and national authorities from nine Member States as participants, as well as ten Member States and the Commission as observers. The exercise took place on 4 November 2020 and included a mix of cybersecurity, IT security and business continuity events within a set of pre-defined scenarios.

In addition to the multi-system exercise, the Agency conducted also a corporate IT exercise to further assess its horizontal security readiness, with the aim of testing the resilience of its corporate information and communication technology (ICT) infrastructure in case of incidents.

The security function continuously supported the development of the new systems, including architecture development and the preparation of technical tender specifications. The MB adopted the ETIAS Recommendations for the Security and Business Continuity Plans, and the contribution to both the development of the interoperability and ETIAS implementing acts. What is more, the Agency actively involved security experts from the Member States and the Commission, via the established Security Officers Network aimed at exchanging best practices in all security and business continuity domains.

³¹ MB Decision 2019-148 of 9 April 2020 on the Security Rules for the Protection of Communication and Information Systems in eu-LISA.

MB Decision 2019-208 of 30 August 2019 on the Protection of Sensitive Non-Classified Information in eu-LISA.

³³ MB Decision 2019-273 of 20 November 2019 on the Security Rules for protecting EU Classified Information in eu-LISA.

In addition, eu-LISA has made significant efforts for the development and update of the security architecture of the systems and infrastructure under its purview, in alignment with the upcoming interoperability activities. Specific focus was given to security analysis on the threats and related mitigation measures in view of the implementation of border protection services of the new large-scale IT systems under development.

In the context of protective and physical security, despite the reduced staff presence at the Agency sites due to COVID-19 safety measures, several improvements were made to enhance on-sites security, mostly aimed at maintaining healthy workplaces for critical staff operating the systems on a 24/7 basis, as well as other horizontal supporting functions. In parallel, security requirements were drafted for the second extension of the operational site and the temporary building in Strasbourg, and for the future new location of the Liaison Office in Brussels.

Close cooperation with EU Agencies and EU institutions allowed the exchange of knowledge and best practices on business continuity matters, especially in the context of the COVID-19 pandemic. The network of Business Continuity Officers of EU Agencies constantly exchanged information, risk assessments and good practices on managing the safety of staff and the resilience of the different organisations in support of their mandate.

1.5 Stakeholder relationship (strategic goals 1 and 3)

1.5.1 Partnerships with the Member States and EU institutions

In 2020, eu-LISA continued its excellent partnership with Member States and EU institutions. The Agency was actively engaged in the technical and strategical discussions held within the relevant EU Council Working Parties and Committees, and in the high-level discussions of the Justice and Home Affairs Council meetings. What is more, the Agency provided constant support for the newly established Council Working Party on Information Exchange (IXIM). Additionally, eu-LISA contributed to the comprehensive discussion on the need for more standardisation in technical and operational areas, and initiated the development of the roadmap for standardisation (for more, see page 29). On 4 March, the Agency also participated for the first time in a meeting of the Horizontal Working Party on Cyber Issues, and presented an overview of its activities related to cybersecurity.

At the 2020 meetings of the High-Level Forum on Implementation of the New Architecture for EU Information Systems for Borders, Migration and Security, that took place on 27 May and 28 October, eu-LISA shared information and contributed to the discussions on the planning and implementation of the EES, ETIAS and the interoperability architecture. Moreover, eu-LISA's Executive Director was in attendance at several events of high importance, in particular with the Commission's Vice-President Margaritis Schinas (on 15 January), Commissioner for Home Affairs Ylva Johansson (on 23 January) and Commissioner for Justice Didier Reynders on (5 February).

In addition, eu-LISA provided expert support to the European Parliament (EP) on technical aspects directly linked to ongoing negotiations on different legislative proposals. The Agency also closely followed the activities of various EP Committees (e.g. LIBE, BUDG, CONT, AIDA, and the Schengen Scrutiny Special Committee). Most importantly, on 11 June, the Executive Director was invited by the LIBE Committee to present an overview on the impact of the COVID-19 pandemic on eu-LISA's activities. Furthermore, the Agency was also invited to provide an update on the state of play of implementation of the new systems and interoperability on several different occasions.

In the context of the implementation of the SIS recast, EES, ETIAS, ECRIS-TCN and Interoperability, the Agency provided constant support to the European Commission and the Member States in the preparation of the implementing and delegated acts, supporting complex technical discussions at operational and business level, as well as actively participating in the meetings of the relevant Committees and Expert Subgroups. eu-LISA also provided the Parliament and the Council with regular reports on the status of the development of future systems as provided by the various legal acts. In particular, the Agency followed closely and when requested by the co-legislators, supported the discussions on the proposals for the revision of the VIS Regulation, the VIS 'Consequential Amendments' and the ETIAS 'Consequential Amendments'.

Considering the expansion of eu-LISA's mandate towards the Justice domain, the Agency actively participated in the discussions held on digital criminal justice, and contributed, when requested, to the preparation of the e-CODEX legislative proposal.



Figure 10: eu-LISA Annual Conference visual

On 26 November 2020, with the support of the German Presidency of the Council of the EU, eu-LISA organised its flagship event for fostering the stakeholder collaboration – the 7th Annual Conference titled 'Interoperability - Building Digital Resilience for the EU Justice and Home Affairs Community'. The conference focused on the digital transformation of the EU's JHA domain and the long-term vision for this process. Held in a digital format, the event reached an even broader audience than usually, thus facilitating the same level of interaction with participants, with everyone given a change to ask questions, comment, participate in polls and network. The conference attracted more than 500 registered participants, including high-level representatives from EU Institutions and Agencies, as well as experts from Member States and industry representatives.





Figure 11: Annual Conference panel screenshots

Schengen evaluation

The Schengen evaluation mechanism is an important instrument to ensure that the countries participating in the EU's border-free area are correctly implementing and applying the relevant rules and regulations. Owing to COVID-19-related travel restrictions, the Commission was forced to reschedule the majority of the evaluations planned for 2020, both for the SIS/SIRENE stream and for the common visa policy (including VIS). eu-LISA participated as an observer to the SIS/SIRENE evaluation of Germany held in February, and to the SIS/SIRENE evaluation of Austria in October. In addition, desk support was provided for the German common visa policy (including VIS) evaluation held at the end of March, and for the SIS/SIRENE evaluation of Liechtenstein in November.

1.5.2 Partnerships with other EU Agencies

In 2020, eu-LISA continued its cooperation with relevant EU Agencies, both bilaterally and through several networks, in particular the Justice and Home Affairs Agencies Network (JHAAN) and the European Union Agencies Network (EUAN).

In 2020, eu-LISA drafted and negotiated a bilateral cooperation plan with several JHA Agencies. On 16 September 2020, eu-LISA concluded a cooperation plan for 2020–2022 with the European Asylum Support Office (EASO). The cooperation plan implements the working arrangement established between eu-LISA and EASO from 2014, and specifies their cooperation in various areas, such as border, migration and asylum management, as well as security and business continuity or data protection. Together with EASO, eu-LISA has closely coordinated matters related to the secure network for asylum authorities, DubliNet (e.g. eu-LISA participated in the EASO Network of Dublin Units and supported the drafting of the DubliNet Recommendations on the Operational and Technical Use of DubliNet).

In addition, eu-LISA and the European Union Agency for Cybersecurity (ENISA) prepared a cooperation plan for the period 2021–2023.³⁴ As in previous years, ENISA supported eu-LISA in the context of the multi-system security exercise with the Member States. The 2020 exercise took place in November and focused on the topics of exercising the security and resilience measures for the SIS, VIS and Eurodac.

Furthermore, eu-LISA kept in close contact with other partner agencies, in the context of system development. eu-LISA and the **European Border and Coast Guard Agency** (Frontex) collaborated on the SIS, EES, ETIAS and Interoperability. In this respect, support and technical expertise were provided both during preparation and in the course of the meetings for the organisation and establishment of the ETIAS Central Unit and the ETIAS National Units, as well as for the definition of the requirements for the devices to be used at the borders for the EES-related purposes. Moreover, eu-LISA contributed to the Frontex feasibility study on Western Balkans, focusing on preparatory activities for Montenegro and North Macedonia to use the large-scale IT systems once they become EU Member States.

eu-LISA and the European Union Agency for Law Enforcement Cooperation (Europol) cooperated in the areas of the SIS, SIRENE, VIS, EES, ETIAS and interoperability. Europol began using the VIS in 2020, having established the necessary connection at the end of 2019, and carried out preparations to set up its SIRENE office scheduled to start operating in 2021.

eu-LISA and the European Union Agency for Criminal Justice Cooperation (Eurojust) continued cooperation in the fields of the SIS and Eurodac, and carried out a horizontal mapping of cooperation areas with a view to a potential cooperation plan to implement the working arrangements in place since 2017.

eu-LISA and European Union Agency for Law Enforcement Training (CEPOL) supported each other's training activities with a focus on e-learning and online learning tools. In addition, eu-LISA contributed to CEPOL's activities on interoperability awareness (July 2020) and to a SIRENE training (November 2020). At the same time, CEPOL supported eu-LISA's training activities by hosting eu-LISA's webinars through its dedicated tool, as eu-LISA is in the process of procuring its own e-learning tool. This eu-LISA—CEPOL cooperation is bound to continue in 2021.

On 12 November 2020, eu-LISA concluded a Cooperation Plan for 2020–2022 with the **European Union Agency for Fundamental Rights** (FRA).³⁵ The cooperation plan implements the working arrangement in place between the two agencies from 2016, and specifies the cooperation in various areas, such as information exchange, trainings for the Member States, data protection and research.

Furthermore, a wide range of coordination activities took place in the framework of the JHA Agencies Network (JHAAN) and the EU Agencies Network (EUAN), where eu-LISA actively contributed. Since March, all EU Agencies exchanged pandemic-related information on a regular basis. During that period, the JHAAN focused its activities on information exchange on the measures to support Member States in the context of COVID-19.

The cooperation plan was signed on 9 January 2021.

³⁵ European Union Fundamental Rights Agency

On 27 January 2020, eu-LISA participated in a meeting between DG HOME and JHA agencies, where the preparation of the EU-Interpol cooperation agreement was discussed. Since Interpol and eu-LISA may need to cooperate in the context of the ETIAS, an informal meeting was organised between eu-LISA and Interpol on 28 April 2020.

The cooperation between eu-LISA and the Estonian National Computer Emergency Response Team (CERT-EE) continued at operational level throughout 2020 and on 27 August, a delegation from the Estonian Information System Authority (RIA) and CERT-EE visited the Agency's headquarters in Tallinn. Of particular interest were topics with potential for future cooperation between eu-LISA and RIA, such as cybersecurity and the Estonian governmental network.

1.5.3 Capabilities

Training for Member States

The COVID-19 pandemic posed particular challenges to the implementation of the eu-LISA training portfolio in 2020. The Agency focused on continuing to deliver high-level technical training events, taking into account the changed circumstances. To that end, eu-LISA identified alternative methodologies and tools to continue the training delivery. The fact that the Agency already had several years of experience in conducting online training modules, facilitated the transfer from face-to-face teaching to eLearning. By the end of the year, the Agency's training programme included a high number of newly created e-learning products, such as online courses, e-learning modules and webinars. Additionally, the new offer also included an extended e-library. Despite the challenging circumstances, training participants expressed a high satisfaction rate of $4.5 \, l_5^{36}$, a result similar to previous years.

In 2020, only one face-to-face session was delivered. At the same time, eu-LISA designed 22 brand new online courses, including 16 e-learning modules, which were made available through the eu-LISA Learning Management System (eu-LISA LMS) covering all major topics and aspects of eu-LISA training curricula. Additionally, seven webinars were delivered to 734 participants. The e-learning offer of the Agency, available on the eu-LISA LMS, was followed and consulted in total by 1 205 registered users.

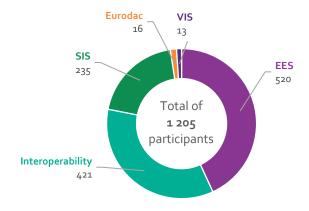


Figure 12: Breakdown of training participants per system

The 2020 Training Plan for all systems was presented to the Member States at the beginning of the year, following the comprehensive analysis of the Member States' training needs that was conducted in Q4 2019. The key points were the implementation of the EES pre-deployment, the definition of the ETIAS training portfolio, the initial development of the Interoperability offer and cooperation with stakeholders (i.e. JHA Agencies, European Commission and Member States). Despite the challenging circumstances, the Agency managed to meet those needs and provided a tailored set of eLearning products for all EES pre-deployment target groups, completed the first ETIAS training needs analysis and

³⁶ As per the 2020, eu-LISA KPI Scale for Member States Training activities: 1-5, with positive KPI: > 3.

provided the basic eLearning modules on Interoperability. In addition, the eLearning training offer for both the SIS and VIS was further developed, and preparations were made for the creation of an eLearning offer for the Eurodac community.

In November 2020, the annual meeting of the National Contact Points Network was held, concluding the 2020 annual training needs analysis.

Reporting and statistics

In 2020, eu-LISA prepared and published several statistical reports on Eurodac, SIS II and VIS, in accordance with their respective legal instruments. For each published report, the Agency prepared a factsheet illustrating the main facts and figures, to increase the awareness and visibility of the systems' utilisation. All reports and factsheets are publicly available on the Agency's website.³⁷

Eurodac - 2019 statistics

In March 2020, following approval by the Eurodac Advisory Group, the 'Eurodac – 2019 statistics' report was submitted to the EU institutions, and published on the Agency's website. This report presents statistical data on the work of the Eurodac central system, specifically the number of datasets transmitted and the number of hits, broken down by category and by Member States and associated countries.

Annual report on the activities of Eurodac's central system, including its technical functioning and security

This report was submitted to the EU institutions in June 2020 and published on the Agency's website following its adoption by the MB. The report provides an insight into the system's main developments and an overview of annual statistics, in line with previous years.

Updated list of designated authorities that have access to data recorded in Eurodac's central system

The document was adopted by the MB on 17 April and was later published on the Agency's website.

SIS II – 2019 statistics

The 'SIS II – 2019 statistics' report was adopted by the SIS Advisory Group and submitted to the EU institutions in March 2020. The report, published on the Agency's website, presents SIS II statistics on the number of records per category of alert, the number of hits per category of alert and how often SIS II was accessed.

Updated list of competent authorities for the SIS II, updated list of National SIS II Offices and national SIRENE Bureaux

Both documents were published in the Official Journal of the European Union C 188.

Fourth report on the technical functioning of VIS

The report was adopted by the MB in August 2020 and submitted to the EU institutions. The report, published on the Agency's website, encompasses the activities carried out to ensure the operation management of the Central VIS, including its security, together with statistical data collected from the Member States (for the period 1 October 2017 to 30 September 2019).

³⁷ https://eulisa.europa.eu/our-publications/reports.

1.6 Governance and compliance (strategic goals 1, 2 and 4)

1.6.1 Governance

Strategic and operational planning and reporting

In 2020, the Agency put substantial efforts into the continuous development of its internal planning and programming processes, including strategy planning, multiannual and annual programming, and reporting.

The Single Programming Document (SPD) for the 2020–2022 period, adopted by the MB on 19 November 2019, was updated twice in 2020. In accordance with the MB Decision on the delegation of powers to the eu-LISA Executive Director to make non-substantial amendments to the Annual Work Programme, on 10 February the Executive Director decided to update the Annex II of the SPD 2020–2022 in line with the final statement of revenue and expenditure adopted by the Management Board on 19 December 2019.³⁸ Following the preliminary analysis of the pandemic's impact on the Agency's planned activities, an operational planning review exercise was carried out in the second quarter of the year. As a result, two activities were cancelled, two others were rescheduled and one new activity was added. On 30 June 2020, the MB adopted an updated version of the SPD 2020–2022. Following a request from the Commission, the MB decided to also include the technical support to develop and test a prototype of the EU visa application portal, in accordance with Article 16(3) of eu-LISA's establishing regulation.

The eu-LISA Consolidated Annual Activity Report (CAAR) 2019 was adopted by the MB on 30 June 2020, published on the Agency's website and translated into 21 official languages. The Interim report on the implementation of eu-LISA's Single Programming Document 2020–2022 was adopted by the MB on 10 September.

On 3 February 2020, the MB adopted the draft eu-LISA SPD 2021–2023. It was later sent to the European Parliament, the Council and the Commission for their formal opinion. The final version of the SPD 2021–2023 was adopted by the MB on 24 November 2020.

In October, the Agency submitted the first draft of its SPD 2022–2024 to the Advisory Groups and it was submitted to the MB for review in November 2020.

Governance framework

Internal Control Framework

On 19 March 2019, the Management Board adopted the revised eu-LISA Internal Control Framework (ICF). ³⁹ The MB tasked the Executive Director with implementing the internal control principles and characteristics, as well as defining the internal control monitoring criteria. The MB also tasked the Executive Director with appointing a Manager to be in charge of risk management and internal control. Following this decision, the eu-LISA Management prepared the Internal Control Monitoring Criteria, adopted by a decision of the Executive Director and entered into force on 1 January 2020, together with the nomination of the Manager in charge of risk management and internal control. For a more detailed overview of the implementation, monitoring and annual assessment of eu-LISA's Internal Control Framework, please refer to Chapter 3 on page 87.

Governance bodies

Throughout 2020, the Agency continued to provide high-quality administrative and logistical support for the successful functioning of the Management Board, Programme Management Boards and Advisory Groups.

The Agency has a designated team – the Management Board Secretariat – fully dedicated to supporting the activities of the governance bodies. The Secretariat supports the Chairpersons in ensuring the smooth functioning of the various groups. Their main responsibilities are to ensure that meetings are efficiently organised and documented; to record,

³⁸ Decision No 2019-304

³⁹ Decision No 2019-042 of 19.03.2019, accessible at https://eulisa.europa.eu/About-Us/access-to-documents/public-register.

keep track of and follow up on all the decisions and deliberations of the groups; to check the legal compliance of the decisions and monitor the legal obligations; and to ensure ongoing communication and correspondence with the members of the groups. In 2020, the Agency ensured the business continuity of all its governance bodies. By mid-March, all meetings moved online, and despite the challenges, the eu-LISA governance bodies managed to continue their operation effectively and efficiently.

In addition, the Agency offered extensive support to the governance structures and processes related to the development of the new systems (i.e. the EES, ETIAS, Interoperability and ECRIS-TCN AGs and PMBs) and also to the governance structures and processes of the existing systems (i.e. SIS, VIS and Eurodac AGs). What is more, the Agency continued to strengthen its relationship with the SIS, VIS and Eurodac AGs, involving them more actively in planning and operational processes in order to increase transparency and to benefit from their extensive experience and knowledge. The Agency also involved the other Advisory Groups (i.e. EES-ETIAS, Interoperability and ECRIS-TCN) in the Agency's planning processes.

Enterprise programme and project management

Pursuant to its establishing regulation, eu-LISA set up an 'Enterprise programme and project management office (EPMO)' in 2017. The EPMO's mission is to integrate and monitor all projects undertaken by the Agency, and to contribute to its internal governance in order to ensure transparency and accountability. In 2020, the Agency adopted and deployed its project portfolio management (PPM) capability, which strengthened the controls on the implementation of eu-LISA's project management methodology.

Project portfolio management (PPM) capability

The Agency decided to implement a PPM capability to enhance its ability to undertake and deliver programmes and projects in a complex environment. The eu-LISA PPM capability is composed of four major elements: processes, people, governance and tools. In 2020, the Agency mainly focused on developing the capabilities related to governance and tools.

During the first quarter, the management of the Agency adopted the preliminary portfolios and programmes structure. The mandate of eu-LISA's Corporate Steering Committee's (CSC) was revised to include the governance of portfolios, programmes and projects. Programme boards were established by decision of the Executive Director in June 2020, to ensure proper steering and oversight for these programmes.

Throughout the year, major efforts were dedicated to the deployment of a PPM software called Planview Enterprise One. From September 2020, all staff and on-site contractors started reporting time on administrative, operational and project activities, with a compliance level reaching over 90 %. The software's functionalities are also used to improve the monitoring of planning activities, the oversight of the Annual Work Programme, and proactive optimisation of human resource allocations

Internal reporting and control of project performance

Projects are essential components for the Agency to achieve its objectives and implement its budget. The Agency monitored project performance on a regular basis through the weekly dissemination of project dashboards, and at project closure ('end of project report') presented by project managers.

Project compliance checks are organised annually as part of the Agency's continuous effort to monitor the compliance of activities with its established project management methodology. The 2020 annual compliance check exercise was conducted between November and December for both active and closed projects. The results were presented and discussed together with a proposed action plan in Q1 2021.

External reporting and control over development programmes

In accordance with the legal instruments, the Agency reported every six months to the European Parliament and the Council on the state of play of the development of new systems.

Ex ante evaluations

The eu-LISA Financial Rules state that all programmes and activities requiring significant expenditure are subject to an *ex ante* evaluation prior to their approval and inclusion in the Agency's Annual Work Programme. In 2020, the Agency's EPMO performed *ex ante* evaluations in accordance with the two-phased approach approved in 2019, i.e. an opportunity assessment two years before the start of the project, and a feasibility assessment one year before the project's start. In 2020, no large projects were assigned to undergo *ex ante* feasibility assessment while nine projects identified for launch in 2021 qualified for an *ex ante* opportunity assessment. A summary report on *ex ante* opportunity assessments was presented to the Management Board in November 2020.

Corporate risks and issues management

The Agency monitors risks and issues at the corporate level through an annual exercise, when all risks and issues are collected and assessed. In 2020, the Agency monitored continually the identified risks and issues, their status and the implementation of the corresponding action plans every quarter. for a more detailed overview of the major risks monitored during the period, please refer to Chapter 3.1.3 on page 89. In April 2020, the eu-LISA Management adopted an update of the Agency's Risk management policy.

IT Service Management (ITSM) framework maintenance and development

The Agency is seeking to continuously improve and extend its role as an IT service provider. To support this ambition, eu-LISA deployed in 2016 its initial IT service management (ITSM) process model, based on the Information Technology Infrastructure Library (ITIL) best practice. In 2020, the Agency continued to develop the services and processes identified in this framework, in particular to support the new product management approach, stemming from the recent organisational transformation.

In 2020, as part of its continual service improvement process, the Agency launched an update of its product and service catalogue, establishing the practical means for identifying, assessing and prioritising improvements related to services and processes. The assessment results, the priority level and the agreed outcome create a strong evidence basis for management decisions.

The knowledge management process, implemented in 2019, was another key process used in 2020 to increase the Agency's efficiency in everyday tasks. The process was used to structure, manage and make accessible internal knowledge artefacts that are made reusable.

Enterprise architecture

In 2020, the Agency continued the implementation of the Enterprise Architecture, started in 2019, following the rollout of the eu-LISA 2.0 organisation. After setting up the process and governance framework, the Agency also put in place the Architecture Review Board. It will ensure that the IT architectural, design and development initiatives are aligned with the Agency's IT goals, corporate strategy, technology strategy and overall objectives. The Architecture Review Board will also be responsible for approving technical design standards, policies and principles for the overall architecture.

1.6.2 Compliance

Internal audit

The Agency's Internal Audit Capability (IAC) provided independent and objective assurance and consulting services to the Executive Director and the MB. Additionally, 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 (for more information, see page 76). The IAC coordinated

work in this area, including the preparation of reports, missions and follow-up activities, and also raised general awareness among the Agency's management and staff of the principles, objectives and procedures of internal and external auditing.

The 2020 results of IAC's performance indicators are presented in Table 4.

Table 4: IAC 2020 performance indicators

Indicator	2020	2019	2018
Implementation rate of the annual internal audit plan Target > 80 %	80 %	89 %	91 %
Staff training hours per year vs. budget Target: baseline (IAC training budget is 64 hours annually per employee)	70 %	53 %	n/a
Audit topics delivered on time Target > 80 %	60%	42 %	70 %

Going forward, the IAC will continue improving its performance by implementing the actions (i.e. opportunities for improvement) identified during the self-assessment exercise, which is part of the IAC's Quality Assurance and Improvement Programme.

Data protection

In accordance with its establishing regulation, eu-LISA must ensure a high level of data protection, in line with the EU's data protection law, including specific provisions for each large-scale IT systems.

Throughout the year, the Agency sought to raise awareness on data protection among its staff through different initiatives, including awareness sessions for staff and newcomers, overviews in the weekly newsletters and a dedicated page on data protection on the Agency's intranet.

The Agency is mandated to ensure a high level of data protection, and must follow the principles of privacy by design and by default during the entire lifecycle of the development of new large-scale IT systems. In this regard, data protection impact assessments (DPIAs) are an essential tool to achieve those objectives. In 2020, the Agency started working on the DPIAs of the ETIAS, ECRIS-TCN and sBMS. Internal content was developed to help Agency staff in the preparation of DPIAs, including guidance on what the DPIAs are, when to perform them, who does what, and a DPIA template with step-by-step instructions.

On 15 April, the newly appointed European Data Protection Supervisor (EDPS), Wojciech Wiewiórowski, virtually visited eu-LISA's technical site in Strasbourg. The discussion focused on the state of play and the evolution of the SIS, VIS and Eurodac, and how the principles of privacy by design and by default are followed during the entire lifecycle of the development of new EU large-scale IT systems for the EU.

As part of the EDPS remote investigation on the records of EU institutions carried out at the beginning of 2020, eu-LISA was listed as fully compliant and was highlighted among the examples of best practice. The scope of the inspection was limited, and focused on the availability, the format and the coverage of the records. During this period, the Agency updated the format of the public register of processing activities, to include all relevant fields in accordance with the EDPS template.

The Agency informed the respective SIS, VIS and Eurodac Supervision Coordination Groups, consisting of representatives of national data protection authorities and the EDPS, on the status of the systems during their meetings in June and November. The updates focused on system performance after the latest developments, related incidents and data quality. The status of the EES and ETIAS developments were also discussed. Additionally, the Agency

presented an overview of the impact of Brexit, focusing on the UK's records and the disconnection strategy from the SIS.

Best practices in data protection were exchanged among EU institutions within different fora, including the Data Protection Officer (DPO) Network meetings and the JHAA DPO meetings. In October 2020, all EU institutions received a request from the EDPS to conduct a mapping exercise of international data transfers to third countries and to report any identified risks and gaps identified during the aforementioned exercise. The Agency submitted its report on potential risks and gaps to the EDPS in mid-November.

1.7 Administration and general support (strategic goal 4)

1.7.1 Organisational transformation programme: eu-LISA 2.0

In 2019, the Agency launched a transformation programme with the aim of delivering a new organisational structure, fitted to the eu-LISA expanded mandate. This programme, commonly referred to as eu-LISA 2.0, was designed to ensure that the reorganisation process is conducted openly, transparently and with the involvement of the Agency's staff.

With this organisational transformation, the Agency strived to achieve:

- · leaner and faster decision-making processes;
- more agility within specific tasks, including more room for innovations;
- more empowerment and ownership through new centralised functions and harmonised profiles;
- better positioning of the Agency, leading to sustained success for the organisation.

This transformative project presented the Agency with several new challenges, but also with a plethora of opportunities, giving eu-LISA the chance to redesign and reinvent itself. However, the main challenge was to ensure that the new organisational structure would support the Agency to provide optimal delivery of its mandate. This required a comprehensive and structured approach, and the organisational redesign was run as a major internal change programme, as a follow-up of the change management programme conducted in 2019. Previously, the Agency had already identified the stakeholders affected by the transformation programme and assessed the possible implications. This exercise led to the preparation of a comprehensive change strategy and communication plan that took into account the hopes and fears of all stakeholders. To successfully implement the new organisational redesign, eu-LISA 2.0 needed to launch this change plan (via training and communication) and roll out a new cultural aspiration that aligns with the Agency's transversal ambitions ('Together as One'). To ensure the success of this transformation, the Agency introduced a dedicated transversal team, which has compiled a holistic plan that includes both hard (i.e. structure, processes and strategy) and soft elements (i.e. people, leadership, values and competencies) which will be implemented in 2021.

1.7.2 Human resources

The year 2020 was extremely challenging for eu-LISA in terms of human resources. First, it was the first year after the completion of the Agency's structural transformation, i.e. 'eu-LISA 2.0', the preparation for the cultural transformation programme, as well as defining and launching of the Leadership Development Programme. Secondly, the COVID-19 pandemic created numerous unprecedented situations for eu-LISA staff. Due to the pandemic, the Agency swiftly rearranged its working modalities, keeping in mind not only the business continuity but also the possible impact of the changes in work environment on the well-being of the staff.

To that end, the Agency conducted a survey to better understand the impact of the COVID-19 pandemic on the workforce. The primary aim of the survey was to assess, in a holistic manner, how this situation has influenced eu-LISA teams and secondly, to make data-driven decisions for the protection of the workforce and the fulfilment of the Agency's mandate. The results of the survey demonstrated that eu-LISA performed well in difficult circumstances: more than 80 % of the workforce felt that the communication during the pandemic was clear, consistent and timely; 77 %

found that the Agency was adapting well to changes in working conditions and 84 % answered that they were able to continue their job safely during the pandemic.

During 2020, the Agency continued its recruitment efforts, although the travel restrictions imposed in March 2020 had a negative impact on the process. While interviews swiftly moved online, recruitment and onboarding of new staff faced significant delays. This was due to the extraordinary restrictions, applied particularly in France and Estonia, the travel restrictions in the Member States, the lockdown of the Commission's Medical Service (hence no possibility to complete the mandatory medical check-up, which is a pre-requisite for signing a contract of employment) and restrictions on access to the Agency sites. Half of the posts for which the recruitments reached their final phase (i.e. reserve list established or job offer accepted), were directly affected. Some impact was also observed on the postponement of starting the service due to the national pandemic restrictions, which affected the ability of the candidates to find accommodation or moving their family to a new country.

At the end of December 2020, the total Agency headcount was 274, from 223 at the beginning of the year (Table 5). In 2020, 90 posts had to be filled. Altogether, 25 selection procedures were launched and 19 selection procedures were closed. There were 27 recruitments from existing reserve lists. In total, 73 persons were recruited during the year, including changes of contracts. Overall, 21 job offers were issued and accepted by the end of 2020.

Staff population	Filled as of 31.12.2019	Authorised under EU budget for year 2020	Actually filled as of 31.12.2020	Occupation rate for 2020 - status on 31.12.2020
Temporary agent (TA)	154	202	181	89.60 %
Contract agent (CA)	61	111	83	74.77 %
Seconded national expert (SNE)	8	11	10	90.91 %
TOTAL	223	324	274	84.57 %

Table 5: Actual and authorised headcount as of 31 December 2020

In addition, the Agency advanced the development and implementation of IT tools in the field of HR. The Sysper system for leave management and time recording was deployed in April and the Agency staff began using it in May. In September, the 'individual rights' module of Sysper was opened to the staff for the declaration of their family situation. A solution for the digitalisation of external training requests was deployed in March, and in December, the dissemination of electronic payslips was initiated. The Agency also acquired an automated video interviewing platform, to streamline and speed up the recruitment processes.

1.7.3 Finance and procurement

The Agency continued the development and strengthening of its internal financial processes and procedures to ensure the transparent and effective management of its available financial resources.

Numerous efforts were also made to digitalise certain critical tendering processes, via the e-submission platform. With the support of the Commission, the Agency implemented fully the use of the e-submission platform, resulting in a definitive shift from paper to electronic workflows in tendering processes.

In addition, eu-LISA made a renewed effort to plan for the future, especially in the areas of budget and procurement, and to embrace change in its processes.

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.

1.7.4 Corporate Services

General Services

In the area of facilities management, a continuously optimised and flexible maintenance programme in all locations ensured a secure, efficient and functional building infrastructure, fully aligned with the Agency's business requirements.

In the area of logistics and infrastructure management, ensuring a healthy and safe working environment was the key priority in 2020. In particular, with the ongoing COVID-19 pandemic, the Agency took special measures to tackle the epidemic and reduce its impact, ensuring specialist cleaning, disinfectants and decontamination services to disinfect sites and help prevent the risk of infection.

Second extension of eu-LISA's technical site

In 2020, the Agency progressed on the second extension of its technical site in Strasbourg. Once completed, in 2026, this extension will allow the Agency to efficiently fulfil its tasks and continue to create and build, through digital technologies, next-generation services in the Justice and Home Affairs domain for the benefit of citizens.

The pre-programme of the building, giving a preliminary overview of the construction project, was unveiled in August 2020. Based on this approved pre-programme, eu-LISA conducted a feasibility study with several scenarios. In October 2020, the project board selected the preferred scenario, which will form the basis of the construction programme.

On 28 September, a key milestone was attained with the formal land transfer, from French authorities to the Agency, of the 20 000 m² plot adjacent to its current building-complex in Strasbourg. It is on this new plot of land that the extension of the technical site will be built.

In November 2020, several workshops on the technical requirements took place with representatives of all functions of the Agency, including the Staff Committee, and with the support of the French Ministry of Interior. The programme manager integrated these outcomes in the building programme, subsequently delivered on time in December 2020, which will be included in the architectural designer tender expected in 2021.

Temporary solutions for office building and data centre

To mitigate in a cost-efficient manner, the capacity issues that the second extension project aims to solve, the Agency leased temporary office facilities in proximity to the technical site. The lease on the new building, located in Illkirch-Graffenstaden, a suburb of Strasbourg, was signed on 30 June 2020. The building was handed over to the Agency on 9 December 2020, and it is expected to be occupied in Q3 2021.

In addition, eu-LISA decided to build a temporary modular data centre at the existing technical site, to cover the needs for a capacity increase. The modular approach will provide an efficient and cost-effective way to expand the existing data centre, until the permanent second extension is ready for use. The temporary data centre must be in compliance with at least the same level of security, safety and fire extinction requirements as the current one. It will be fully redundant, in terms of infrastructure and network feeds, for concurrent planned maintenance activities as well as service continuation without expected outages.

Information and communications technology (ICT) services

In 2020, the pandemic added a significant extra pressure on the provision of the ICT services in the Agency, on top of the planned and expected challenges. The client VPN, the videoconference, as well as and VoIP telephony services and tools became business-critical as the whole Agency started teleworking by mid-March. The network and communications services were scaled up and fine-tuned, in order to ensure a smooth teleworking experience. The ICT

Service Desk, a horizontal service acting as a single point of contact for all ICT services, managed an increased number of tickets for incidents and service requests (+15 % compared to the previous year) and adapted very fast for a remote support way of working. The Agency's ICT Service Desk team also carried out technical moderation activities, which contributed to the successful organisation of large virtual conferences and meetings, the number of which increased manifold in 2020.

Nevertheless, all planned activities and projects were also addressed and ushered towards a successful completion. During 2020, eu-LISA finalised studies for developing a Digital Workplace Strategy and a Cloud Adoption Strategy for ICT Services, ensuring a solid base for the strategies to be launched in 2021. The Agency also undertook activities in the scope of the Networking and Security Modernisation initiative, in order to prepare a roadmap in this area.

The content collaboration ICT services were improved with the regular yearly tools (e.g. for planning and reporting), with tools supporting automation of several internal workflows and eu-LISA's pandemic response measures.

Enterprise content management programme

In 2020, the Agency decided to implement an Enterprise Content Management (ECM) Programme in order to increase efficiency, improve the overall control over content, and to streamline the Agency's processes. The programme includes a review of all existing policies, as well as creation of new policies for document, records management and long term preservation. The main objective of the Programme is to provide eu-LISA personnel with an integrated Enterprise Content Management (ECM) framework, comprising all strategies (including policies and procedures), methods and tools (i.e. information management systems) used to capture, process, manage, deliver, store and preserve information relating to the Agency's activities. The implementation of ECM Programme is gradual and is expected to last until the end of 2025

Audiovisual system technology for conference rooms

In 2020, the Agency introduced a new state-of-the-art conference room technology in the main conference rooms on its premises in Tallinn and Strasbourg. The objective was to equip the two meeting rooms with the latest audiovisual technology, to provide enhanced in-house conference services to ensure seamless and enhanced meeting experience, collaboration, presentation and communication across the organisation. The technical solution is based on state-of-the-art suite of products, and offers professional conference services.

Mission processing system (MiPS)

The Agency successfully implemented the MiPS, an IT tool used by the European Commission for the online management of missions. The MiPS, hosted by the Directorate-General for Informatics (DG DIGIT), supports the processing of travel orders, the subsequent statement of expenses and reimbursement of the staff through a direct connection with the accounting system used by eu-LISA.

1.7.5 Communication

External communication

Throughout 2020, eu-LISA's external communication activities were implemented timely and efficiently, in line with the annual Communication and Dissemination Plan, and the overall priorities set for communication. In addition to the planned tasks, as of February 2020, the Agency allocated significant resources to the communication on the work of the COVID-19 Task Force and on crisis communication. Considerable additional efforts were made to provide regular updates and assurance to external stakeholders about the availability of the systems and services to the Member States.

In addition, eu-LISA also communicated on 16 joint actions and campaigns with the JHA Agencies and EU institutions (e.g. EU Security Union Strategy, New Pact on Migration and Asylum, Schengen 35 celebrations, Europe Day, various cybersecurity and digitalisation topics) to highlight the positive impact of cooperation in making Europe more secure and safer. The communication function was also actively involved in the 2020 multi-system security exercise, responsible for

running a complex business continuity test and crisis communication management regarding the IT systems under eu-LISA responsibility.

To foster transparency and increase public awareness, the Agency prepared and carried out, from mid-May to mid-June, a four-week coordinated online awareness campaign "Discover eu-LISA" (discover.eulisa.europa.eu), presenting the Agency and its core business areas in a fresh and interactive way. The first bi-annual digital newsletter, 'eu-LISA Bits and Bytes', 40 was launched in the format of a modern, responsive and self-contained website, to showcase the Agency's progress and highlight its priorities in the JHA domain. The outcome of targeted and tailored campaigns, and the engaging digital newsletter, were very successful and showed positive trends of outreach across all channels. Consequently, in 2020 the increase of followers was +43% for Twitter, +70% for LinkedIn, +27% for Facebook and +79% for YouTube. The eu-LISA public website also achieved a considerable increase in all the indicators: number of unique visitors (+12%), average visit duration (+3%).

Despite the COVID-19 pandemic, the Agency's regular large-scale stakeholder events, the Annual Conference and the Industry Roundtable, conducted entirely online for the first time, were a success in terms of engagement and high-level speaker attendance. Furthermore, the online coverage of the events also yielded successful results.

Internal communication

The pandemic had a direct impact on eu-LISA's internal communication throughout the entire year. The Agency had to meet the needs of internal stakeholders for timely information concerning the impact of the pandemic on working regimes, health-related issues and restrictions introduced by both national authorities and EU institutions. For a more detailed overview of the crisis communication activities carried out in 2020, please refer to page 60.

The Agency carried out all the tasks foreseen in its *Internal Communication and Dissemination Plan 2020.* Altogether, 50 weekly editions of the "*News&Info*" newsletter were published, two special highlights newsletters were prepared, allowing the different teams to share their success stories while working under challenging conditions. For 90 % of the staff, the weekly newsletters were the primary source of information, and the Agency was able to keep this primary source of information active and updated. According to the 2020 Staff Satisfaction Survey, the overall satisfaction rate with the Agency's internal communication was 93 %.

⁴⁰ eu-LISA's bi-annual digital newsletter 'eu-LISA Bits and Bytes' bit.ly/eu-LISA-Bits-Bytes

2 Management

2.1 Management Board

In 2020, the Agency continued its very close, transparent and constructive collaboration with its Management Board (MB). In addition to the items approved by the MB in accordance with its functions, the Agency regularly presented to the MB all the significant risks and issues identified during the reporting period, alongside the mitigation measures implemented.

The status of implementation and the reports from the EES, ETIAS, Interoperability and ECRIS-TCN AGs PMBs were regularly presented to the MB. These included the presentation of the programmes' risks and issues. In particular, on several occasions the MB addressed the need for the strong involvement of the Member States to ensure the timely delivery of the programmes. The effects of the pandemic on the implementation timeline of EES, ETIAS and Interoperability programmes and the proposed mitigation measures were repeatedly addressed by the MB.

In accordance with the systems regulations, the MB mandated the corresponding PMBs to perform the evaluation of technical tender specifications. In 2020, the evaluation was performed on the EES and ETIAS Web Services Evolution TTS, on the ETIAS TTS (except ETIAS watch list) and on CRRS, ESP, CIR and MID TTS. The PMBs confirmed that the assessed technical specifications were in line with the relevant legal provisions. The evaluation by the PMBs contributed to the mitigation of risks related to the preparations for the procurement procedure.

The SIS, VIS and Eurodac AGs reported to the MB on the status of their work, including the risks and issues associated with the systems' operational management and evolution.

The MB subgroup ACFC contributed to providing assurance with respect to the Agency's risk management arrangements.

The MB was regularly updated on the status of the negotiations with the new Multiannual Financial Framework for 2021–2027. The MB also closely followed the project for the second extension of the Strasbourg technical site and the risk associated with the lack of facilities to host new systems, staff and on-site contractors. The MB was regularly updated on the status of implementation of the Agency's transformation programme (eu-LISA 2.0), which is closely connected to an identified corporate risk (organisational instability). The Agency consistently submitted the Monitoring Report on the status of the implementation of audit recommendations to the MB.

2.2 Major developments

2.2.1 Impact of the COVID-19 pandemic

In accordance with its establishing regulation highlighting the Agency's obligation to 'ensure continuity and uninterrupted service' of the large-scale IT systems under its operational management, eu-LISA took several measures from the early stages of the pandemic. These were to ensure the health and safety of its staff and on-site contractors, safeguard the 24/7 operational management of the systems under its responsibility and minimise the impact of the pandemic on the implementation of the new systems entrusted to the Agency.

At the onset of the pandemic, the Agency created a special Task Force to respond to COVID-19 operational and tactical challenges, reporting to the Executive Director on the situation at Agency level on a regular basis. The Task Force's main goal was to minimise as much as possible the impact to the operational management of the large-scale IT systems, monitoring at 360 degrees existing and potential threats to the Agency. The Task Force developed its working practice throughout the year, proactively analysing the evolution of the pandemic response at international level (with main focus on France, Austria, Estonia, Belgium and Germany) and investing in the establishment of communication channels with the whole staff, aimed at keeping the whole Agency duly and timely informed on the latest measures. The Task

Force was assigned the additional responsibility to cover business continuity issues that may affect the Agency during the pandemic.

Communication played an important role in the management of the pandemic impact. Crisis communication was launched as of 27 February, providing daily/weekly updates and special communications related to the pandemic situation. Throughout 2020, the Agency prepared and shared over 150 situational reports and guidelines, formulated by the COVID-19 Task Force. Internal communication on COVID-19 matters was performed efficiently, and met a very high satisfaction rate (89 %) from the Agency's staff.⁴¹ Dedicated video messages from the Executive Director, and staff assemblies, supported the crisis communication messages' outreach from the management to the staff, and opened up channels for two-way communication, with an average audience of 200 employees per event.

From the end of February throughout the year, regular updates were sent to the Agency's stakeholders (e.g. eu-LISA personnel, Management Board, Commission) on the measures taken in regards to the pandemic. Specific measures (guidance, communications on work arrangements, surveys, and awareness sessions) were carried out to address the needs and concerns of staff, contractors and Member States. The Agency also maintained close contact with the network of officers of EU institutions and bodies (EUAN) and the national authorities of the host states, to exchange best practices and early warnings.

Special arrangements were implemented to ensure the continuous delivery of services to the Member States while safeguarding the health and safety of on-site personnel. Both the functioning and capacity of the technical site and the back-up site were maintained throughout the pandemic. Teleworking arrangements were put in place for activities that allowed it and special *laissez-passer* were provided to staff who needed to travel for business reasons.

The Agency increased hygiene measures, cleaning supplies and regularly proceeded with the disinfection of working areas. Access restrictions were implemented for the operational areas to enhance hygiene conditions. As a result, the COVID-19 pandemic did not affect the continuity of the systems operations. All systems (SIS, VIS and Eurodac) remained available to Member States without interruption or major incidents. The Agency took several steps to mitigate the pandemic-related risks for the operations of the existing systems and provided information on the status of operations on a daily basis to the Commission.

The planned development and system evolutions activities were affected in various ways. Data centre access constraints, travel restrictions, disruption of hardware supply chains and reduced productivity of the contractors' development teams. The Agency made all possible arrangements to maintain the agreed timetable for the development of the new systems. Activities were reprioritised to limit the overall impact. The Agency also worked closely with its contractors, Member States and the Commission to assess accurately the possible delays occurring at national levels and their potential impact on the implementation of the new systems. The Agency launched two consecutive surveys among the Member States and EU Agencies to assess the effects of the COVID-19 pandemic on their plans and their ability to stick to the overall timeline. The surveys focused on the EES implementation. The results of the surveys were presented and discussed with the Agency's governance bodies and at the 'High-level forum on implementation of the new architecture for EU information systems for borders and security', on 27 May.

eu-LISA prepared a detailed IA of the COVID-19 pandemic on the planned central and national activities, with a view to developing the most favourable scenario for the implementation of all the development activities. It should be noted that potential changes in the timeline of one programme might however affect the timelines of the other programmes, so it is important to look at them in a holistic way. The Agency analysed the global implementation timeline to identify possible optimisations and ensure compliance with the political milestone of interoperability architecture readiness by the end of 2023. The IA was provided to the Agency's governance bodies.

⁴¹ Internal Communication Satisfaction Survey 2020

2.2.2 New legislation

The year 2020 brought a number of initiatives that will significantly change the legal environment in which eu-LISA operates, once the legislation will be adopted.

On 23 September 2020, the European Commission presented a new Pact on Migration and Asylum, covering all the aspects needed for a comprehensive European approach to migration. One of the key elements of the pact was the amended proposal for a regulation on the establishment of **Eurodac**. According to the draft regulation, Eurodac should become a case management system with a broadened scope. The new regulation provides for a clear and consistent link between specific individuals and the procedures they are subject to in order to better assist with the control of irregular migration and the detection of unauthorised movements. It also supports the new solidarity mechanism and contains consequential amendments allowing Eurodac to function in the interoperability framework of EU information systems. eu-LISA will be responsible for the development and operational management of this upgraded system. The improved Eurodac database will:

- focus on applicants rather than applications to determine responsibility for asylum claims;
- include new categories of persons for whom data (biometric and alphanumeric data) will be stored;
- allow its use to improve the identification of irregular migrants and to deter unauthorised movements to other
 Member States (secondary movements);
- contribute to prevent asylum shopping;
- improve registration, playing a determinant role to counter Trafficking on Human Beings, with a decisive contribution for the protection of minors and other categories of vulnerable persons;
- facilitate relocation and better monitoring of returnees;
- track support for voluntary departure and reintegration;
- enable to draw up new statistics to support decision-making and improve analytical capabilities of relevant Agencies.

A further initiative to impact Agency's activities is a **new EU Security Union Strategy** for the period from 2020 to 2025 presented by the Commission on 24 July 2020. The strategy maps out the strategic priorities for action at EU level, as well as lists the tools and measures to ensure European security, both in the physical and digital world, and across all parts of society. eu-LISA contributes to the delivery of all four strategic priorities established in the strategy. In particular, priority 4 – a strong European security ecosystem, is of great importance to the Agency as it covers the areas under its mandate. The topics listed under this priority include implementing interoperability between EU information systems in the JHA area, reinforcing the use of SIS, creation of a European Innovation Hub for internal security, use of digital technologies that can improve the efficiency of the justice systems as well as use of AI – all the areas where eu-LISA is already actively contributing.

Negotiations on VIS Recast Regulation, including the VIS Consequential Amendments continued. Political agreement was reached in the trilogies in December 2020, followed by the endorsement by COREPER II and the LIBE Committee of the European Parliament in January 2021. The new regulation will foster the security of the short-stay visa procedure, include long-stay visas and residence permits in the database and ensure interoperability between the VIS and other relevant EU systems and databases. These changes will ensure better responding to the evolving challenges on security and migration as well as to improve the management of EU's external borders.

Negotiations on **ETIAS Consequential Amendments** continued, but the adoption process was not finished by the end of the year. Notwithstanding, for all affected systems, namely EES, ETIAS and ECRIS-TCN, the Agency anticipated and already took into account the requirements indicated in the documentation. Linked to ETIAS development, eu-LISA was actively supporting the European Commission with the drafting of the **Carriers Implementing Regulations**.

As part of a package to modernise EU justice systems and speed up digitalisation of justice systems, the Commission tabled the proposal on e-CODEX on 2 December. e-CODEX (e-Justice Communication via Online Data Exchange) is the

main tool for secure cooperation in civil, commercial and criminal law proceedings across borders. With the adoption of the legislative proposal, the Commission aims to make e-CODEX the gold standard for secure digital communication in cross-border judicial proceedings in all Member States. As of 1 July 2023, the Commission aims to entrust this system to eu-LISA.

On 19 February 2020, the European Commission issued a **White Paper on Artificial Intelligence** – A European Approach to Excellence and Trust.⁴² Europe is well placed to benefit from the potential of Artificial Intelligence (AI), not only as a user but also as a creator and a producer of this technology. AI can help protect citizens' security and enable them to enjoy their fundamental rights. At the same time, the EU should make full use of the tools at its disposal to enhance its evidence base on potential risks linked to AI applications. In close cooperation with the Commission and Member States, eu-LISA is exploring options of potential deployment of dedicated AI elements in the systems under its management.

On 16 December 2020, the European Commission issued a communication the **EU's Cybersecurity Strategy for the** Digital Decade. The concerted implementation of this strategy will facilitate achieving a Security Union, and to the strengthening of the EU's position globally. In its area of expertise, eu-LISA contributes to the process of ensuring world class solutions and standards of cybersecurity for critical infrastructures, as well as the development and application of new technologies.

2.2.3 Impact of the UK withdrawal from the European Union

Following the signing of the agreement on the draft Withdrawal Agreement of the United Kingdom from the European Union in November 2018, the Agency monitored the situation constantly in order to identify potential new obligations. With regard to law enforcement and internal security, after the withdrawal on 31 January 2020 and the subsequent transition period ending on 31 December 2020, the UK ceased to have access to any Union information systems under the operational management of eu-LISA, more specifically SIS and Eurodac. eu-LISA made all the necessary preparations to disconnect the UK and delete UK data from SIS and Eurodac on the date required by the legal framework. The Agency regularly discussed the technical details with the Commission and the respective AGs, and participated in a dedicated working session on Brexit organised by the Commission for the EU Agencies on 5 September. The Agency made the necessary preparations for the application of the provisions of the Withdrawal Agreement and the respective Commission guidelines regarding the UK participation in the Agency's governance bodies, human resource management, statistical reports and other relevant matters. The disconnection of the UK from the SIS is described on page 34 and that from Eurodac on page 40.

2.3 Budgetary and financial management

2.3.1 Financial management

The Agency's budget for the financial year was financed through different funding sources. 43 The main revenue comes from an EU contribution, received on an annual basis from the EU budget — Commission section, Chapter 18 o2 'Internal Security' — as adopted by the budgetary authority. 44 Additional contributions are received from associated countries.

As part of its annual reporting framework, the Agency publishes its budget execution rates and performance indicators, demonstrating efficiency and effectiveness in the management of spending during the reporting period.

⁴² European Commission (2000) White Paper on Artificial Intelligence – A European Approach to Excellence and Trust https://ec.europa.eu/info/sites/default/files/commission-white-paper-artificial-intelligence-feb2020_en.pdf

⁴³ In accordance with Article 46(3) of Regulation (EU) No 2018/1726.

⁴⁴ See Article 45(5) and 46(3) of Regulation (EU) No 2018/1726. The EU contribution relates to C1 commitment and payment appropriations (voted credits for the current budgetary year).

2.3.2 Budgetary implementation

The 2020 final statement of the revenue and expenditure was adopted by eu-LISA's Management Board45.

The Agency had a high budget implementation rate at the end of 2020:

- 99.1 % for commitment appropriations, taking into account the non-automatic carry-over of commitment appropriations authorised by the Management Board on 15 February 2021 as summarised in Table 6;
- 99.0 % for payment appropriations including the carry-forward of administrative expenditure to 2021.

Table 6: Commitment appropriations (in EUR million)

2020 budget implementation as at 31/12/2020			Budget implem	entation with carry-over by decision
2020 final adopted budget	Executed commitments	Implemented (%)	Non-automatic carry-over	Implemented taking into account non- automatic carry-over (%)
240.119	181.550	75.6 %	56.286	99.1 %

Of the total budget, a proportion was subject to the adoption of a legal basis and/or implementing acts for new tasks assigned to the Agency, as indicated in Table 7.

Table 7: Commitment appropriations for new tasks (in EUR million)

New tasks/systems	Commitment appropriations
LFS Eurodac recast	0.268
LFS Dublin Allocation	0.735
Total budget subject to new legal basis	1.003

Table 7 amounts include administrative expenditure, to be allocated according to the budgetary nomenclature in Title 1, 'staff expenditure', and Title 2, 'infrastructure and operating expenditure'.

Amending Budget No 1

An amendment of the budget was required for two reasons:

- The EU general budget marked commitment and payment appropriations for the Eurodac Recast and Dublin allocation as reserve. Such appropriations had to be returned to the EU general budget due to the outstanding adoption of the legal basis.
- The progress of activities for EES development required additional payment appropriations to honour existing commitments.

The Management Board approved one amendment to the budget addressing the issues highlighted above by:

- Returning EUR 1.003 million in commitment appropriations;
- Receiving EUR 36.417 million in payment appropriations.

Table 8 provides a detailed breakdown of the amending budget by budgetary title.

⁴⁵ In accordance with Article 45(7) of Regulation (EU) No 2018/1726.

Table 8: Breakdown of 2020 amending budget (in EUR million)

	Budgetary title System/task		Amending budget		
Budgetary title			Commitment appropriations	Payment appropriations	
A01	Staff expend	liture	-0.268	-0.268	
	of which	Eurodac recast	-0.268	-0.268	
Воз	Operational	expenditure	-0.735	36.685	
	of which	Dublin Allocation	-0.735	-0.735	
	EES			37.420	
		Total 2020 amending budget	-1.003	36.417	

Carry over by decision

The ongoing procurement for ETIAS, Interoperability, and ECRIS-TCN allows the Agency to carry over EUR 56.286 million of commitment appropriations from 2020 to 2021 by Management Board decision, in order to preserve these funds for use in the following years (Table 9).⁴⁶

Table 9: Breakdown of 2020 carry-over (in EUR million)

Budgetary title	System/task	Non-automatic carry-over of 2020 commitment appropriations
Bo3 Operational Expenditure	Interoperability police cooperation/border	2.477
	ETIAS	50.143
	ECRIS-TCN	3.666
Bo3 total		56.286

Commitment appropriation execution

The commitment credits (C1) finally accepted for 2020 were divided among the different titles as follows:

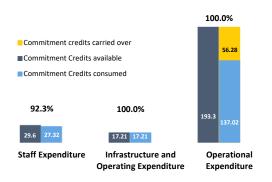
- 80.5 % for the operational budget (Title 3);
- 7.17 % for infrastructure and operating expenditure (Title 2);
- 12.33 % for staff expenditure (Title 1).

Figure 13 and Figure 14 show the budget implementation by title at the year-end.

⁴⁶ In line with Article 12(3) of the Agency's Financial Rules (Decision 2019–198 REV. 1 of 28 August 2019 of the Management Board establishing the Financial Rules of eu-LISA), the Management Board Decision 2021–03 was adopted on 15 February 2021.

Figure 13: Consumption of C1 commitment appropriations (in EUR million)

Figure 14: Trends in consumption of funds committed and budgeted (in EUR million)





With regard to Title 3, owing to the multiannual nature of the contracts used to support core operations, EUR 101.319 million of 2020 open commitment appropriations were automatically carried forward and will be paid in 2021 and in the following years. EUR 56.286 million in commitment appropriations related to new tasks were carried over by a Management Board decision⁴⁷. A detailed breakdown is shown in Annex II.

Of the operational budget, 100 %, amounting to EUR 193.302 million, was implemented (EUR 157.605 million carry-over and EUR 137.016 million of executed commitment appropriations). Figure 15 shows the breakdown of the operational budget by chapter, excluding the carry-over amounts, as listed in Table 9.

In 2020, the Agency cancelled EUR 17.458 million of commitment appropriations carried forward from previous years, representing 6.6% of the total carried-forward appropriations in Title 3 – operational expenditure. Table 10 summarises the de-commitments by year of origin of the underlying legal commitment.

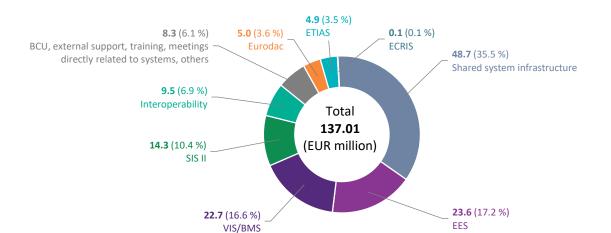


Figure 15: Title 3 commitment appropriations executed (EUR million)

⁴⁷ Management Board Decision 2021-03 of 15/02/2021

Table 10: 2020 de-commitments of budgetary commitments by year of origin (in EUR million)

Budget Chapter	Budget Article	2016	2017	2018	2019	Total
Infrastructure	Shared system infrastructure/Wide area network	_	-0.000	-1.052	-0.319	-1.371
Applications	SIS II	_	_	-0.261	-0.172	-0.434
	VIS	_	-0.006	_	-0.093	-0.099
	Eurodac	-0.214	-0.108	_	-12.853	-13.175
	EES	_	_	-0.069	-o.676	-0.745
	ETIAS	_	_	-0.037	-0.329	-0.366
Operational	Operational	_	-0.008	-0.118	-1.143	-1.269
support	support					
Total		-0.214	-0.122	-1.538	-15.584	-17.458

73.6 % of the cancellations refer to appropriations carried forward as global commitments reserved in the scope of Eurodac Recast and Dublin Allocation Mechanism, pending approval of Eurodac Recast Regulation. Table 11 provides a detailed overview of the respective global commitments.

Table 11: 2020 de-commitments of global (L1) commitments (in EUR million)

Budget Article	Global (L1) commitment	Year of origin	Carried forward amount	Consumption amount	De- commitment amount
Eurodac	Eurodac Recast (pending approval of Eurodac Recast Regulation)	2019	11.870	_	-11.870
Eurodac	Development of new system for Dublin Allocation Mechanism (pending approval of Eurodac Recast Regulation)	2019	0.983	_	-0.983
Total			12.853	_	-12.853

EUR 1.269 million refer to cancellations of budgetary commitment appropriations for which the contract end date was reached, and contractually foreseen provisions were not required (e.g. de-commitments referring to external support contracts, which included extra costs for overtime; de-commitments of remainders of AG meetings and training related to systems and Member States; de-commitments due to applied liquidated damages).

Payment appropriation execution

The total voted budget for payment appropriations amounted to EUR 233.384 million. At the end of 2020, the execution of payment appropriations for C1 credits reached 99.0 %, including the carry-forward of administrative expenditure to 2020. Figure 16 and Figure 17 show the breakdown of the total budget by title and overall consumption of funds and payment appropriations during 2020.

Figure 16: Consumption of C1 payment appropriations (in EUR million)

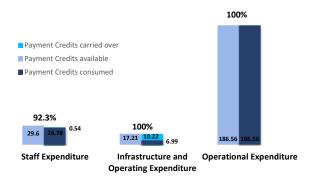
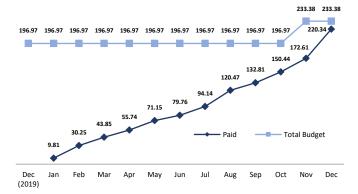


Figure 17: Trends in consumption of funds paid and budgeted (in EUR million)



A total of 86.4 % of the payment appropriations carried forward from 2019 to 2020 in administrative expenditure has been executed.

Commitment appropriations in Title 1 (staff expenditure)⁴⁸ amounting to EUR 0.541 million and in Title 2 (infrastructure and operating expenditure) amounting to EUR 10.217 million, not yet paid in 2020 and for which a valid legal commitment exists, were carried forward to 2021 together with the corresponding payment appropriations.⁴⁹

Within Title 3, the largest proportion of payment appropriations was spent on EES. Figure 18 shows the breakdown of executed payment credits for the operational budget.

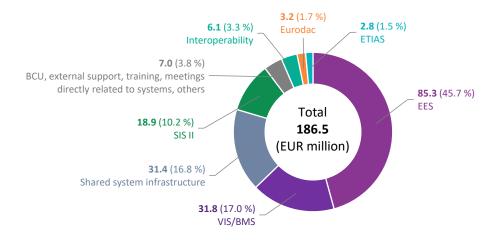


Figure 18: Title 3 executed payment appropriations (in EUR million)

Performance indicator: time to pay

A total of 2 322 payment transactions were carried out in 2020, a decrease of 26 % over 2019. Of these:

- 2 108 transactions had a maximum payment time of 30 days.
- 163 had a maximum payment time of 60 days.
- 43 had a maximum payment time of 45 days.
- 8 had a maximum payment time of 90 days

⁴⁸ Commitment and payment appropriations related to remuneration are not carried forward

⁴⁹ In accordance with Article 12(6) of eu-LISA Financial Rules.

The average time to pay for all types of payments remained far below the stipulated time limits: 18.0 days for 30-day payments, and 44.9 days for 60-day payments.

Figure 19: Payments within time limit of 30 days



Figure 20: Payments within time limit of 60 days



Overall, 95.9 % of all transactions were made within the contractual time limit. 95 payments were delayed, of which 10 resulted in late interest, amounting to EUR 22 393.48 payable to creditors.

2.3.3 Procurement procedures

Figure 21 shows the results of a synoptic volume analysis performed by examining the number of transactions (i.e. contracts) in the period 2014–2020. The volume analysis highlights the need to strengthen procurement functions across the Agency. Despite the pandemic, the procurement activity remained stable in 2020, compared to 2019. The figure shows the split between the different types of contracts, highlighting especially the constantly growing number of specific contracts and order forms under framework contracts.

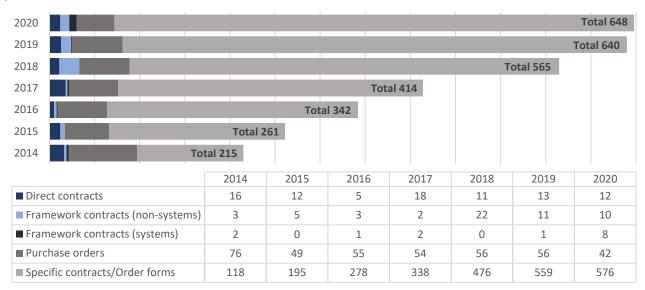


Figure 21: Procurement procedures over the period 2014–2020

2.4 Delegation and sub-delegation of the powers of budget implementation to Agency's staff

In accordance with eu-LISA Financial Rules, and in particular with the articles 41 and 46, the Authorising Officer delegates the powers of budget implementation to the Authorising Officers by delegation. The Delegation of Powers are exercised in accordance with the Charter for Authorising Officers by Delegation, containing a series of tasks and responsibilities for the Authorising Officers by Delegation. These delegations are applied based on a budget ownership matrix, which is established within eu-LISA as the allocation of authority and responsibility to designated staff based on their managerial function within the organisation over planning, implementing, and monitoring of budgetary resources

within all financial circuits. The delegation of power is provided at the level of budget line for all fund sources and are performed by staff formally appointed to that role by an ED decision up to a specific amount (financial ceiling).

During financial year 2020, eu-LISA's Authorising Officer has delegated budget implementation powers to the Deputy Executive Director, Heads of Corporate Services and Operational Departments and Heads of Units. The correct implementation of these delegations is checked on a yearly basis, during the periodic validation of access rights granted in ABAC. The process consists of cross-checking that access rights granted in ABAC are in line with the delegations and responsibilities entrusted, and is performed by the internal audit capability i.e. a neutral verifier as per requirements.

2.5 Human Resources Management

The key achievements in the area of Human Resources Management in 2020 are described in section 1.7.1. This section presents the main achievements in different fields of HR.

2.5.1 Recruitment

Recruitment continued to be a major activity in 2020, following the evolution of the Agency.

Several selection procedures that were started in 2019 were concluded in Q1 2020, and 25 new selection procedures were launched in 2020. In 2020, the Agency received 2 497 applications for 19 closed⁵⁰ recruitment procedures. Several procedures that started in 2020 are still open, and are planned to be concluded in the second quarter of 2021. The average number of applications per procedure was 131.4. Compared to the year 2019 there has been a 35 % increase in the number of applications. The lowest number of applicants for a closed procedure was 39 applications for the post of Information Technology Officer in the area of Architecture (AD5). The maximum number of applicants for a closed procedure was 297 applications for the post of Administrative Assistant/Technical Administrative (FGIII). Thanks to the efforts to publish the vacancies beyond eu-LISA's website (e.g. European Personnel Selection Office website, Eurobrussels, LinkedIn etc.) the Agency has seen a quantitative and qualitative rise in applications.

Where possible, the grouping of profiles and longer reserve lists were used to cover several posts within one recruitment procedure. In other cases, the Agency used valid reserve lists already established for the same grade/function group and profile. The use of these methods generated significant efficiency gains.

eu-LISA has made considerable effort to fill in the authorised posts in 2020. However, the year started with a significant backlog from 2019 caused by the lack of resources in the recruitment team, at the time composed of only two recruitment agents until the third quarter of 2019. The COVID-19 pandemic put the Agency into the unprecedented situation of a lockdown and travel restrictions of candidates. The situation of quarantine and people experiencing restrictions of movement (e.g. closure of national borders) and physical interaction at workspaces created an unusual situation on the job market and the limited delivery of essential services as part of the recruitment process at eu-LISA (e.g. closure of EC pre-employment medical services). Due to the travel limitations during the COVID-19 pandemic, the selected candidates joined the Agency with a considerable delay and in a lower number than planned.

Another consequence of the pandemic was the way the recruitment process was performed. There was a 18o-degree shift, from a traditional face-to-face recruitment to a fully remote process, with interviews and tests done via teleconferencing systems. This digital transformation of well-established paper-based procedures required the development of special arrangements, including the acquisition of new IT applications (such as Cammio for on-demand interviews or online proctored tests). While this shift generated an additional workload at first, the new processes and tools will continue to generate efficiency gains after the end of the pandemic.

Recruitment progress in comparison to the number of authorised posts is presented in Table 12.

⁵⁰ Reserve list established.

TA posts in 2020 Establishment plan	TA posts filled	TA posts filled + job offers accepted	Authorised in 2020 (TA, CA, SNE)	Total of posts filled in	Posts filled + job offer accepted
202 ⁵¹	181	189	324	274	295
	89.6 %	93.6 %		84.6 %	91.0 %
200	181	189	322	274	295
	90.5 %	94.5 %		85.1 %	91.6 %

Table 12: Overview of recruitment target and progress until 31.12.2020

2.5.2 Learning and development

Performance management

The appraisal and reclassification exercise was launched on time and an updated model on reclassification was prepared and presented to the Management Team of the Agency. Appraisal elements were further improved and aligned to the Competency Framework and appraisal guidelines were shared to create standardisation on this exercise. Probation period reports were continuously followed up, ensuring that managers receive dedicated support. A high-level plan was developed to update the Competency Framework and integrate it into the performance management of eu-LISA staff.

Leadership Experience

Continuous support and coaching on HR topics (e.g. leadership, cultural performance, conflicts, probation periods, employee relations, etc.) was offered to the managers to ensure alignment and added value in form of business partnering from the Human Resources Unit. The Agency launched a comprehensive Leadership Programme, tailored to the needs and the vision of the organisation, to support managers and shape eu-LISA's future leadership for the years to come. The first of three modules was delivered and allowed managers to understand the focus areas of each leadership level, create a clear view on the strategy and how to support its execution. They were also asked to reflect on their own leadership behaviour and to learn how to develop new strategies.

Competency-based training

Taking into account the COVID-19 restrictions, many of the planned training courses were shifted online and reprioritised. The Agency focused its efforts on the well-being of people and the support of management through business partnering activities and coaching. In 2020, a total of 50 training activities took place with a total of 785 participants in those and other online activities organised. The activities received an overall satisfaction rate of 79 %.

Employee experience

A survey was conducted during the reporting period to measure the staff engagement. The Agency used an intelligent platform allowing to take full ownership of the process, automate various aspects, such as to pinpoint areas with problems, to identify the best performing teams, analyse what makes them productive, and apply their insights to other teams. The data was collected anonymously with the overall participation rate of 86 % and indicated an increased engagement level compared to 2018. The main findings were presented to the MB and to the staff members. A dedicated task force analysed the results further and proposed a total of 18 actions.

The Human Resources Unit continued to offer the best possible onboarding experience to newcomers with organising in total 40 onboarding sessions on synchronous modus, which complemented with the online onboarding module offer a comprehensive blended learning solution, contributing that 81% of newcomers were satisfied with the overall onboarding experience during their first week and month in eu-LISA.

Two posts in the establishment plan were planned for Eurodac recast. As the legal base was not adopted, it was not possible to recruit for these posts in the course of

Additionally, the Human Resources Unit started to measure and evaluate further elements of employee experience, related to newcomers and people exiting the organisation.

People relations and values

eu-LISA values drive and underpin its operational activities and any strategic development. A tailor-made course on sexual and other forms of harassment was delivered to people working in eu-LISA. Additionally, sessions on prevention of sexual and psychological harassment were organised in cooperation with the Agency's confidential counsellors.

In the frame of respect and dignity at the workplace a number of awareness sessions were organised. Staff was informed through awareness session about the role of the Confidential Counsellors and the Human Resources Unit. In total, 161 people attended those sessions.

In addition, the Human Resources Unit took all necessary actions to reinforce the message that eu-LISA is a place of respect.

2.5.3 Establishment plan and headcount

In 2020, the authorised posts of eu-LISA consisted of the following types of posts: 202 Temporary Agents (TAs), 111 Contract Agents (CAs) and 11 Seconded National Experts (SNEs), coming to 324 authorised posts.

The number of posts in the establishment plan increased by 30 posts in comparison to 2019. Annex IV shows the 2020 Establishment Plan. The number of CA posts increased by 23 posts, from 88 to 111, due to the budget authorisation for the new tasks allocated to the Agency (ETIAS and Interoperability). The number of SNE posts has not changed.

In 2020, the occupancy rate was 89.6 % for the establishment plan headcount and 93.6 % including issued job offers. The occupancy rate for all types of posts was respectively 84.6 % and 91.0 % showing a slight improvement in comparison to 2019 (by 0.1% to 2.4% respectively). This level of the occupancy rate was reached despite the conditions affecting the recruitment (the pandemic limitations and a small number of HR officers).

In terms of headcount, at the end of December 2020, eu-LISA had 274 full-time staff members: 181 TAs, 83 CAs and 10 SNEs. Five interns were offered a professional practice at the Agency. Table 13 shows the number of staff members per type of contract and split between the sites of the Agency.

TA CA **SNE TOTAL** 31 December 2020 **Tallinn** 47 22 5 74 Strasbourg 133 60 4 197 Brussels 1 1 1 3 Total 181 83 10 274

Table 13: Distribution of staff by sites and types of contract

27 % percent of staff were employed at the Agency's Headquarters in Tallinn and 72 % at its technical site in Strasbourg. The Liaison Office in Brussels represents 1 % of the Agency's staff.

The Agency staff represented 22 nationalities of the EU member states in comparison to 21 nationalities represented in 2019. Women constituted 30 % of the staff (80), while men 69.7 % (184). This shows a slight improvement (1.3 %) of the gender balance in comparison to 2019 and a maintained tread of increase comparing with 2018.

Performance indicators in the area of HR

The Agency set key performance indicators (KPIs) for areas related to Human Resource Management, which are used to measure performance of the Agency in different areas of the Human Resources management.

The absenteeism rate was measured by three indicators:

- An average number of sick leave days per employee. It was 5.6 days per staff member, while the target KPI is not to exceed 15 days per employee.
- The percentage of staff on a long-term sick leave. It was 4.4 %, while a target is not to exceed 10 % of staff.
- The percentage of staff that did not take any sick leave. It was 52.9 %, while a target is to have it above 15 % of all staff.

The exit turnover of staff was 3.7 %, due to seven employees leaving the organisation in 2020. This is below the target of 5 % set for turnover. The Tallinn headquarters was more strongly affected as the staff turnover reached 6.5 %, showing an increase by 1 % in comparison to 2019.

Percentage of staff submitting on time their declaration of interest was 82 % for a target set at above 80 %.

The talent retention index, assessing average performance of people leaving the Agency versus average performance of staff, reached o.g, while the target value was set at being above zero. This KPI was measured for the first time, therefore no comparison of data could be made.

Compensatory leave schemes

The Agency is required, under paragraph 28 of the Parliament's Discharge Report '2011 Discharge: performance, financial management and control of EU Agencies',⁵² 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.⁵³ The Agency has a mandate to provide its services to Member States on a continuous basis (24/7); this means that some staff work in shifts or on stand-by duty. Interventions on the IT systems managed by the Agency from time to time require that the work be performed outside regular office hours, including at night or on public holidays. Therefore, compensation for overtime worked under flexitime or during stand-by duty interventions is an inherent feature in the operation of the organisation.

Table 14 shows the number of days' leave granted as compensation for overtime, broken down by function group, grade of staff member, and the average number of days of those compensated.

Table 14: Compensatory leave breakdown per type of leave and grade of staff

Functional group and grade	Compensated overtime	Compensated stand- by duty	Compensated flexitime
AD05	5.0	0.0	173.5
ADo6	0.0	0.0	62.0
AD07	0.0	0.0	198.0
ADo8	0.0		144.5
AD09	0.0	0.0	50.5
AD10	0.0	0.0	46.5
AD11	0.0	0.0	8.0
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

⁵² P7_TA(2013) 0134

⁵³ Commission decision on Working Time of 15 April 2015, C(2014) 2502 adopted by the Management Board of eu-LISA on 15 April 2015.

Functional group and grade	Compensated overtime	Compensated flexitime	
ASTo1	0.0	0.0	0.0
AST ₀₂	0.0	0.0	0.0
ASTo ₃	0.0	0.0	31.0
AST04	0.0	0.0	9.0
ASTo ₅	0.0	0.0	18.5
ASTo6	1.0	0.0	18.5
ASTo7	0.0	0.0	22.0
ASTo8	0.0	0.0	23.0
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	6.0	0.0	805.0
Number of people	3	0	131
Average number of days on		6.05	
compensatory leave		0.05	
GFIII09	0.0	0.0	49.0
GFIII10	0.0	0.0	21.0
GFIV ₁₃	0.0	0.0	29.0
GFIV14	0.0	0.0	116.0
GFIV15	0.0	0.0	32.0
GFIV16	0.0	0.0	33.5
GFIV17	0.0	0.0	4.0
GFIV18	0.0	0.0	2.0
Total number of days	0.0	0.0	286.5
Number of people	0.0	0.0	62.0
Average number of days on compensatory leave		4.62	
SNE	0.0	37.0	42.0
Total number of days	0.0	37.0	42
Number of people	0	1	9
Average number of days on		4.67	
compensatory leave		4.07	
TOTAL number of days:	6.0	37.0	1 133.5
TOTAL number of people:	3.0	202.0	
Average number of days per type of leave	2.0	37.0	5.6
Overall average number of compensatory leave days		5.56	

Description of the results of the screening/benchmarking exercise

In accordance with the requirements of the Framework Financial Regulation (FFR) and the methodology agreed by the Heads of Administration of the European Agencies, eu-LISA performed its annual benchmarking exercise to identify the ratio of administrative to operational staff.

The Agency considers that a distribution of posts and staff for around 70 % to operational activities, 20 % for the administrative support and coordination and 10 % to neutral (financial) activities constitutes an optimum to reach.

The results of the 2020 benchmarking show almost no change (0.1%) in the percentage of operational posts (from 72.4% to 72.5%), while the internal distribution within the operational category has slightly shifted from the general operational activities (a decrease by 1.1%) to programme management (an increase by 0.9%) and top-level coordination (an increase by 0.3%). This is due to the fact that new tasks assigned to the Agency required increase of a number of staff for the project management and with the overall increase of the number of staff in operations, the new units and posts for the Heads of unit were established. The percentage of administrative and coordination posts slightly decreased by the same figure (0.1%) from 16.6% to 16.5%. The share of neutral posts remained at the same level.

The ratio of administrative support type of posts and of operational type of posts applied to external support also shows a slight change by approximately 1%. More services of administrative support and coordination were outsourced, showing an increase from 51.2% to 52.2%, while for operational activities this decreased from 43.5% to 42.4%. The share of neutral posts in external services has increased from 5.2% to 5.4%.

The tables in Annex IV show the results of the 2020 screening exercise. In the same annex are also listed the HR implemented rules adopted in 2020.

2.6 Strategy for efficiency gains

The policy objectives set for 2020 had to be achieved taking into account the constraints affecting eu-LISA's budget and available human resources for the tasks performed. The main measures addressing the issue of a gap between the available human resources and the objectives to be reached by the Agency were applied as follows:

- Insourcing 25 posts that in the past years were outsourced following the adoption of the new eu-LISA Regulation enabled more effective operation by reducing or solving organisational issues and risks due to granting relevant access rights, exercising internal control and providing or ensuring know-how.
- In parallel, the Agency continued to use a framework contract for external support services as it has proven to be effective in dealing with relevant tasks to achieve its objectives on a short-term basis.
- In recruitment of the additional staff, efficiency gains were achieved through the use the reserve lists created during the selection procedures performed in 2019 in order to fill posts granted in 2020. There were 27 such recruitments.
- Some efficiency gains could be observed already in 2020 with launching of the time management module of Sysper to eu-LISA staff. For both staff and managers, it facilitated the approval workflows of leave requests, teleworking requests and time records. It also supported a move towards a paperless environment.

In 2020, the Agency pursued several major initiatives, which are expected to provide significant contributions in terms of efficiency gains in the upcoming years: the eu-LISA 2.0 organisational transformation programme (page 55), the start of the transversal engineering framework (page 31) and the development of the CSI (page 44).

eu-LISA started formalising its efficiency gains strategy: it will answer the needs for improvement to processes management, optimisation in the use of human resources and optimisation of the organisational governance and structure.

2.7 Assessment of audit and ex post evaluation results

2.7.1 Internal Audit Service (IAS)

Management of IT security in eu-LISA

The objective of the audit was to assess the adequacy of the design and the effectiveness and efficiency of processes eu-LISA implemented to manage and control the security of the large-scale IT systems under its responsibility, also referred to as core business systems (CBS). The audit aimed at giving the Agency assurance that the IT security processes and procedures effectively and efficiently protect the related information, IT systems and communication networks. In particular, it included assessing:

- the adequacy of the internal IT organisation for IT security purposes;
- the adequacy of controls to ensure that production software is kept up to date regarding security vulnerabilities,
 as well as software development practices for new applications integrate security practices at all stages;
- the adequacy of IT security services to address confidentiality, integrity and availability of information stored and processed through the CBS;
- the proper execution of IT security operations regarding the CBS.

The scope of the audit covered an assessment of the IT security processes and activities related to the CBS in operations (SIS II, VIS/BMS, Eurodac) and under development (EES, ETIAS, ECRIS-TCN, interoperability components). There were no observations/reservations in eu-LISA 2019 CAAR that related to the area/process audited.

The fieldwork was conducted remotely, and was finalised on 20 November 2020. The report and its recommendations will be issued in 2021.

Staff recruitment, management and engagement of structural service providers (SSPs) and organisational ethics⁵⁴

The objective of the audit was to assess the adequacy of the internal control systems put in place by eu-LISA for staff selection and recruitment, the management of structural service providers and organisational ethics. The audit focused on the 2018 and 2019 financial years.

The scope of the audit covered the Agency's selection and recruitment procedures, the planning for and management of structural service providers used to deliver contracted services (as indicated in the related framework and specific contracts) and the ethical framework in place.

The audit did not cover the key human resource management processes including staff planning and allocation, performance appraisal and promotion, and staff training. These processes were covered in an audit engagement in 2016. Financial contract management and procurement procedures relating to the contracting of structural service providers were not within scope.

The fieldwork at the Agency was finalised on 18 October 2019. All observations and recommendations relate to the situation as of that date.

The auditors noted the very good organisation of recruitment and personal files, the appropriateness of the security measures adopted for their storage and, in general, clear evidence of significant work volumes managed by dedicated staff.

Audit conclusion and major audit findings

The IAS concluded that, within the challenging context of rapid growth, overall the Agency's recruitment procedures complied with the regulatory frameworks in place and the internal control systems for managing the selection and recruitment of staff and organisational ethics were adequate. The Agency also managed its structural service providers

⁵⁴ Excerpt from Final audit report on staff recruitment, management and engagement of structural service providers and organisational ethics in eu-LISA IAS Audit Report IAS.A2-2019-EU-LISA-001, ref. Ares(2020)2917223 – 05/06/2020

in compliance with the conditions laid down in the respective framework service contracts. However, very important weaknesses still existed with regard to the processes for assessing human resource requirements and the lack of (national) legal assurances regarding the engagement of structural service providers. In this regard, the auditors identified the following two 'very important' issues:

- Human resource needs assessment: the Agency covers its human resource needs through a combination of staff and structural service providers. Compared to other agencies, the proportion of structural service providers is high and in addition, structural service providers are not only used for temporary or ad hoc duties but also for core operational and/or administrative tasks. The justification for the current level of staff and structural service providers as well as the strategy defining the tasks which can or cannot be performed by structural service providers was found to be rather weak. The Agency provided the auditors with a draft sourcing strategy, which at the time of the audit was not formally validated by senior management or the management board. In addition, the Agency has not converted the draft sourcing strategy into detailed work plans to determine optimal levels of staff and structural service providers it requires to achieve its objectives.
- **Legal assurances concerning the use of structural service providers**: the Agency still needs to obtain legal assurances regarding several aspects of its working relations with the structural service providers.

To address the risks and issues highlighted by the auditors, the Agency put in place an action plan⁵⁵ and monitored its implementation regularly.

2.7.2 European Data Protection Supervisor (EDPS)

SIS and VIS audit

In November 2018, the EDPS conducted an audit for the SIS and for the VIS in accordance with relevant international auditing standards. The purpose of the EDPS inspection was to check that the personal data processing activities of eu-LISA, as the Management Authority for both systems, are in accordance with the applicable data protection regulation.

The final EDPS report was received in April 2020 and contained 43 recommendations. eu-LISA has transposed all EDPS recommendations into an Action Plan. The DPO monitors the progress of its implementation and, to this extend, organises quarterly follow-ups with responsible staff. The follow-up on recommendations with deadline Q1-2020 took place during May 2020. Follow-up on recommendations with deadline Q2-2020 was conducted in July 2020, and in October 2020 for those recommendations with deadline Q3-2020. It is planned that recommendations having Q4-2020 as a deadline will be reviewed in January 2021. eu-LISA liaised with EDPS every quarter to proactively update on the progress and status of the recommendations.

Eurodac inspection

At the beginning of December 2019, EDPS carried out and inspection on Eurodac. The draft EDPS report on the 2019 Eurodac inspection was received in the second half of November. In accordance with its establishing Regulation, the Agency reviewed the report and organised a consultation with the Eurodac AG and the MB towards the end of the year. In 2021, all inputs will be consolidated to proceed with the adoption of the formal comments of the MB.

2.7.3 Internal Audit Capability (IAC)

Project for the second extension of the technical site in Strasbourg⁵⁶

The objective of the review was to provide independent, objective reasonable assurance that Project's controls are adequate and effective, risks are being managed appropriately, and Projects' objectives are met (for what has been planned to be delivered by September 2020).

⁵⁵ eu-LISA Action Plan, ref. Ares(2020)3992866 – 29/07/2020.

⁵⁶ IAC Report, ref. Ares(2020)7030632 - 23/11/2020.

The scope included:

- Lessons learnt from previous similar project,
- Project's compliance with applicable regulations, decisions, rules and methodologies,
- Risks management process put in place for the project.

The Project Board expected to receive from the programmer (i.e. a contractor) a more accurate financial estimation (i.e. precision of +/-20 %) by the end of the year 2020. For this reason, the project cost (i.e. estimation methods, baseline, tolerance, monitoring and reporting) was not included in the scope of this audit.

Based on the results of the review, the Head of IAC concluded that the internal controls put in place for the project were adequate and effective, and provided reasonable assurance that risks were managed appropriately. The audit concluded that the projects' objectives were met, for what was planned to be delivered by September 2020, except for one very important non-compliance issue: the sourcing of project manager to external consultancy. Following the audit, the project board put in place an appropriate action plan⁵⁷ in response to the highlighted issue.

EES central system project management⁵⁸

The IAC, supported by an EY audit team started the audit in December 2019 and carried it out in the first quarter of 2020. The audit reviewed the processes and controls in place related to the three following objectives:

- Alignment of vision and objectives between the Member States (MS) (end-users of the EES), eu-LISA
 operations' team (users of the EES central system) and eu-LISA programme and project teams responsible for
 the EES deliverables;
- Alignment of the project with Agency's SPDs and project management methodology;
- Effectiveness and efficiency of related risk management practices.

Based on the results of the audit, the Head of IAC concluded that the internal controls designed and put in place for the EES central system project were adequate and effective, and provided reasonable assurance regarding achieving project control objectives, except for the following *very important* issues:

- budget;
- governance and project organisation;
- vendor management;
- project's compliance with legal base and eu-LISA's project management methodology;
- resource Management.

Following the audit, the Agency put in place an action plan.59

Management of ABAC access rights⁶⁰

The IAC carried out a pilot review of the management of ABAC⁶¹ access rights at eu-LISA. The review was recommended by DG Budget⁶² to be performed annually by the internal audit capability, as a neutral verifier. The Head of IAC agreed to take it up, based on an approval by the ED and the MB.

To support its financial circuit, the Agency uses ABAC system. DG Budget is responsible for the development and maintenance of the ABAC system in accordance with the instructions and data processing policy laid down by the Commission. In order to access ABAC, user rights including the specification of the user's role have to be requested to

⁵⁷ Action Plan, ref. Ares(2020)7454012 - 09/12/2020

⁵⁸ IAC Final Report, ref. Ares(2020)3103765 - 15/06/2020.

⁵⁹ Action Plan, ref. Ares(2020)3853768 - 22/07/2020.

⁶⁰ IAC Report, ref. Ares(2020)7820454 - 21/12/2020.

⁶¹ ABAC (Accrual Based ACcounting) is the corporate information system allowing the daily execution and monitoring of all budgetary and accounting operations by the Commission's Directorate Generals, the Agencies, and the Institutions. The system has been developed by the Commission and includes a complete set of features to ensure compliance to the Financial Regulation and Implementing Rules.

⁶² P.11 Financial Systems Roles & Responsibilities ref. Ares(2017)3437526 – 07/07/2017

and granted by DG Budget based on a SLA between DG Budget and eu-LISA signed on og/o3/2020. Communication of ABAC operational roles to DG Budget is done with the SLA.

The objective was to provide independent, objective assurance on the management of ABAC access rights in eu-LISA. The scope covered the following activities:

- Perform a periodic (at least on a yearly basis) compliancy validation of ABAC access rights (ABAC workflow, ABAC accounting and ABAC reporting) against responsibilities entrusted to the user in accordance with the standing procedures in place;
- Conduct a risk assessment in the area of granted access rights in function of the context, procedures and control
 standards applicable to eu-LISA; in particular, in relation to segregation of duties and the configuration of
 financial circuits;
- Where corrective measures have to be taken at central level, liaise with the Central Authorisation Manager in order to remediate.

During the audit, the results were extensively discussed with the Finance and Procurement Unit (FPU) before being integrated into the final detailed audit report⁶³.

Based on the results of this pilot review, the Head of IAC concluded that the internal controls put in place for the management of ABAC access rights at eu-LISA are adequate and effective and provide reasonable assurance that risks are being managed appropriately. The Head of IAC also validated the compliance of ABAC access rights against responsibilities entrusted to the user in accordance with the standing procedures in place as at 27/07/2020. Following the audit, the auditee has put in place an appropriate action plan.⁶⁴

2.7.4 European Court of Auditors (ECA)

Report on the annual accounts of eu-LISA for the financial year 2019⁶⁵

In 2020, the European Court of Auditors (the Court) finalised the usual audit on the Annual Accounts of the eu-LISA for the financial year 2019. The Court audited:

- a) the accounts of the Agency, which comprise the financial statements⁶⁶ and the reports on the implementation of the budget⁶⁷ for the financial year ended 31 December 2019, and
- b) the legality and regularity of the transactions underlying those accounts.

In the Court's opinion, the accounts of the Agency for the year ended 31 December 2019 present fairly, in all material respects, the financial position of the Agency at 31 December 2019, 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 accounts for the year ended 31 December 2019 are legal and regular in all material respects.

However, the Court made three comments that do not call the above opinions into question, of which a summary is presented below:

⁶³ On 16/11/2020, IAC communicated the initial results to FPU (ref. draft audit report, eu-lisa.iad(2020)7644054) who validated the findings and suggested an appropriate action plan. On 21/12/2020, IAC communicated the detailed final audit report (ref. Ares(2020) Ares(2020)7820454 - 21/12/2020) to the Head of FPU and other relevant internal stakeholders.

⁶⁴ Detailed final audit report and Action Plan, ref. Ares(2020) Ares(2020)7820454 - 21/12/2020.

⁶⁵ Excerpt from ECA report on the annual accounts of the European Union Agency for the operational management of large-scale IT systems in the area of freedom, security and justice (eu-LISA) for the financial year 2019. The report was published on 22.10.2020 on ECA's website.

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.

⁶⁷ These comprise the reports which aggregate all budgetary operations the explanatory notes.

Observations on legality and regularity of transactions

- one payment of 284 000 euros referred to a time period not covered by the duration of the framework contract, and as a result, it was not in compliance with the contractual provision,
- In one recruitment procedure, the Court highlighted weaknesses in the assessment of eligibility criteria, which led to the unequal treatment of candidates,

Observations on Budgetary Management

• The Agency, together with the Commission, should improve the alignment of budgetary planning with the timing of the related legal acts.

Special Report on Future of EU Agencies

In October 2020, the European Court of Auditors published its 'Special Report on Future of EU Agency – Potential for more flexibility and cooperation'. ⁶⁸ For the first time, the ECA assessed how well the EU had enabled the agencies to deliver its policies for the public good. EU decentralised agencies are bodies governed by European public law and equipped with their own legal personality, making them distinct from the EU institutions. ³⁷ EU Agencies are located in ²³ Member States and serve a wide range of matters of interest to EU citizens. In ²⁰¹⁸, their total annual budget amounted to EUR 4 billion (equivalent to ²⁸ % of the EU general budget) and all the agencies together employed a total of ⁸⁹⁷ staff (13.4 % of all staff working for the EU).

Having focused in the past on the performance of individual agencies, the ECA identified two key criteria for all EU Agencies to contribute more effectively to EU policy. First, the auditors looked at whether the agencies' lifecycle was flexible enough to serve the relevant EU policy area and European cooperation in a changing global landscape. In this respect, they identified a lack of flexibility in the way agencies are set up, function and, if necessary, are wound up. In some policy areas there are multiple agencies, which can lead to overlap between their mandates and/or activities. Second, the auditors examined the extent to which agencies acted as centres of expertise and networking for the implementation of EU policies, and found that their potential is not fully exploited.

In general, the auditors recommended that the Commission and the agencies ensure the relevance, coherence and flexibility of the set-up of agencies; allocate resources in a more flexible manner; improve governance, accountability and reporting on performance; and strengthen the role of agencies as centres of expertise and networking in their respective policy areas.

2.8 Follow-up of recommendations and action plans for audits

In line with an ED decision⁶⁹, IAC collected updates from recommendation's owners and compiled monitoring reports. IAC delivered the following reports during the year:

- Status of implementation of audit recommendations as of 31/12/2019, document 2020-055 under agenda point B.9 of the MB 22nd meeting on 21/03/2020;
- Status of the progress with implementation of the outstanding audit recommendations as at 30/04/2020, document 2020-192 under agenda point B.15 of the MB 23rd meeting on 26/06/2020;
- Status of the progress with implementation of the outstanding audit recommendations as at 31/10/2020, document 2020-359 under agenda point A.25 of the MB 25th meeting on 24/11/2020;
- Status of the progress with implementation of the outstanding audit recommendations as at 31/12/2020, document 2021-075 under agenda point A.23 of the MB 27th meeting on 16/03/2021.

⁶⁸ Executive Summary from European Court of Auditors Special Report 22/2020 Future of EU Agencies – Potential for more flexibility and cooperation published on 23.10.2020 on ECA's website

⁶⁹ Decision of the Executive Director, for the Adoption of a system of compulsory reporting to the Executive Director and the Head of the Internal Audit Capability on the subject of the progresses made in the area of audit recommendations and / or findings, ref. Ares(2018)6152498 - 30/11/2018.

The implementation rate of audit recommendations for the year 2020^{70} is 65 % (i.e. 24 recommendations implemented / 37 recommendations due). The status of audit recommendations on 31 December 2020 is summarised in Table 15.

Table 15: Status of implementation of audit recommendations

IAS, IAC and ECA recommendations by rating	Total open for 2020	In progress	Implemented	Past due	Closed in 2020	Total open at the end of 2020
Critical	0	0	0	0	0	0
Very important	33	4	18	9	14	19
Important	14	4	6	4	2	12
Total	47	8	24	13	16	31

Notes:

For monitoring purposes, recommendations issued by ECA are rated as 'Very important'

In progress: Implementation proceeds according to 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 the recommendation is in progress but was not achieved by the agreed deadline.

Closed: The auditor has formally closed the 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.

The outstanding audit recommendations can be summarised as follows:

- Finalisation of deployment of Sourcing Strategy and design of Contract Management process (2015);
- Finalisation of implementation of efficiency measures in IT Operations (2016);
- Finalisation of putting in place internal controls in Procurement (2017);
- Organisation of IT asset management process (2018).

Concerning the implementation of actions that the Agency has taken following the observations made by the European Court of Auditors in the previous years, the situation is as follows:

⁷⁰ Details are available in the Monitoring Report on the status of implementation of the outstanding audit recommendations as at 31 December 2020 (ref. MB document 2021-075).

Table 16: implementation status of actions addressing observations made by ECA

Year	Observation	Status	Actions taken by the Agency
2013/ 2015	Schengen Associated Countries contribute to the financing of the Agency's operational expenditure, but not staff and administrative expenditure.	Completed	N/A
2017	eu-LISA currently manages three separate, non-integrated large-scale IT systems (SIS II, VIS and Eurodac) all dealing with data in the Union's policy area of freedom, security and justice. Such an approach may prevent the Agency from achieving economies of scale and synergies between the different systems.	Ongoing (Not under the control of the Agency)	eu-LISA will continue integrating all the systems under its management to the level allowed by the legal instruments, by deploying for instance a common shared infrastructure or setting architectural standards.
2017	The Agency publishes vacancy notices on its own website and on social media, but not on the website of the European Personnel Selection Office.	Completed	N/A
2017	E-procurement: by the end of 2017, the Agency had introduced e-invoicing and e-tendering for certain procedures, but not e-submission.	Completed	N/A
2017	For the development and implementation of IT projects the Agency applies an outsourcing model where some 90 % of the related work is carried out by contractors, creating a considerable risks of over-reliance and dependency on contractors.	N/A	N/A
2017	The framework contracts signed with the respective consortia for the operation of the main IT systems create a risk of overpayment. The Agency may consider using a standard methodology using function points for the determination of price for development activities.	Completed	N/A
2018	The selection committee deviated from the published vacancy notice and applied a higher minimum score for applicants to be placed on the reserve list. The Agency should make sure that the published selection criteria are respected.	Completed	N/A
2018	The Agency awarded a contract for an amount exceeding the tenderer's offer, which is not in line with the public procurement rules.	N/A	N/A

2018	The Agency extended the duration of a direct contract, which increased also the contract value with 73 %. Payments executed beyond the 4-year initial period are irregular. The Agency should make sure it complies with public procurement rules.	Completed	N/A
2018	The Agency increased the prices of a framework contract without amending it and extended one specific contract after the expiry of the framework contract.	Ongoing	A Vendor and Contract Management Sector was created in the Operations Department, working closely with the Procurement Sector in the Corporate Services Department, to address inter alia the monitoring of contract end dates, succession planning and close follow up of operational needs and regulatory framework. In addition, contract management responsibility and accountability, and how to ensure correct, timely and regular succession of contract, have been embedded in the guidelines on procurement and contract management, planned to be adopted in 2021.
2018	The evaluation formula stipulated in the tender specifications for the MWS contract was different from the one communicated in the question and answers document for bidders. The Agency should strengthen procurement-related internal controls.	Completed	In order to strengthen <i>ex ante</i> controls relevant to the observation, two provisions are included in the procurement guidelines: - the introduction of formalised peer review within the procurement sector, for business continuity and the implementation of the four-eyes principle; - the introduction in the final contract of formalised references to tender documentation changes stemming from question and answers sessions.
2018	Budget implementation was less than planned. The Agency, together with the Commission, should improve alignment of budgetary planning with the timing of the related legal acts.	Outstanding	The inscription of resources in the Agency's budget for legislation not yet adopted by the co-legislators introduces significant risks to sound financial management. Such risks have been systematically reported to the Management Board. The process of adopting legislation is completely out of Agency's control.

The Agency will keep IAS and ECA informed about progress with implementing these action plans. The Agency will take firm and urgent actions to address the delayed recommendations, including providing revised target implementation dates.

To confirm closure (see header 'Closed' in the summary table above), the IAS 71 and the IAC 72 carried out the annual follow-up to those action plans declared as 'Implemented' (i.e. auditor's assessment of evidence provided and collected). ECA also followed up its observations issued in previous audits 73 .

2.9 Follow up of recommendations issued following investigations by the OLAF

There were no recommendations issued to eu-LISA following investigations by the OLAF.

2.10 Follow-up of observations from the discharge authority

On 29 April 2021, the European Parliament granted the ED of eu-LISA discharge in respect of the implementation of the Agency's budget and approved the closure of the accounts of eu-LISA for the financial year 2019.

The discharge authority set out its observation in a resolution adopted on the same date. eu-LISA will prepare a follow-up report and follow the instructions of the EU Agencies Network to share it with the discharge authority.

The discharge authority called on the Agency to report by June 2021 on four of its observations (on staff policy, prevention and management of conflicts of interests, ethics and transparency, and internal controls), which are answered below.

Staff policy

18. Notes that the Agency has adopted a policy on protecting the dignity of persons and preventing harassment; notes that following a request by a member of staff in October 2018, the Agency opened an administrative inquiry in 2019 that was completed in September 2019 with a disciplinary measure; acknowledges that a complaint was issued against that disciplinary measure and that the Agency replied on 3 August 2020; notes that a court case was lodged before the General Court by the member of staff concerned; calls on the Agency to report to the discharge authority by June 2021 with regard to the progress made and, if applicable, correction measures taken following a final decision of the General Court; notes that based on the data from the confidential counsellors, there were nine harassment cases reported during 2019 but none of these cases resulted in members of staff requesting support through either formal or informal procedures;

As at 3 June 2021, the court case lodged before the General Court is ongoing.

Prevention and management of conflicts of interest, ethics and transparency

22. Acknowledges the Agency's existing measures and ongoing efforts to secure transparency, prevention and management of conflicts of interest, and whistleblowing; notes that the Agency has in place rules on the prevention and management of conflicts of interest for members of staff; notes that in 2019 the Agency organised one training session on ethics and integrity with a focus on whistleblowing and fraud delivered by a representative of the European Anti-Fraud Office (OLAF), two training sessions on ethics and the code of conduct covering the prevention of harassment and whistleblowing with the involvement of the Agency's confidential counsellors, and three training sessions on the management of conflicts of interest; notes that in 2019, 106 declarations of interest were submitted by members of staff appointed as agents or verifiers in the operational and financial circuits and by newcomers, of which 21 declared an interest, and that for one member of staff it was advised to not participate in several actions to comply with the rules preventing conflicts of interest; notes that in June 2020, the management board was expected to adopt new rules on conflicts of interest that would apply to all members of staff of the Agency, including its senior management; calls on the Agency to report to the discharge authority by June 2021 with regard to the progress made;

On 23 December 2020, the Management Board of eu-LISA adopted the Decision No 2020–405 on implementing rules on the prevention and management of conflicts of interests of the staff members. This

⁷¹ Follow-up of outstanding recommendations from past audits in eu-LISA – IAS Note on audit conclusions, ref. Ares(2020)6687111 – 13/11/2020.

² IAC Follow-up 2020 Memo, ref. Ares(2021)1582348 - 02/03/2021.

⁷³ ECA report on the annual accounts of the European Union Agency for the operational management of large-scale IT systems in the area of freedom, security and justice (eu-LISA) for the financial year 2019, Annex – page 9 to 11. The report was published on 22.10.2020 on ECA's website

decision lays down rules for the prevention and management of conflicts of interests of eu-LISA staff members in order to ensure, in a transparent and consistent manner, the handling of situations where conflicts of interests may arise. Article 2 of the decision states that it shall apply to contract staff, temporary staff, including the Executive Director and the Deputy Executive Director, seconded national experts and paid and unpaid interns.

25. Notes that according to the Agency's reply there is no legal obligation to publish the CVs of the members of its management board; highlights in that respect that the Union agencies should set an example in terms of transparency and calls on the members of the management board to publish their CVs on the Agency's website; notes that the Agency will continue to encourage the representatives of the management board to provide their CVs in order to increase transparency; calls on the Agency to report to the discharge authority by June 2021 with regard to the progress made;

The Agency has encouraged the representative of the Management Board to provide their CVs and increase the transparency of the group via publishing the CVs on the website of the Agency. The Agency has to respect also the right of the members/alternates/observers of the Management Board not to provide their CVs for further publishing as there is no legal obligation for this request.

Internal controls

27. Notes in light of the comments and observations from the discharge authority related to open audit recommendations that at the end of 2019 the implementation rate of audit recommendations was 62 % (21 implemented out of 34 recommendations); notes that in total 32 recommendations were open at the end of 2019 out of which none were 'critical'; notes that in 2020 the Agency took firm and urgent actions aimed at addressing the delayed recommendations, including providing revised target implementation dates; calls on the Agency to report to the discharge authority by June 2021 on the implementation of the audit recommendations;

The Agency continuously monitors and reports on the implementation of audit recommendations. The monitoring report as at 31 December 2020 shows that there were no 'critical' audit recommendations open. As described in section 2.8 of this CAAR, 24 recommendations were implemented in 2020 out of 37 expected, an implementation rate of 65 %. In particular, the implementation rate was 67 % for very important recommendations (target 90 %), and 60 % for important recommendations (target: 80 %). Although still below the target, the overall implementation rate is an improvement compared with that of 2019 (62 %). The Agency is confident that it will maintain the positive trend and will implement all outstanding recommendations without further delay.

2.11 Environment management

An Environmental corporate key performance indicator (KPI) introduced in 2020, measuring the environmental footprint of the Agency. The 'carbon footprint' of the Agency was calculated for the first time in the yearly environmental statement as regards utilities (electricity, water, waste) which led to a CO2 production of 341.04 (t). However, due to extended teleworking as a result of the COVID-19 pandemic, the calculation for the Agency's 2020 CO2 emissions cannot be considered as representative for comparison purposes and for the years to come.

2.12 Assessment by management

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.

2.13 External evaluations

In accordance with eu-LISA's establishing regulation, the Commission carried out the first evaluation of the Agency within three years of the start of its operations, supported by an external contractor. The evaluation was carried out in close cooperation with the MB and the Agency itself. The evaluation was conducted over a period of one year (from March 2015 to March 2016) and covered the period from 1 December 2012 to 30 September 2015.⁷⁴

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, coherence and added value. 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 came to the conclusion that the Agency effectively fulfils its mandate. On the basis of the evaluation, the Commission, after consulting the Management Board, issued recommendations regarding changes to the establishing regulation of the Agency. These recommendations, together with the opinion of the Management Board, were provided to the European Parliament, the Council and the European Data Protection Supervisor.

Out of 30 recommendations listed, 28 have been implemented and 2 are obsolete in the context of the Agency's revised mandate and will not be implemented.

Independent external evaluation of the European Agency for the operational management of large-scale IT systems in the area of freedom, security and justice – eu-LISA, Final evaluation report, 20.05.2016. Available on: https://op.europa.eu/s/o1dR.

3 Assessment of the effectiveness of the internal control framework

3.1 Effectiveness of the internal control framework

3.1.1 Methodology used to assess the effectiveness of the ICF

Internal control is a process that helps an organisation to achieve its objectives and sustain operational and financial performance, respecting rules and regulations, and supports sound decision-making, reducing risks to acceptable levels through cost-effective controls. eu-LISA Management Board Decision No 2019-042 of 19 March 2019 requires the Executive Director to implement the internal control principles and characteristics and to put in place an organisational structure and internal control system that is in accordance with the principles and characteristics adopted by the Management Board.

The internal control components at eu-LISA are the control environment, risk assessment, control activities, information and communication and monitoring activities. The five components are interrelated and must be present and function well at all levels of the organisation in order for internal control over operations to be considered effective. The framework further specifies principles for each component and the subsequent characteristics of each principle that are defined to take into account the specific governance arrangements in the Agency. The internal control principles and characteristics set out constitute the minimum standards referred to in Article 45(2) of eu-LISA Financial Rules.

The Executive Director appointed the Deputy Executive Director to serve as Manager in charge of Risk Management and Internal Control (MRMIC) to support him with the setting up, monitoring, implementation, assessment and reporting on the Internal Control Framework. The Executive Director is mandated to conduct an overall assessment of the efficiency of eu-LISA's Internal Control Framework annually.

The annual assessment comprised the establishment of internal control monitoring criteria for each principle, the identification of internal control strengths and areas of improvements, the assessments at principle and component levels and an overall assessment. The ICF principle baselines and indicators were defined in Annex 2 to the Decision of the Executive Director on the Adoption of Internal Control Monitoring Criteria and the appointment of the MRMIC. To conduct the assessment, the MRMIC collected and analysed data based on defined monitoring criteria from various data sources in the Agency, including the staff survey, the register of exceptions and non-compliance events, internal and external audit reports and other documentation of the Agency's business processes.

3.1.2 Results of the assessment of effectiveness of the ICF

Control environment

The control environment is a set of standards of conduct, processes, and structures that provide the basis for carrying out internal control across an organisation. The Management Board, the Executive Director and management set the tone at the top for the importance of internal control, including expected standards of conduct.

The control environment component of the ICF is present and functioning but some improvements are needed (category 2).

The Agency is committed to integrity and ethical values, and continues to improve controls strengthening the implementation of these values. The Management Board (MB) continued in 2020 to demonstrate independence from eu-LISA management and exercised effectively its oversight of the development and performance of internal control. In 2021, the Agency has planned to strengthen the role of the MB in the ICF, in particular with its ACFC. In a challenging period combining structural changes, staff and budget growth and a

global pandemic, eu-LISA ensured that its structure, reporting lines, authorities and responsibilities were well established and reviewed when and where needed. The Agency also demonstrated its commitment and ability to recruit a large number of new talents, while at the same time putting efforts in the development of its staff. eu-LISA continued to develop its appraisal and promotion processes, and worked on several new strategies and procedures that will help enforce the accountability of individuals for the performance of internal control.

Risk assessment

Risk assessment is a dynamic and iterative process for identifying and assessing risks that could affect the achievement of objectives, and for determining how such risks should be managed.

The risk assessment component is present and functioning but some improvements are needed (category 2).

eu-LISA has well established processes for the establishment of objectives at the different levels of the organisation. The reporting and monitoring of the objectives' achievement is done following procedures and involving the required stakeholders. The Agency improved its oversight of risk tolerance and materiality by including this element in the new rules of procedures for its programmes boards. The Agency also runs risks identification and assessment exercises at various levels (e.g. corporate, programme, project) and will continue to improve this process at unit and entity level, in particular using a new tool deployed in 2020 (Planview Enterprise One). eu-LISA continued to strictly implement its anti-fraud strategy, which included the deployment of new controls. Risks related to changes, in particular those related to the organisational transformation programme and the new development tasks entrusted to the Agency, were particularly assessed and monitored. Through continual improvements of processes and tools, objectives setting and risk management will gain efficiency and effectiveness, reducing also the costs of internal controls.

Control activities

Control activities ensure the mitigation of risks related to the achievement of policies, operational and internal control objectives. They are performed at all levels of the organisation, at various stages of business processes, and across the technology environment. They may be preventive or detective and encompass a range of manual and automated activities as well as segregation of duties.

The control activities component is partially present and functioning, major improvements are needed (category 3).

Control activities have been carried out at different levels as part of existing processes, procedures and governance mechanisms in the different departments and units. The integration of controls into a strategy is expected to facilitate the assessment of their effectiveness and of their costs and benefits, as required by the Financial Rules. There is no current list of controls related to main processes and activities, and listing individual responsibilities, which is impacting the effectiveness of the monitoring and reporting. Despite the amount of controls performed, in particular as part of the Agency's ITIL implementation and project management methodology implementations, major improvements are still needed for Agency to mitigate the risks to the achievements of objectives to acceptable levels, as highlighted by several audits. Controls over technology are present and functioning, and some improvements are also identified and under implementation, such as the implementation of ITIL for the corporate IT infrastructure. The security of both large-scale and corporate IT systems is a key objective of the Agency, and many controls are carried out to ensure that the objective is attained. The Agency has identified areas of improvements and will continue to invest in it in the coming years. In 2020, eu-LISA also advanced several major corporate policies, in particular for the management, control and governance of external service providers, which are expected to add new controls and strengthen existing control activities.

Information and communication

Information delivered by means of internal and external communication is necessary for the organisation to carry out internal control and to support the achievement of objectives. External communication provides the public and stakeholders with information on the Agency's policy objectives and actions. Internal communication provides staff with the information it needs to achieve its objectives and to carry out day-to-day controls.

The information and communication component is present and functioning well (category 1).

The Agency's information and communication activities are following well established procedures and processes that support the achievement of broader organisational objectives. Information relevant to the functioning of internal control are available and overall of the required quality. Internal and external communication procedures and processes should be mobilised to address more specifically the topic of internal control. The adoption of the control strategy could help coordinate the activities related to the implementation of this component.

Monitoring activities

Continuous and specific assessments are used to ascertain whether each of the five components of internal control is present and functioning. Continuous assessments, built into processes at different levels of the organisation, provide timely information on any deficiencies. Findings are assessed and deficiencies are communicated and corrected in a timely manner, with serious matters reported as appropriate.

The monitoring activities component is present and function and but some improvements are needed (category 2).

The Agency is conducting continuous and specific assessments of its internal controls. They are based on self-assessments by staff within their area of responsibility, on reporting activities, on the registration of exceptions and non-compliance events, on the implementation of the anti-fraud strategy, and on audits, both internal and external. The 2021 annual assessment of the effectiveness of the ICF was improved, using the lessons learnt from the previous assessment.

3.1.3 Major corporate risks during the reporting period

The following table shows the list of the ongoing corporate risks at the end of 2020.

Risk ID	Corporate Risk Title	Probability	Impact	Owner
2017-1	Targeted and successful external cyber-attack towards the eu-LISA infrastructure	3 – High	3 – High	Head of Security Unit
2018–1	Measures already taken might not be sufficient to ensure that the sizing of the data centre capacity will enable the Agency to host future systems	2 – Medium	3 – High	Head of Infrastructure Management Unit and Head of Corporate Services Department
2018–2	Organisational instability arising from the Agency restructuring	2 – Medium	2 – Medium	Executive Director and Deputy Executive Director
2018–3	Threat of significant cost increase of communication infrastructure	4 – Very High	3 – High	Head of Infrastructure Management Unit

2018–4	Proper allocation and balancing of resources might be hampered by lack of people, procedures and tools. Increasing discrepancies between statutory staff present and activities to be undertaken, might negatively affect the Agency's work and possibly its business continuity. Year n-1 budget implementation/ cancellation of appropriations	3 – High	3 – High	Management Committee Members
2018–6	Breach of confidentiality: accidental public exposure of sensitive procurement information	2 – Medium	3 – High	Head of Security Unit and Head of Infrastructure Management Unit
2019-3	Potential non-compliance with Health & Safety requirements and regulations due to lack of Health & Safety risk assessment	3 – High	3 – High	Head of Corporate Services Unit
2019–5	Lack of physical space available on time to accommodate crucial needs of the Agency	1-Low	4 – Very High	Head of Corporate Services Department and Head of Operations Department
2019–6	Due to the complexity of the entrusted programmes and projects, due to the specific sourcing strategy and considering the current level of the project management capabilities (resources, process compliance, supporting tools and decision-making mechanisms), the Agency might not be able to - to fulfil its strategic objectives - to establish, maintain and exert full control over the development of the new generation of large-scale IT systems	3 – High	3 – High	Head of Programme and Project Delivery Unit
2019-7	The Agency might be insufficiently prepared for the new Transversal Procurement paradigm that requires increased effort to manage the relationships of the different vendors involved	3 – High	3 – High	Head of Vendor & Contract Management Sector
2019–8	Technical support model and capacity: the significant increase of requests addressed to the Agency's technical support functions after the entry into operation of new systems may lead to severe degradation of the technical support for new and existing systems	2 – Medium	4 – Very High	Head of Systems Operations Unit and Head of Security Unit and Head of HR Unit
2019-9	Management of numerous people onboarded at once	3 – High	2 – Medium	Head of HR Unit

The source for the corporate risks for the year 2020 is the backlog of open items from the previous years and the annual risk collection and assessment phase, performed in the third quarter of 2019 by eu-LISA's Management (Management Committee Members and Heads of Sector). The new risks raised were assessed and confirmed during the annual corporate risks workshop at the end of 2019 and a risk owner was nominated during 2020.

Every quarter of 2020, the EPMO presented to the Management Committee the status of the risks and an update on their probability and impact. The action plans were maintained by the respective owners until the risk was closed.

In addition, during the reporting period, two corporate risks were closed and three materialised, thus were transformed into issues..

3.1.4 Report on the implementation of the Action Plan for the Anti-fraud Strategy for the year 2020⁷⁵

The revised Anti-fraud Strategy comprises three strategic objectives for the period 2019–2021:

- Reinforce anti-fraud culture in the Agency
- Set and maintain a high level of ethics in line with the activities of eu-LISA
- Develop intelligence for prevention and detection purposes

IAC carried out the regular monitoring of the implementation of the action plan attached to the Strategy. The Action Plan under review had 13 actions, each of them aimed to mitigate one or several of the fraud risks identified. The report summarises responses received from action owners following several meetings between IAC and action owners. IAC, based on the assertions of the action owners, performed assurance procedures and gathered evidence in order to define the status of implementation and compute the following interim performance indicators:

Objectives	Indicators	Results
1. Reinforce the anti-fraud culture in the Agency.	% of financial actors who correctly respond to questions on prevention / detection of fraud issues (source: statistics from mandatory awareness trainings - HRU)	Data not available. Starting 2021, mandatory trainings on ethics, integrity and anti-fraud will be implemented and related statistics made available.
2. Set and maintain a high level of ethics in line with the activities of eu-LISA	Annual trend of ethical issues (source: statistics from register of administrative inquiries - Legal Officer)	Year 2019: one (1) Year 2020: two (3 administrative inquiries, 1 preliminary assessment)
3. Develop intelligence for prevention and detection purposes	% transactions (i.e. procurement procedures, commitments, payments) detected with potential fraud (source: statistics from list of commitments, payments, procurements vs for instance ECA findings and/or sample ex-post checks - FPU)	2.47% of transactions (i.e. 39 payments) were identified as high risk for potential fraud and subjected to further review. Based on the review of the 39 transactions and related supporting evidence, IAC concluded that there was no factual indication of fraud that would warrant reporting to OLAF. However, IAC identified opportunities for internal control improvements and recommended actions to be taken in this regard.

⁷⁵ IAC Monitoring Report on the implementation of the Action Plan to the Anti-fraud Strategy for the year 2020, ref. Ares(2021)653622 - 27/01/2021.

The results of the monitoring exercise for 2020 show that the Agency implemented 7 out of 13 actions due, which gives an implementation rate of 54 %. The overall quantitative implementation of the Action Plan to the Anti-fraud Strategy of eu-LISA 2019–2021 appears slightly delayed for the year 2020. The Agency's senior management's has planned to review the Action Plan schedule to ensure its full implementation by the end of 2021.

3.2 Conclusions of the assessment of the effectiveness of the internal control framework

The results of the overall assessment show that the internal control system of eu-LISA is present, functioning and effective but some improvements are needed (category 2).

eu-LISA has a well-established **control environment**, composed of a set of standards of conduct, processes and structures, that provide the basis for carrying out internal controls. The Agency's governing bodies and management effectively and independently take on their role related to internal controls. eu-LISA is actively pursuing the implementation of improvements to the control environment, in particular concerning the individual responsibility for internal controls.

eu-LISA can rely on its strategy and on **risks assessment** processes to effectively specify its objectives and identify and analyse risks. The Agency has identified that its risk assessment would benefit from being more dynamic and iterative, and has already identified the tools and processes that would support this objective.

The Agency uses strong control frameworks to ensure the mitigation of risks related to the achievements of its objectives, in particular its operational business objectives. Within these frameworks, control activities are performed at all levels of the organisation, at the various stages of the business processes (e.g. systems development, systems operation) and many are automated. eu-LISA is investing significant resources to further strengthen its control activities, in the areas where it has identified that major improvements are needed. The presence and functioning of the control environment component and of the risk assessment components contribute to the mitigation of the partial presence of the control activities component to the overall assessment of the ICF effectiveness.

The Agency effectively **communicates** externally to its stakeholders, including the public, and provide assurance about the achievements of its policy objectives. Internally, the Agency communicates to its staff, ensuring that they receive all needed information for the effective completion of their tasks, including controls.

eu-LISA is conducting continuous and specific **monitoring** and assessments of its internal controls, to assess the presence and functioning of the five components of its internal control framework, identify strengths and deficiencies, assess them and communicate the results.

3.3 Statement of the Manager in charge of Risk Management and Internal Control

I, the undersigned,

Manager in charge of Risk Management and Internal Control within 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 Manager in charge of Risk Management and Internal Control, I declare that, in accordance with the eu-LISA Internal Control Framework, I have reported my advice and recommendations on the overall state of internal control in the Agency to the Executive Director.

I hereby certify that the information provided on the internal control system in the present Annual Activity Report and its annexes is, to the best of my knowledge, accurate, reliable and complete.

Tallinn, 29 June 2021

Luca Tagliaretti

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Digitally signed by: LUCA TAGLIARETTI (EU-LISA) Date: 2021-06-29 12:55:12

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4 Management assurance

4.1 Review of the 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 Agency's management is reasonably confident 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 Agency's management recognises the need to maintain a high level of efficiency in its internal control framework and to pursue the monitoring and assessment of the implementation of the ICF principles and components to ensure the achievement of the objectives set out in the Agency's establishing regulation and its long-term strategy.

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 or significant instances of overriding controls or deviations from the established regulatory framework are thoroughly explained, registered and reported in accordance with the principle of transparency. Any exception must be documented, justified and approved at the appropriate level before any action is taken.

In 2020, 19 exceptions and 4 non-compliance events reports were registered. The 2020 register of exceptions was analysed by the Management of the Agency at the beginning of 2021. This analysis was also used to identify deficiencies as part of the ICF effectiveness assessment. Drawing from the conclusions of the exceptions register review, the standard operating procedure for exceptions and non-compliance events will be updated in 2021.

Building block 2: External audit results

European Court of Auditors' statement of assurance provided to the European Parliament and the Council

Opinion on the reliability of the accounts

In the Court's opinion, the accounts of the Agency for the year ended 31 December 2019 present fairly, in all material respects, the financial position of the Agency at 31 December 2019, 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.

Opinion on the legality and regularity of revenue underlying the accounts

In the Court's opinion, revenue underlying the accounts for the year ended 31 December 2019 is legal and regular in all material respects.

Opinion on the legality and regularity of payments underlying the accounts

In the Court's opinion, payments underlying the accounts for the year ended 31 December 2019 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 2019 did not contain any reservation.

Conclusion

Based on sections 3 and 4 herein, it can be concluded that there are no significant weaknesses in internal controls that might have an impact on the declaration of assurance.

4.2 Reservations

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

5 Declaration of assurance

I, the undersigned,

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.76

I further 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, *ex post* controls (the audits of the Internal Audit Service of the European Commission, the audits of the Internal Audit Capability of eu-LISA and the audits of the European Court of Auditors) for the years prior to the year of this declaration.

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

Tallinn, 30 June 2021

Digitally signed by:

KRUM EMILOV GARKOV (EU-LISA) Date: 2021-06-30 08:41:17 UTC

Krum Garkov

⁷⁶ True and fair in this context means a reliable, complete and correct view of the state of affairs in the Agency.

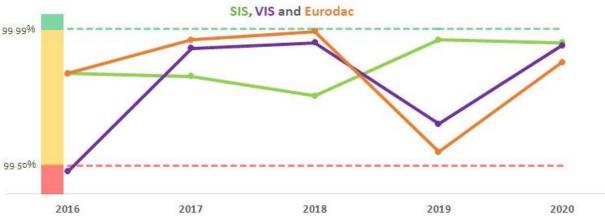
Annex I. Core business statistics

Operational management of the systems

Systems availability

	KPI	Target	2016	2017	2018	2019	2020
3	Eurodac central system availability	Green ≥ 99.99 % 99.99 %> Amber ≥ 99.50 % Red <99.50 %	99.83 %	99.95%	99.98%	99.55%	99.87%
6	SIS central system availability	Green ≥ 99.99 % 99.99 %> Amber ≥ 99.50 % Red <99.50 %	99.83 %	99.82 %	99.75%	99.95%	99.94%
8	VIS central system availability	Green ≥ 99.99 % 99.99 %> Amber ≥ 99.50 % Red <99.50 %	99.48%	99.92 %	99.94 %	99.65%	99.93%

Availability of the central systems:

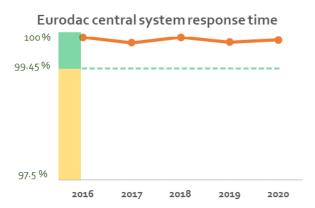


The systems availability target is not precisely defined in the legal instruments governing the systems. The green target of 99.99 % was established by the Agency because the systems it manages are defined as high-availability systems.

Response time

	KPI	Target	2016	2017	2018	2019	2020
7	SIS central system response time	Green ≥ 99.5 %, 99.5 %> Amber ≥ 99 % Red <99 %	99.88%	99.66 %	99.9 %	99.84%	99.86%
9	VIS central system response time	Green = 100 % 100 %> Amber ≥ 90 % Red <90 %	98.64 %	99.24%	100 %	97-79 %	99.98%
4	Eurodac central system response time	Green ≥ 99.45 % 99.45 %> Amber ≥ 90 % Red < 90 %	99.99 %	99.90 %	99.99%	99.91%	99.95%





SIS central system response time

Standard queries are split into categories. Category 1 represents all single and multiple queries classified as 'exact', because exact information is provided in search fields. Inexact or fuzzy queries are excluded from category 1. The standard response time for category 1 queries is 1 second. For other queries, the standard response time is 3 seconds. The response time for category 1 queries is the core indicator to assess performance as it is the most representative query. The KPI 7 indicator is green if more than 99.5 % of category 1 queries have a response time within 1 second, amber if between 99.5 % and 99 % of category 1 queries have a response time within 1 second and red if fewer than 99 % of category 1 queries have a response time within 1 second.

VIS central system response time

The indicator value is the share of total response time within the contractual limits for each business group (asylum, border, consular, law enforcement and territory). There are three contractual limits for the VIS: the peak per hour indicator, the SLA breach indicator and the records indicator. KPI 9 is the result of the calculation for all business groups and all contractual limits. The indicator is green if the value equals 100 %, amber if the value is between 90 % and 100 %, and red if the value is below 90 %.

Eurodac central system response time

System critical business functions are grouped into two categories: high-priority transactions and normal transactions. The standard response time for high-priority transactions is 1 hour, for normal transactions it is 24 hours. For each category, an indicator is monitored. KPI 4 is the average of the indicator for high-priority transactions and the indicator for normal transactions. The indicator is green if 99.5 % of transactions are within the standard response time, amber if between 90 % and 99.5 % of transactions are within the standard response time, red if fewer than 90 % of transactions are below the standard response time.

Availability of the communication infrastructure

	KPI	Target	2016	2017	2018	2019	2020
5	WAN availability (for SIS and VIS)	Green ≥ 99.99 % 99.99 %> Amber ≥ 99.50 % Red <99.50 %	100 %	99.9900%	99.9900 %	99.9926%	99.9931%



Operation support and training

	KPI	Target	2020
19	Customer satisfaction: % of MS users satisfied or very satisfied with the overall service provided by the eu-LISA Service Desk	≥ 80 %	95%
20	eu-LISA Service Desk performance	≥75%	99.9 %
16	Training for Member States on core systems	> 4	4.5

Security

	KPI	Target	2020
1	Percentage of security objectives implemented as defined per the legislation	100 %	100 %
2	Number of emergency drills/security and business continuity related exercises performed annually	2	2

Governance and compliance

	KPI	Target	2020
21	Assessing completion of projects against a baseline of defined quality/cost/time parameters and taking into account the project tolerances	< 10 %	9.19%
22	Project management: assessing the compliance of completed projects against eu-LISA project management methodology during the project lifecycle	Small projects: > 75 % Medium projects: > 80 % Large projects: > 85 %	No small project completed and assessed in 2020 Medium projects: 71 % Large projects: 73.5 %
23	(A) Percentage of audit recommendations implemented within stipulated deadlines (B) Number and age of outstanding recommendations	(A) critical = 100 % Very important ≥ 90 % Important ≥ 80 % (B) ≤ four past due for less than six months ≤ two past due between six months and one year ≤ one past due for more than one year	N/A 67 % 60 % 2 1

Administration and general support

	KPI	Target	2020
10	Cancellation rate of payment appropriations	< 5 %	13.6 %
11	Rate (%) of budgetary commitments implementation	95-99 %	99.1%
12	Rate (%) of payment implementation	> 95 %	99.0%
13	Ratio (%) of administrative resources and ratio (%) of operational resources compared to all human resources (staff and SNEs)	Administrative: 20 % Operational: 70 %	16.5 % 72.5 %
14	Ratio (%) of payments completed within statutory deadlines	> 87.5 %	95.9 %
15	Environmental indicator: carbon footprint	baseline	341.04 tons
17	Efficiency of the procurement process	< 25 %	11 %
18	Acquisition management: procurement projects on schedule	> 60 %	163.6 %
19	Customer satisfaction: % of MS users satisfied or very satisfied with the overall service provided by the eu-LISA Service Desk	≥80%	95%
20	eu-LISA Service Desk performance	≥ 75 %	99.9 %
24	Absenteeism rate within the reporting period: - Average number of sick leave days per staff, - Percentage of staff on a long sick leave, - Percentage of staff who did not use a sick leave	< 15 days per staff < 10 % > 15 %	5.6 days, 4.4 %, 52.9 %
25	Annual percentage staff turnover	≤ 5 %	3.7 %
26	Annual percentage occupancy rate	> 94 %	91 %
27	Talent retention index	> 0	0.9
28	Staff engagement level	≥ 63 %	7.4 (index)
29	eu-LISA external communication impact	Website: maintain baseline	+ 12 % year-on-year
		Social media: +200 followers per platform per year	+477 (Twitter) + 1 888 (LinkedIn) + 332 (Facebook)
		Engagement events: satisfaction > 90 %	4.2/5 (84 %)
		Participation at events: > 95 %	105 %
30	eu-LISA internal communication impact: - participation in the survey - general satisfaction with internal communication channels and actions	> 51 % > 70 %	52 % 93 %

KPI 29 – Participation at events: the value was calculated by measuring the number of active connections to the online platform of the conference.

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 2020 in millions of euros. The Management Board approved one amendment to the budget.

Budget Chapter			Commitment	appropriations			Payment ap	propriations	
		Initial budget	Transfers	Amending budget	Final budget	Initial budget	Transfers	Amending budget	Final budget
A-11	Salaries and allowances	34.800	-7.197	-0.268	27.334	34.800	-7.197	-0.268	27.334
A-12	Expenditure related to recruitment	0.380	-0.299		0.081	0.380	-0.299	0.000	0.081
A-13	Mission Expenses	0.426	-0.080		0.346	0.426	-0.080	0.000	0.346
A-14	Socio-Medical Infrastructure	0.640	0.528		1.168	0.640	0.528	0.000	1.168
A-15	Training for Staff	0.553	0.125		0.677	0.553	0.125	0.000	0.677
TITLE 1	- STAFF EXPENDITURE	36.798	-6.924	-0.268	29.606	36.798	-6.924	-0.268	29.606
A-20	Expenditure for premises	1.043	1.179		2.222	1.043	1.179	0.000	2.222
A-21	Corporate IT & Telecom	1.700	1.425		3.125	1.700	1.425	0.000	3.125
A-22	Movable Property and Associated Costs	0.246	0.261		0.507	0.246	0.261	0.000	0.507
A-23	Current Administrative Expenditure	1.278	-0.598		0.681	1.278	-0.598	0.000	0.681
A-24	Postage	0.040	-0.025		0.015	0.040	-0.025	0.000	0.015
A-25	Management Board	0.970	-0.961		0.009	0.970	-0.961	0.000	0.009
A-26	Information and Publications	1.532	-0.808		0.724	1.532	-0.808	0.000	0.724
A-27	External Support Services	4.606	1.826		6.432	4.606	1.826	0.000	6.432
A-28	Security	3.050	0.446		3.496	3.050	0.446	0.000	3.496
	– INFRASTRUCTURE AND TING EXPENDITURE	14.465	2.746		17.211	14.465	2.746	0.000	17.211
В3-о	Infrastructure	59.021	2.585		61.606	51.243	-12.722	0.000	38.521
В3-1	Applications	123.110	1.922	-0.735	124.297	86.733	18.643	36.685	142.062
B ₃ -8	Operational support activities	7.728	-0.329		7-399	7.728	-1.744	0.000	5.984
TITLE 3	– OPERATIONAL DITURE	189.859	4.178	-0.735	193.302	145.704	4.178	36.685	186.567
TOTAL		241.122	0.000	-1.003	240.119	196.967	0.000	36.417	233.384

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

As far as the 2020 appropriations (funding source C1) are concerned.

BUDGET TITLE	СОМ	MITMENTS (C1)			PAYMENTS (C1)
	Budgeted (in EUR million)	Consumed (in EUR million)	%	Budgeted (in EUR million)	Consumed (in EUR million)	%
Title 1 – Staff expenditure	29.606	27.323	92.2 %	29.606	27.323	92.2 %
of which, executed		27.323	92.2 %		26.781	90.5 %
of which, automatic carry-forward		_	_		0.541	1.8 %
Title 2 — Infrastructure and Operating expenditure	17.211	17.211	100.0 %	17.211	17.211	100.0 %
of which, executed		17.211	100.0 %		6.995	40.6 %
of which, automatic carry-forward		_	_		10.217	59.4 %
Title 3 – Operational expenditure	193.302	193.302	100.0 %	186.567	186.565	100.0 %
of which, executed		137.016	70.9 %		186.565	100.0 %
of which, non-automatic carry-over		56.286	29.1 %			
TOTAL EUR	240.119	237.836	99.0 %	233.384	231.099	99.0 %
of which, executed		181.550	75.6%		220.341	94.4 %
of which, automatic carry-forward		0.000	_		10.758	4.6 %
of which, non-automatic carry-over		56.286	23.4 %			

Implementation of the budget from other funding sources

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

- from appropriations carried over to 2020 by an MB decision (funding source C3);
- from internal assigned revenue (funding source C4);
- 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 a contribution from the associated countries pursuant to Article 46(3)(b) of the establishing regulation (funding source Ro, Title 3 only).

ı	Budget Title	Fund Source		Commitment			Payment	
	_		Budgeted (in EUR million)	Consumed (in EUR million)	% Commit	Budgeted (in EUR million)	Consumed* (in EUR million)	% Payment
	G. (C	C1	29.606	27.323	92.3%	29.606	26.781	90.5%
A-1	Staff expenditure	C4	0.000	0.000	100.0 %	0.000	0.000	100.0 %
	·	C8	0.455	0.366	80.4 %	0.455	0.366	80.4 %
		Subtotal	30.062	27.689	92.1 %	30.062	27.148	90.3 %
	Infrastructure	C1	17.211	17.211	100.0 %	17.211	6.995	40.6 %
A-2	and Operating	C4	0.005	0.005	100.0 %	0.005	0.005	100.0 %
	Expenditure	C8	9.267	8.032	86.7 %	9.267	8.032	86.7 %
		Subtotal	26.484	25.249	95.3 %	26.484	15.032	56.8 %
Во-3		C1**	193.302	193.302	100.0 %	186.567	186.565	100.0 %

E	Budget Title	Fund		Commitment			Payment	
	j	Source	Budgeted (in EUR million)	Consumed (in EUR million)	% Commit	Budgeted (in EUR million)	Consumed* (in EUR million)	% Payment
		C ₃	159.076	159.076	100.0 %			
		C ₄	0.015	0.015	100.0 %	0.015	0.015	100.0 %
	Operational Expenditure	C8	264.820	247.362	93.4 %			
		Ro	13.028	0.325	2.5%	13.028	0.325	2.5 %
		Subtotal	630.241	600.079	95.2 %	199.610	186.904	93.6 %
	ALL	TOTAL	686.786	653.016	95.1 %	256.155	229.084	89.4%

^{*} for Title 3 C1, EUR 68.248 million refer to payments of commitments of the year. The remainder, amounting to EUR 118.316 million was used to cover commitments from previous years

Budgetary transfers

During 2020, the following internal transfer operations were performed under Article 26 of the Agency's Financial Rules. The rationale for the transfers was to ensure optimal budget allocation of commitment and payment appropriations.

The table summarises the budgetary transfers performed in 2020.

Budget transfers between titles are indicated in full value in euros.

	Budget title	Title 1 — staff	expenditures		structure and xpenditures	Title 3 — C	perational ditures
Budgetary transfer	Reference	Commitment appropriation	Payment appropriation	Commitment appropriation	Payment appropriation	Commitment appropriation	Payment appropriation
1	LIS.3057	0	0	0	0	0	0
2	LIS.3072					0	0
3	LIS.3074	-3 000 000	-3 000 000	3 000 000	3 000 000	0	0
4	LIS.3078	-642 000	-642 000	642 000	642 000	0	0
	LIS.3088					0	0
5	LIS.3089			0	0	0	0
6	LIS.3092					0	0
7	LIS.3094					0	0
8	LIS.3097					0	0
	LIS.3100					0	0
9	LIS.3101			0	0	0	0
10	LIS.3106	0	0	0	0	0	0
	LIS.3114	-2 856 206	-2 856 206			2 856 206	2 856 206
11	LIS.3115			0	0	0	0
42	LIS.3123	-425 790	-425 790	-895 633	-895 633	1 321 423	1 321 423
12	LIS.3124					0	0
Т	otal	-6 923 996	-6 923 996	2 746 367	2 746 367	4 177 629	4 177 629

No transfer under Article 26(2) of the Agency's Financial Rules was performed.

^{**} Commitment consumed include non-automatic carry-over of EUR 56.286 million

Detailed list of budgetary transfers

Budgetary transfer No. Reference Date Budget Line Commitment Appropriation Appropr
A01402 European school 551 451.16 551 4 A02330 Other Running Costs -40 000.00 -40 0 A02330 Other meetings 70 000.00 70 0 A02800 Corporate Security -30 000.00 -378 5 B03010 Wide area networks 0.00 378 5 B03811 Consultancies and studies 0.00 378 5 B03010 Wide area networks -3 450 000.00 -6 000 0 B03100 SIS II projects 0.00 6 000 0 B03810 External Support 3 450 000.00 -3 000 0 A01100 TA salaries and allowances -3 000 000.00 -3 000 0 A02320 Legal Expenses 20 000.00 20 0 A02700 External Support Services 2 980 000.00 2 980 0 B03110 VIS/BMS projects 0.00 -7 180 0
A02330 Other Running Costs —40 000.00 —40 00 A02330 Other meetings 70 000.00 70 0 A02800 Corporate Security —30 000.00 —30 00 B03010 Wide area networks 0.00 378 5 B03811 Consultancies and studies 0.00 378 5 B03010 Wide area networks —3 450 000.00 —6 000 0 B0310 SIS II projects 0.00 6 000 0 B03810 External Support 3 450 000.00 —3 000 0 A01100 TA salaries and allowances —3 000 000.00 —3 000 0 A02320 Legal Expenses 20 000.00 2980 0 A02700 External Support Services 2 980 000.00 2 980 0 B03110 VIS/BMS projects 0.00 —7 180 0
LIS.3057 LIS.3057 LIS.3057 LIS.3057 LIS.3057 LIS.3057 LIS.3057 LIS.3072 LIS.3072 LIS.3074 LIS.3074 LIS.3074 Ao2510 Other meetings For ooc.00 Fo
Ao2800 Corporate Security —30 000.00 —30 00 Bo3010 Wide area networks 0.00 —378 5 Bo3811 Consultancies and studies 0.00 378 5 Bo3010 Wide area networks —3 450 000.00 —6 000 0 Bo3100 SIS II projects 0.00 6 000 0 Bo3810 External Support 3450 000.00 —3 000 00 Ao2320 Legal Expenses 20 000.00 2980 0 Ao2700 External Support Services 2980 000.00 2980 0 Bo3110 VIS/BMS projects 0.00 —7 180 0
Bo3010 Wide area networks Bo3010 Wide area netw
Bo3811 Consultancies and studies Do.00 378 5 Bo3010 Wide area networks Do.00 6 000 0 Bo3100 SIS II projects Do.00 6 000 0 Bo3810 External Support A01100 TA salaries and allowances A02320 Legal Expenses A02700 External Support Services Bo3000 Shared System Infrastructure Bo3110 VIS/BMS projects Do.00 378 5 Do.00 378
Bo3010 Wide area networks
2 LIS.3072 19/03/2020 Bo3100 SIS II projects 0.00 6 000 0 Bo3810 External Support 3 450 000.00 A01100 TA salaries and allowances -3 000 000.00 -3 000 0 A02320 Legal Expenses 20 000.00 20 0 A02700 External Support Services 2 980 000.00 2 980 0 Bo3100 VIS/BMS projects 0.00 -7 180 0
Bo3810 External Support 3 450 000.00 A01100 TA salaries and allowances -3 000 000.00 -3 000 0 A02320 Legal Expenses 20 000.00 20 0 A02700 External Support Services 2 980 000.00 2 980 0 Bo3000 Shared System Infrastructure 0.00 -3 000 0 Bo3110 VIS/BMS projects 0.00 -7 180 0
A01100 TA salaries and allowances —3 000 000.00 —3 000 00 A02320 Legal Expenses 20 000.00 20 0 A02700 External Support Services 2 980 000.00 2 980 0 B03000 Shared System Infrastructure 0.00 —3 000 0 B03110 VIS/BMS projects 0.00 —7 180 0
A02320 Legal Expenses 20 000.00 20 00 A02700 External Support Services 2 980 000.00 2 980 00 B03000 Shared System Infrastructure 0.00 -3 000 0 B03110 VIS/BMS projects 0.00 -7 180 0
A02700 External Support Services 2 980 000.00 2 980 0 B03000 Shared System Infrastructure 0.00 -3 000 0 B03110 VIS/BMS projects 0.00 -7 180 0
Bo3000 Shared System Infrastructure 0.00 -3 000 0 Bo3110 VIS/BMS projects 0.00 -7 180 0
3 LIS.3074 17/04/2020 B03110 VIS/BMS projects 0.00 -7 180 0
Bo3110 VIS/BMS projects 0.00 -7 180 0
Bo3111 VIS/BMS operational maintenance 0.00 4 030 0
Bo3130 EES projects 0.00 5 000 0
Bo ₃ 811 Consultancies and studies 0.00 1150 0
A01100 TA salaries and allowances —647 000.00 —647 0
A01110 CA salaries and allowances -40 000.00 -40 0
A01400 Annual medical check-up 45 000.00 45 0
Ao2000 Expenditure for premises 800 000.00 800 0
A02100 Corporate IT & Telecom 204 228.00 204 2
A02300 Office Supplies -25 000.00 -25 0
4 LIS.3078 04/06/2020 A02320 Legal Expenses 40 000.00 40 0
A02400 Postage -25 000.00 -25 0
A02700 External Support Services —192 228.00 —192 2
Ao2800 Corporate Security —160 000.00 —160 0
Bog811 Consultancies and studies 30 000.00 30 0
Bo ₃ 812 Quality assurance -30 000.00 -30 0
Bo3100 SIS II projects 0.00 2 2
Bo3101 SIS II operational maintenance 0.00 —2 2
LIS.3088 29/07/2020 B03110 VIS/BMS projects 0.00 258 3
Bo3111 VIS/BMS operational maintenance 0.00 -258 3
A02000 Expenditure for premises 200 000.00 200 0
5 A02100 Corporate IT & Telecom 725 000.00 725 0
A02331 HR fees and charges —400 000.00 —400 0
LIS.3089 29/07/2020 A02500 MB Meetings -525 000.00 -525 0
Ao2600 Information and Publications -715 000.00 -715 0
A02700 External Support Services -53 672.00 -53 6
Ao2800 Corporate Security 768 672.00 768 6

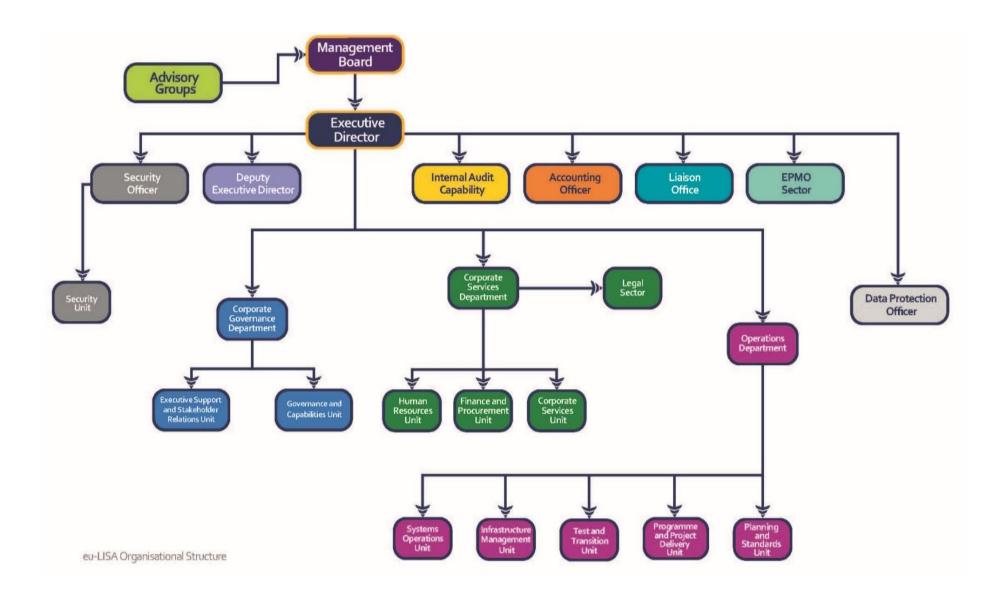
			BUDGETARY TRANSFERS in 2020		
Budgetary transfer No.	Reference	Date	Budget Line	Commitment Appropriation	Payment Appropriation
			Bo3000 Shared System Infrastructure	0.00	-1 000 000.00
			Bo3001 System security and business continuity	0.00	700 000.00
			Bo3010 Wide area networks	0.00	-1 000 000.00
			Bo3101 SIS II operational maintenance	0.00	3 124 418.50
			Bo3102 SIS II recast	0.00	-1 000 000.00
			Bo3111 VIS/BMS operational maintenance	0.00	2 000 000.00
			Bo3140 ETIAS projects	0.00	-500 000.00
			Bo3150 ECRIS projects	0.00	-1 134 000.00
			Bo ₃ 8 ₂ o Advisory Groups	0.00	-509 000.00
			Bo ₃ 8 ₂ 1 Other meetings and missions	0.00	-22 184.59
			Bo ₃ 8 ₂₂ Schengen evaluations	0.00	-20 889.26
			Bo ₃ 8 ₃ o Operational learning and development	0.00	-348 015.40
			Bo ₃ 8 ₃ 1 Training for Member States	0.00	-290 329.25
			Bo3000 Shared System Infrastructure	0.00	-1 000 000.00
			Bo3001 System security and business continuity	-197 500.00	0.00
			Bo3003 Interoperability	-73 854.00	-7 300 000.00
			Bo3010 Wide area networks	0.00	-830 000.00
			Bo3100 SIS II projects	0.00	-1 000 000.00
			Bo3101 SIS II operational maintenance	-2 814 004.00	0.00
			Bo3102 SIS II recast	0.00	-401 000.00
			Bo3111 VIS/BMS operational maintenance	7 494 282.00	1 140 000.00
C	LIC	1-01	Bo3120 EURODAC projects	-1 200 000.00	-360 000.00
6	LIS.3092	21/08/2020	Bo3121 EURODAC operational maintenance	255 000.00	0.00
			Bo3130 EES projects	0.00	12 351 800.00
			Bo3140 ETIAS projects	-1 165 462.00	-1 000 000.00
			Bo3150 ECRIS projects	-1 165 462.00	-800 000.00
			Bo3810 External Support	-600 000.00	-740 000.00
			Bo ₃ 8 ₁₁ Consultancies and studies	0.00	-20 800.00
			Bo ₃ 8 ₁₂ Quality assurance	0.00	-40 000.00
			Bo ₃ 8 ₂ o Advisory Groups	-509 000.00	0.00
			Bo ₃ 8 ₂ 1 Other meetings and missions	-24 000.00	0.00
			Bo3000 Shared System Infrastructure	3 450 000.00	0.00
			Bo3100 SIS II projects	845 000.00	0.00
			Bo3101 SIS II operational maintenance	-1 995 000.00	0.00
7	LIS.3094	03/09/2020	Bo3111 VIS/BMS operational maintenance	-1 150 000.00	0.00
			Bo3121 EURODAC operational maintenance	-1 150 000.00	0.00
			B03122 EURODAC recast	0.00	-3 000 000.00
			Bo3130 EES projects	0.00	3 000 000.00
			Bo3000 Shared System Infrastructure	0.00	400 000.00
			Bo3101 SIS II operational maintenance	3 639 072.73	0.00
8	LIS.3097	28/09/2020	Bo3110 VIS/BMS projects	395 460.00	0.00
			Bo3140 ETIAS projects	-3 089 072.73	0.00
			Bo3820 Advisory Groups	-395 460.00	-400 000.00

			BUDGETARY TRANSFERS in 2020		
Budgetary transfer No.	Reference	Date	Budget Line	Commitment Appropriation	Payment Appropriation
			Bo ₃ 8 ₃ o Operational learning and development	-250 000.00	0.00
			Bo ₃ 8 ₃ 1 Training for Member States	-300 000.00	0.00
			A02100 Corporate IT & Telecom	5 262.59	5 262.59
	LIS.3100	26/10/2020	A02510 Other meetings	-5 262.59	-5 262.59
	LI3.3100	20/10/2020	Bo3001 System security and business continuity	-14 535.32	0.00
			Bo3010 Wide area networks	14 535.32	0.00
			A01403 Social activities	-53 626.65	-53 626.65
			A01500 Training for staff	53 626.65	53 626.65
			Ao2ooo Expenditure for premises	180 000.00	180 000.00
			A02100 Corporate IT & Telecom	275 106.58	275 106.58
			A02200 Other Technical Equipment and Installation	-106 797.40	-106 797.40
			A02210 Furniture and Office Equipment	358 690.82	358 690.82
9			A02500 MB Meetings	-257 000.00	-257 000.00
			A02700 External Support Services	-450 000.00	-450 000.00
	LIS.3101	26/10/2020	Bo3000 Shared System Infrastructure	205 454.05	0.00
			Bo3010 Wide area networks	9 649.88	0.00
			Bo3111 VIS/BMS operational maintenance	0.00	600 000.00
			Bo3122 EURODAC recast	0.00	-5 640 000.00
			Bo ₃ 1 ₃ 0 EES projects	0.00	5 195 000.00
			Bo ₃ 811 Consultancies and studies	-30 000.00	0.00
			Bo3812 Quality assurance	-60 000.00	0.00
			Bo3820 Advisory Groups	0.00	-25 000.00
			Bo ₃ 8 ₃ 1 Training for Member States	-125 103.93	-130 000.00
			A01200 Recruitment and Reassignment Expenditure	-100 000.00	-100 000.00
			A01500 Training for staff	100 000.00	100 000.00
			A02100 Corporate IT & Telecom	146 125.79	146 125.79
			A02700 External Support Services	-146 125.79	-146 125.79
			Bo3000 Shared System Infrastructure	0.00	2 211 000.00
			Bo3002 Back-up site – running costs	0.00	62 312.00
			Bo3oo3 Interoperability	0.00	422 000.00
			Bo3010 Wide area networks	180.00	2 795 642.78
			Bo3100 SIS II projects	39 800.00	4 212 213.15
10	LIS.3106	20/11/2020	Bo3101 SIS II operational maintenance	170 000.00	700 000.00
10	LI3.3100	20/11/2020	Bo3102 SIS II recast	0.00	-400 000.00
			Bo3111 VIS/BMS operational maintenance	0.00	4 895 042.37
			Bo3120 EURODAC projects	0.00	-160 000.00
			Bo3130 EES projects	0.00	-11 898 919.33
			Bo3140 ETIAS projects	0.00	-922 000.00
			Bo3150 ECRIS projects	0.00	-1 652 000.00
			Bo ₃ 810 External Support	-209 980.00	-37 718.20
			Bo ₃ 811 Consultancies and studies	0.00	-11 929.99
			Bo ₃ 812 Quality assurance	0.00	-20 000.00
			Bo ₃ 8 ₂₁ Other meetings and missions	0.00	-125 000.00

Budgetary	Reference	Date	Budget Line	Commitment	Payment
transfer No.			j	Appropriation	Appropriation
			Bo3822 Schengen evaluations	0.00	-24 493.78
			Bo ₃ 8 ₃ 1 Training for Member States	0.00	-46 149.00
			A01110 CA salaries and allowances	-2 856 205.91	-2 856 205.91
	LIS.3114	17/12/2020	Bo3000 Shared System Infrastructure	2 856 205.91	2 856 205.91
			A02100 Corporate IT & Telecom	74 780.99	74 780.99
			A02200 Other Technical Equipment and Installation	10 044.00	10 044.00
			A02300 Office Supplies	-7715.33	-7 715.33
			Ao2500 MB Meetings	-77 109.66	-77 109.66
			Bo3000 Shared System Infrastructure	0.00	-2 988 945.79
			Bo3001 System security and business continuity	0.00	14 202.63
			Bo3002 Back-up site – running costs	0.00	6 600.00
			Bo3003 Interoperability	0.00	1 303 904.31
			Bo3010 Wide area networks	0.00	-1 036 748.32
			Bo3100 SIS II projects	1 181 798.66	-1 962 606.94
11		17/12/2020	Bo3101 SIS II operational maintenance	0.00	-758 882.04
	LIS.3115		Bo3110 VIS/BMS projects	0.00	-1 644 296.99
			Bo3111 VIS/BMS operational maintenance	0.00	-732 901.79
			Bo3120 EURODAC projects	0.00	-132 356.40
			Bo3121 EURODAC operational maintenance	0.00	-32 829.26
			Bo3130 EES projects	0.00	8 953 098.39
			Bo3140 ETIAS projects	0.00	-378 652.09
			Bo3150 ECRIS projects	0.00	-148 656.24
			Bo3810 External Support	-591 309.87	-698.44
			Bo ₃ 811 Consultancies and studies	0.00	-12 226.00
			Bo3820 Advisory Groups	-260 901.17	-28 743.46
			Bo3821 Other meetings and missions	-146 216.87	-6 145.40
			Bo3822 Schengen evaluations	-47 423.34	-590.00
			Bo3830 Operational learning and development	-84 375·93	-357 026.50
			Bo ₃ 8 ₃ 1 Training for Member States	-51 571.48	-55 499.67
			A01120 SNEs and Trainees allowances	-102 587.70	-102 587.70
			A01200 Recruitment and Reassignment Expenditure	-198 897.94	-198 897.94
			A01301 Mission Expenses	-80 000.00	-80 000.00
			Ao1400 Annual medical checkup	-9 504.24	-9 504.24
			A01401 Nursery allowance	-5 752.00	-5 752.00
			A01500 Training for staff	-29 047.72	-29 047.72
			Ao2ooo Expenditure for premises	-1 335.83	-1 335.83
12	LIS.3123	22/12/2020	A02210 Furniture and Office Equipment	-426.86	-426.86
			A02220 Documentation and Library Expenditure	-55.00	- _{420.00}
			A02300 Office Supplies	-858.77	-55.00 -858.77
					•
			Accesso Other Purping Costs	-22 220.00	-22 220.00
			Access UR face and charges	-94 618.79	-94 618.79 67174 06
			A02331 HR fees and charges A02500 MB Meetings	-67 174.06 -92 600.98	-67 174.06

BUDGETARY TRANSFERS in 2020					
Budgetary transfer No.	Reference	Date	Budget Line	Commitment Appropriation	Payment Appropriation
			A02510 Other meetings	-78 995.47	-78 995.47
			Ao2600 Information and Publications	-92 848.63	-92 848.63
			A02700 External Support Services	-311 524.25	-311 524.25
			Ao2800 Corporate Security	-132 974.65	-132 974.65
			Bo3010 Wide area networks	1 321 422.89	1 321 422.89
	LIS.3124	22/12/2020	Bo3000 Shared System Infrastructure	-143 348.81	0.00
			Bo3001 System security and business continuity	-92 947.60	0.00
			Bo3002 Back-up site – running costs	-53 010.69	-2 241.11
			Bo3003 Interoperability	73 854.00	-298 763.91
			Bo3010 Wide area networks	-1 321 422.89	20 019.80
			Bo3100 SIS II projects	-1 183 068.06	-132 757.46
			Bo3101 SIS II operational maintenance	-4 031.57	0.00
			Bo3102 SIS II recast	0.00	193 259.84
			Bo3110 VIS/BMS projects	-3 200.38	0.00
			Bo3111 VIS/BMS operational maintenance	-2 359 891.62	-71 687.23
			Bo3121 EURODAC operational maintenance	560 625.72	0.00
			Bo3130 EES projects	0.00	292 170.07
			Bo ₃₁₄ o ETIAS projects	3 454 534-73	0.00
			Bo3150 ECRIS projects	1 165 462.00	0.00
			Bo ₃ 810 External Support	-85 550.13	0.00
			Bo ₃ 8 ₂ 1 Other meetings and missions	-6 091.74	0.00
			Bo ₃ 8 ₃ o Operational learning and development	-1 912.96	0.00

Annex III. Organisation chart



Annex IV. Establishment plan and additional information on human resources management

Establishment plan 2020

The 2020 establishment plan consisted of 202 posts for temporary agents.

Category and grade	Temporary agents
AD 16	0
AD 15	1
AD 14	1
AD 13	3
AD 12	4
AD 11	5
AD 10	8
AD 9	16
AD 8	17
AD ₇	32
AD6	15
AD 5	47
Total AD	149
AST 11	0
AST 10	0
AST 9	1
AST 8	2
AST ₇	4
AST 6	9
AST 5	12
AST 4	12
AST ₃	13
AST 2	0
AST 1	0
Total AST	53
Total Establishment Plan	202

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 in case of differences between the Commission's and the Agency's terminology. The entry grades that are higher than the ones mentioned in Article 53 of the Conditions of Employment

of Other Servants of the European Union are due to the recruitment organised during the start-up phase of the Agency when higher grades were allocated in eu-LISA's Establishment Plan.

Key functions (examples — terminology should be adjusted to each Agency's job titles)	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	Administration/operations
Head of Sector — level 4	TA, CA	AD 5, AD 7, AD 8, AD 9	Administration/operations
Senior Officer	TA	AD 7	Administration/operations
Officer	TA, CA	AD 5, AD 6, FG IV	Administration/operations
Junior Officer	n/a	n/a	n/a
Senior Assistant	n/a	n/a	n/a
Junior Assistant	n/a	n/a	n/a
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 ⁷⁷ /Assistant Assistant to the Head of Department or Assistant to the Head of Unit	TA, CA	AST 2, AST 3, FG III	Administration/operations
Mail Clerk	n/a	n/a	n/a
Webmaster-Editor	n/a	n/a	n/a
Data Protection Officer	TA	AD 8	Administration
Accounting Officer	TA	AD 9	Neutral
Head of Internal Audit Capability	TA	AD 9	Administration/neutral
Personal Assistant to the Executive Director ⁷⁸	TA	AST ₅	Administration

Benchmarking exercise

At the end of 2020, eu-LISA conducted its benchmarking exercise in accordance with the methodology agreed by the Heads of Administration of the European Agencies in 2014. This methodology has been devised by adapting, refining and elaborating the Commission's screening methodology. The screening categorises the Agencies' human resources by the organisational role each job is serving. The focus of this exercise is to generate figures for the number of 'administrative support and coordination', 'operational' and 'neutral' jobs in all organisational entities, in order to compare the results with previous years. The screening was applied to all eu-LISA posts. The results of this screening are presented in the tables below.

⁷⁷ The eu-LISA 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. At the same time, when necessary, external service providers (*intra muros*) perform the secretarial work.
78 This entry grade was established at the creation of the Agency in 2012.

Results of the eu-LISA	benchmarking	evercise in 2020	- staff mambars
Kesuits of the en-Fish	Delicilliarking	exercise iii 2020	- Stall Illellibels

Job type (sub)category	2018 (%)	2019 (%)	2020 (%)
Administrative support and coordination	16	16.6	16.5
Administrative support	12.5	11.5	12
Coordination	3.5	5.1	4.5
Operational	73	72.4	72.5
General operational	59	62.6	61.5
Programme management	6	3.1	4
Top-level operational coordination	8	6.7	7
Evaluation and impact assessment	0	0	0
Neutral	11	11	11
Finance	11	11	11
Control	n/a	n/a	n/a

The Agency also screened the posts occupied by external service providers (the on-site contractors' personnel), with the following results.

Results of the eu-LISA benchmarking exercise in 2020 – external service (on-site contractors)

Job type (sub)category	2018 (%)	2019 (%)	2020 (%)
Administrative support and coordination	47.5	51.2	52.2
Administrative support	44.5	47.8	40.2
Coordination	3	3.4	12
Operational	48.5	43.5	42.4
General operational	41	36.3	35.8
Programme management	3	2.9	2.2
Top-level operational coordination	2.5	2.4	2.2
Evaluation and impact assessment	2	1.8	2.2
Neutral	4	5.2	5.4
Finance	4	5.2	5.4
Control	n/a	n/a	n/a

A more detailed report on the allocation of human resources to activities will be possible in future once the activity-based reporting system is implemented.

Information on the list of HR implementing rules adopted in 2020

In 2020, eu-LISA adopted the following Implementing Rules to the Staff Regulations:

Commission Decision C(2020) 1559 final amending Decision C(2013) 9051 of 16.12.2013 on leave for the implementation by analogy as from 1.07.2020, and

- Decision No 2020–405 of 23.12.2020 of the Management Board of eu-LISA on implementing rules on the prevention and management of conflicts of interests of the staff members.

The Commission Decision C(2020) 4818 of 20 July 2020 amending the EC decision C(2011) 1278 of 3 March 2011 on general implementing provisions for Articles 11 and 12 of Annex VIII to the SR on the transfer of pension rights will enter into force at eu-LISA automatically on 6 May 2021 for the implementation by analogy.

Annex V. Human and financial resources by activity

Human resources

In 2020, out of total 274 FTEs (full-time equivalents) available, 239.65 FTEs (72.5 % of staff) were used for operational activities and 51.5 FTEs (11 % of staff) for related procurement and financial activities. 32.85 FTEs (16.5 % of staff) were used for horizontal activities (general coordination and administrative support).

The table below presents an overview of staff in 2020 per legislative proposal defining the area of activity.

Staff overview per legislative proposal in 2020

Area of activity	20	2020 authorised			2020 actual situation on		
					31.12.2020		
	TA	CA	SNE	TA	CA	SNE	
Posts authorised under 2020 budget (base line)	113	27	9	112	25	9	
EES	32			26			
New eu-LISA Regulation - additional staff	23	27	2	19	21	1	
ETIAS	7	25		7	21		
ECRIS		5			4		
SIS return and SIS border		4			4		
Interoperability between the European systems	25	20		17	8		
LFS Eurodac - subject to adoption of the legal instrument	2			0			
Total FTEs	202	111	11	181	83	10	

Expenditure according to activity-based costing

In 2018, eu-LISA developed an Activity-Based Costing methodology, allowing it to identify the total costs of each system managed by the Agency.

The total system expenditure consists of:

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

The re-allocation of corporate and operational horizontal expenditure is based on the following cost drivers:

- direct system expenditure;
- time (cost of manpower) allocated to the systems.

During the reporting year, the Agency implemented a budget of EUR 180.1 million, of which:

• 75 % was spent on operational activities.

• 25 % represented corporate horizontal costs.

VIS/BMS €47.2 (26%)

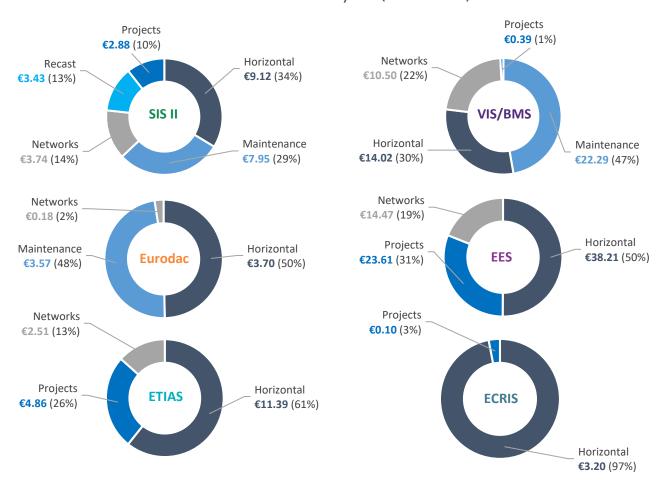
The total system costs are summarised below:



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

The following graphs provide the cost breakdown for each system in EUR million and as a percentage of the total cost of the systems.

Cost breakdown for each system (in EUR million)



Expenditure related to the multi-site organisation

In line with the external evaluation recommendation (R 4.34), the direct costs associated with the Agency's multi-site organisation are summarised in the table below.

Share of 2020 direct costs associated with the Agency's multi-site organisation (in EUR million)

	Budget title	Total payments	Payments related to the Agency's multi-site organisation	Share (%)
A01	Staff Expenditure	26.781	0.009	0.03 %
A02	Infrastructure and Operating Expenditure	6.995	n/a	n/a
Bo ₃	Operational Expenditure	186.565	0.103	0.06 %
Total		220.341	0.112	0.05 %

Direct costs related to the Agency's multi-site organisation are mission expenditure for statutory staff travelling between the Agency's headquarters in Tallinn and the Agency's technical site in Strasbourg. In 2020, this represented 0.05 % of the total of payments executed.

Annex VI. Contribution, grant and service level agreements.

Not applicable to eu-LISA.

Annex VII. Environment management

eu-LISA's SPD 2020–2022 did not include a dedicated Annex VI identifying actions and targets to reduce the impact of its administrative operations on the environment.

Annex VIII. Annual accounts

Balance sheet (EUR)

	24/42/2022	24/42/2046	Variation	Change in 04
NON CURRENT ASSETS	31/12/2020	31/12/2019	Variation	Change in %
Computer software	45 915 100	15 712 271	30 202 829	192 %
Intangible assets under construction	26 722 167	20 154 328	6 567 839	33 %
Intangible assets	72 637 267	35 866 599	36 77 0 668	103 %
Land and buildings	31 708 123	32 105 388	(397 265)	-1 %
Plant and equipment	473 914	542 320	(68 406)	-13 %
Furniture and vehicles	102 817	141 620	(38 803)	-27 %
Computer hardware	64 992 434	16 439 276	48 553 158	295 %
Other fixtures and fittings	953 733	377 108	576 625	153 %
Buildings under construction	600 000	_	600 000	
Property. plant and equipment	98 831 021	49 605 712	49 225 309	99 %
Non-current pre-financing	2 546 822	2 546 822	_	o %
Non-current exchange receivables and non-exchange recoverables	135 277	_		
TOTAL NON CURRENT ASSETS	174 150 388	88 019 133	86 131 254	98 %
CURRENT ASSETS				
Deferred charges	22 262 822	3 134 058	19 128 763	610 %
Other exchange receivables	23 488 844	19 371 717	4 117 128	21 %
Current exchange receivables	45 751 666	22 505 775	23 245 891	103 %
Receivables from member states (VAT)	2 900 354	348 861	2 551 493	731 %
Contribution from associated countries	3 763 102	3 726 733	36 369	1%
Non-exchange receivables	6 663 456	4 075 594	2 587 862	63 %
TOTAL CURRENT ASSETS	52 415 122	26 581 369	25 833 753	97 %
TOTAL ASSETS	226 565 509	114 600 503	111 965 007	98 %
NET ASSETS				
Accumulated surplus	84 635 727	77 119 638	7 516 o88	10 %
Economic result of the year (+ profit)	54 677 447	7 516 088	47 161 359	627 %
NET ASSETS	139 313 173	84 635 727	54 677 447	65 %
CURRENT LIABILITIES				
Current payables	56 299 740	4 722 680	51 577 060	1 092 %
Accounts payables with consolidated entities	3 610 513	1 657 575	1 952 938	118 %
Accounts payables	59 910 254	6 380 255	53 529 999	839 %
Accrued charges	27 342 082	23 584 521	3 757 561	16 %
TOTAL CURRENT LIABILITIES	87 252 336	29 964 776	57 287 560	191%
TOTAL LIABILITIES	226 565 509	114 600 503	111 965 007	98%

Statement of financial performance (EUR)

REVENUE	2020	2019	Variation	Change in %
Subsidy of the Commission	229 773 830	136 405 325	93 368 505	68 %
Contribution of EFTA countries	4 045 520	3 726 733	318 787	9 %
Non-exchange revenue – transfer of asset	750 000	_	750 000	
Non-exchange revenues	234 569 350	140 132 058	94 437 292	67 %
Administrative revenues with consolidated entities	5 699	52 475	(46 775)	-89 %
Miscellaneous income	14 535	_	14 535	
Exchange rate gains	110	46	64	137 %
Exchange revenues	20 345	52 521	(32 176)	-61 %
Total revenues	234 589 695	140 184 579	94 405 115	67 %
EXPENSES				
Operational expenses	(113 925 007)	(67 177 585)	(46 747 423)	70 %
Staff expenses	(25 651 441)	(19 389 591)	(6 261 849)	32 %
Finance costs on late payment	(22 393)	(5 075)	(17 318)	341 %
Administrative and IT expenses	(5 985 233)	(16 296 919)	10 311 686	-63 %
Other external service provider expenses	(3 571 376)	(3 015 030)	(556 346)	18 %
Expenses with consolidated entities	(2 477 099)	(1 939 934)	(537 165)	28 %
Fixed asset related expenses	(28 130 679)	(24 720 218)	(3 410 461)	14 %
Operating Lease Expenses	(148 998)	(123 473)	(25 526)	21 %
Exchange rate losses	(21)	(668)	646	−97 %
Administrative expenses	(65 987 241)	(65 490 907)	(496 334)	1%
Total expenses	(179 912 248)	(132 668 491)	(47 243 756)	36%
ECONOMIC RESULT FOR THE YEAR	54 677 447	7 516 088	47 161 359	627 %

Cash-flow statement – indirect method (EUR)

Cash Flows from operating activities	2020	2019
Surplus/(deficit) from ordinary activities	54 677 447	7 516 088
Amortisation of intangible fixed assets	12 065 219	13 258 514
Depreciation and write off of tangible fixed assets	12 245 422	8 550 030
(Increase)/decrease in Long term Pre-financing/Deposits	(135 277)	(2 546 822)
(Increase)/decrease in Short term Receivables	(25 833 753)	(7 164 573)
Increase/(decrease) in Accounts payable and accrued charges	55 334 622	9 744 091
Increase/(decrease) in Liabilities related to consolidated EU entities	1 952 938	737 308
Net cash Flow from operating activities	110 306 618	30 094 635
Cash Flows from investing activities		
(Increase) of tangible and intangible fixed assets	(110 306 618)	(30 094 635)
Net cash flow from investing activities	(110 306 618)	(30 094 635)
Net increase/(decrease) in cash and cash equivalents	_	_

Annex IX. Annual activities and indicators

Note for projects' performance indicators: project performance is monitored and reported according to the Agency's project management methodology. In line with this methodology, project performance indicators retained for the Agency's corporate reporting are cost, schedule and scope. For reporting on performance indicators, the Agency uses a 'RAG' (red, amber, green) traffic-light rating scale. The respective tolerances are the following:

	Cost	Schedule	Scope
Green	Total deviation ≤ 5 %	Total deviation ≤ 5 %	no deviation
Amber	Total deviation between 5 % and 10 %	Total deviation between 5 % and 10 %	deviations allowed within the limits for schedule and cost, as far as they are aligned with the business case and approved by project board
Red	Total deviation > 10 %	Total deviation > 10 %	when the above conditions are not satisfied

CAAR ref.	Annual activity	Planned outcome	Delivered outcome	Performance Indicator	Performance indicator's status	SPD 2020– 2022 ref.
1.1.1	EES implementation	Supporting the MS in achieving smarter and more secure border management	Ongoing Despite the minor deviations related to the pandemic, the general timeline and critical milestones were kept. The pandemic affected the meeting organisations and travelling constraints for contractors and development time, and delayed the NUI deployment by almost six months. The Agency installed 57 out of 64 NUIs and upgraded VIS TAP infrastructure on 59 out of 65 sites. There were delays at the contractor level in the application development, and the pre-compliance testing shifted from 1/1/21 to 1/3/21. Key deliverables like ICD and Central System Simulator were shared with the MS, allowing them to prepare for EES testing. At the end of December, the availability of the environment readiness for connectivity testing shifted to the end of January, resulting in a one-month delay, but without impact on the defined timeline. The Agency made progress with the BMS requirements and specifications and started the development. VIS adaptation for EES progressed as planned. Due to unclear specifications during the tender preparation phase, and because the project aims to cover both EES and ETIAS needs, the Web Services evolution resulted in a much bigger scope than initially envisaged. The Agency started the design and implementation phases. In November, many new points changed the pending Implementing Regulation for Carriers, and as a result, the scope and subsequently the schedule for the Web Services for 2021 also changed.	Cost – Schedule – Scope	Below target Amber – Amber – Amber Changes in scope and budget for the web services. COVID-19 pandemic caused delays in the schedule.	2.2.1.23

1.1.1	ETIAS WAN implementation	Operational ETIAS communication infrastructure in place, allowing the MS to connect and use ETIAS central system	On May, the corporate steering committee formally merged the activity with the EES network upgrade as a part of the EES programme.	_	_	2.2.1.20
1.1.1	ETIAS – Interconnection with Interpol and Frontex	Operational connection between ETIAS central system and Interpol/Frontex to allow Interpol/Frontex to use ETIAS central system as per legal basis	Delivered The Agency completed the ETIAS interconnection with Frontex as part of the EES network upgrade. Interpol interconnection is pending the adoption of the corresponding legal base.	(1) Test report for the connection (2) Network Performance Indicator for the connection	Delivered	2.2.1.18
1.1.1	ETIAS implementation	ETIAS is developed according to the covering regulation and provide Member States with a new system aiming at assessing the risk prior to the entrance into the Schengen area of visaexempt third-country nationals entering the Schengen area.	Ongoing Contribution to the drafting of the relevant delegated and implementing acts. Transversal Engineering Framework: finalisation of TTS, procurement procedure and award of Lot 1, Lot 3 and five Lot 2 contractors. ETIAS development re-opening of competition: TTS finalised, re-opening of competition procedure launched, offer under evaluation with the objective to award ETIAS Lot 2 Contractor beginning 2021. Watchlist Technical Specifications elaboration initiated in December 2020 with the objective of adoption in Q2 2021. DPIA ongoing with the objective of adoption in Q1 2021. Timelines of the Audio/Video tool study elaborated, awaiting stabilisation of related act to be triggered in 2021.	Cost – Schedule – Scope	Below target Green – Amber – Amber The Agency' did not meet the initial objective to finalise the ETIAS Procurement in 2021 due to the accumulation of delays on the TEF procurement, combined with delays on the ETIAS re-opening procedure. However, the main milestones for the ETIAS Implementation remain unchanged, with an entry into operation planned for December 2022. Due to the audio/Video tool study's addition, the Agency also extended the initial scope.	2.2.1.23
1.1.1	Implementation of the interoperability regulations	ESP, CIR, sBMS, MID and CRRS fully implemented together with all interfaces to existing and future systems.	Ongoing The Agency initiated the procurement under TEF for ESP/CIR/MID/CRRS and started implementing sBMS.	Cost – Schedule – Scope	Achieved The development projects are in the initiation stage.	2.2.1.25
1.1.1	Central repository for reporting and statistics maintenance and alignment with the legal requirements for interoperability	The management of eu- LISA and its stakeholders will receive timely and sufficient statistical and data quality information to allow and ease decision- making.	Ongoing Activities continuing as planned in the Integrated Planning and in the approved interoperability Business Case. The CRRS procurement under the TEF is ongoing.	Cost – Schedule – Scope	Achieved Green – Green – Green	2.2.1.26
1.1.2	ECRIS-TCN implementation	Supporting the MS in achieving smarter and more secure border management	Ongoing The Agency progressed on the preparation of the tender technical specifications and contributed to the drafting of the implementing acts.	Cost – Schedule – Scope	Below target Amber – Amber – Green The late delivery of the legal basis implied a late delivery of the TTS and delayed the start of the project.	2.2.1.24

1.1.3	Execution of annual research and technology monitoring roadmap for 2020 and the research and technology monitoring strategy 2019–2021	Dissemination of accrued knowledge and provision of ad hoc advice boosts stakeholder awareness on technical matters, leading to improved collaborative possibilities. The Agency's profile as a centre of knowledge is raised and its image boosted.	Delivered The Agency published a research and technology monitoring report on artificial intelligence in the operational management of large-scale IT systems, organised Industry Roundtable on data quality in interoperability architecture and an annual conference on interoperability with solid attendance from a wide range of stakeholders.	Publication of research reports. Industry event and annual conference take place.	Achieved	2.3.1
1.1.3	Integration of research findings into internal projects and administration of the eu-LISA library	Advance planning for systems evolution is undertaken with full knowledge of trends and likely future possibilities, enabling more efficiency.	Delivered The Agency prepared the requested internal and external technology briefs, supported the internal initiatives aimed at the evolution of existing systems and services. The research and technology monitoring staff collaborated with the Operations Department in the projects, and in collaboration with the AGs began the preparation of a Roadmap for Standardisation.	Submission of high quality and impactful technology briefs.	Achieved	2.3.1
1.1.3	Technical support for a project to develop a proof of concept and a prototype of the EU online visa application portal	Test and demonstrate the feasibility of the concept of an EU online visa application portal, involving MS.	Ongoing The Agency finished the design phase in December. The development is ongoing according to the plan.	Cost – Schedule – Scope	Achieved Green – Green	2.2.1.16
1.1.3	Impact assessment and cost benefit analysis for the active-active configuration	Ability of systems and the CSI to meet the high availability target as specified in the legal instruments	Delivered The Agency delivered the independent impact assessment to the Commission for review and assessment/opinion.	Cost – Schedule – Scope	Achieved Green – Green – Green There was a shift in the initial schedule, but it did not affect the overall outcome, scope and budget.	2.3.1.24 (in SPD 2019)
1.2.1	SIS maintenance	SIS system available and within SLAs in 2020	Delivered SIS was available according to the agreed SLA.	Conformity with the SIS SLA and SIS- related corporate KPIs	Achieved KPI 6: SIS central system availability: 99.94 % KPI 7: SIS central system response time: 99.86 %	2.1.1.4
1.2.1	SIS AFIS maintenance	SIS AFIS system available and within SLAs in 2020	Delivered SIS AFIS was available according to the agreed SLA.	Conformity with the SIS SLA	Achieved	2.1.1.5
1.2.1	SIS support to Member States	Support to National Systems properly delivered	Delivered The Agency provided support to the MS effectively: Ireland concluded the entry into operation rehearsal, and Finland, France, Malta and Romania performed a complete qualification of their National SIS. The Agency accelerated the work on the AFIS fingerprint searches qualification, resulting in the successful qualification of 11 MS and one ongoing campaign.	(1) Quality and time of Member States integration (2) Adherence to Member States testing plan	Achieved There was no deviation from Member States' national systems testing plan.	2.1.1.6
1.2.1	SIS unplanned evolutions	New SIS central system release	Ongoing The project on parallelisation is in the design phase, the Agency finalised the offer.	Cost – Schedule – Scope	Below target Green – Amber – Green The Agency finalised the offer with delay, and the COVID-19 delayed the project's start.	2.1.1.8

1.2.1	New SIS legal framework implementation	A new SIS central system release including the new SIS core functionalities identified in the recast legal instrument (return decision not included).	Ongoing The project is on track. It may be affected by the AFIS phase 2 project due to pandemic restrictions for the hardware installations.	Cost – Schedule – Scope	Below target Amber – Green – Amber	2.2.1.1
1.2.1	SIS return decision	A new SIS central system release including return decision functionalities.	Ongoing The project is on track and is fully linked with SIS new regulation and AFIS phase 2.	Cost – Schedule – Scope	Below target Green – Amber – Green	2.2.1.2
1.2.1	Implementation of SIS AFIS Phase 2	This project will provide additional biometric capabilities to MS.	Ongoing The project is on track. The pandemic had an impact on the project. Restrictions and access limitations delayed the hardware installations at both operational and backup sites.	Cost – Schedule – Scope	Below target Amber – Amber – Amber	2.2.1.12
1.2.1	Implementation of ABIS for SIS (face recognition)	This project will provide additional biometric capabilities to MS (e.g. latent print search and storage).	Postponed This project is postponed, pending adoption of the corresponding legal basis.	-	_	2.2.1.13
1.2.1	New search engine and Oracle upgrade for SIS, improving availability and considering transcription aspects	New SIS Central System cost efficient state of the art search functionalities, additional query and alerts capacity; prepare search engine module for National Systems.	Ongoing The new search engine's implementation was delayed from June to November due to the pandemic and access restrictions to both CU and BCU data centres. For operational reasons, the Agency postponed the entry in the operation of the release to 2021. This in turn delayed the deployment to production of the Oracle upgrade.	Cost – Schedule – Scope	Below target Amber – Red – Green Due to the COVID-19, the contractors declared 'force majeure', and the Agency could not meet delivery dates for entry into operation.	2.2.1.4
1.2.1	SIS interconnection module/interface with ETIAS and other systems	Operational SIS central system platform/interface for interconnection to other systems in place	Postponed Due to the late delivery of implementing acts and consequential amendments, the Agency did not finalise the offer for this component. A further delay arose due to the need to use the integration layer from EES, which was not fully designed in 2020.	Cost – Schedule – Scope	The schedule needs to be revised; the project should start in 2021 following the offer and contract finalisation.	2.2.1.9
1.2.1	SIS – Central systems backup service move to virtual tape libraries	Enable the virtualisation and use of the CSI services.	Ongoing The Agency finalised the offer and the contract. Hardware installation activities were affected by access restrictions to CU and BCU data centres.	Cost – Schedule – Scope	Below target Amber – Red – Green COVID-19 delayed the schedule, but it will be ready in 2021.	2.2.1.7
1.2.1	SIS Pre-Production Environment (PPE) move at the BCU	Separation and movement of PPE systems at BCU premises to release valuable data centre footprint.	Ongoing This project was heavily affected by the access restrictions to the BCU site in Austria. As the offer/contract finalisation was delayed, the activity shifted and should be finalised by 2021.	Cost – Schedule – Scope	Below target Green – Amber – Green	2.2.1.8
1.2.2	VIS/BMS maintenance	VIS/BMS performance remains within the SLA.	Delivered VIS/BMS was available according to the agreed SLA. Even with the pandemic-related restrictions, the Agency successfully migrated VIS storage area network to the CSI.	Conformity with the VIS/BMS SLA	Achieved KPI 8: VIS central system availability: 99.93 % KPI 9: VIS central system response time: 99.98 %	2.1.1.3

1.2.2	BMS database increase	Appropriate continuation of an existing service provided by eu-LISA to Member states	Delivered The Agency increased the BMS capacity to 85 million records, deployed adaptive and corrective elements, and improved its efficiency. The changes performed as part of the release turned to be stable, and apart from a few low impact issues, the VIS/BMS functioned very well in production.	Cost – Schedule – Scope	Achieved Green – Green The COVID-19 pandemic delayed the release plan by three months, but the deployment was finalised in July.	2.2.1.3
1.2.2	VIS new users integration: Europol	Europol can connect and use VIS system as per legal basis	Delivered The VIS central system is ready to be accessed and is awaiting final steps by Europol.	Cost – Schedule – Scope	Achieved Green – Green – Green	2.3.1.15 (in SPD 2019)
1.2.2	Granting of passive access for Bulgaria and Romania to VIS	Bulgaria and Romania can use the VIS system as per legal basis	Delivered The VIS central system is ready to allow Bulgaria and Romania to connect in read-only mode. However, the actual connection on the national side will take place in Q2 2021, in line with the entry into operation decision by the Commission.	Cost – Schedule – Scope	Achieved Green – Green – Green	2.3.1.15 (in SPD 2019)
1.2.2	Amendments of the VIS regulation (preparation for implementation)	Modified CS-VIS and NS- VIS in line with the amended VIS legal base.	Ongoing The ongoing discussions at the political level have delayed the new VIS Regulation. The preliminary work on the service design has started based on the final text. A significant amount of implementing acts / delegating acts is expected after the adoption of the regulation.	_	_	2.2.1.11
1.2.3	Eurodac maintenance	The MS receive a reliable service of the EURODAC system	Delivered Eurodac was available according to the agreed SLA.	Conformity with the Eurodac SLA and Eurodac-related corporate KPIs	Achieved KPI3: Eurodac Central System availability: 99.87% KPI4: Eurodac Central System response time: 99.95%	2.1.1.1
1.2.3	DubliNet maintenance	MS are receiving reliable and uninterrupted DubliNet services	Delivered DubliNet was available according to the agreed SLA.	Conformity with the DubliNet operational SLA	Achieved	2.1.1.2
1.2.3	Eurodac compliance with CSI/CSS services	The Eurodac central system complies with the CSI requirements and takes advantage of the offered CSS services	Postponed Eurodac will implement full compliance with CSI when implementing the recast functionalities.	Cost – Schedule – Scope	The Agency postponed the activity due to a lack of legal basis.	2.2.1.10
1.2.3	Eurodac Recast implementation	Eurodac in line with the Recast provisions	Postponed Activity did not start due to pending Recast legal base.	Cost – Schedule – Scope	Activity is still pending legal base adoption.	2.2.1.5
1.2.3	Eurodac Recast – implementation of face recognition	Eurodac in line with the new legal provisions	Postponed Activity did not start due to pending Recast legal base.	Cost – Schedule – Scope	Activity is still pending legal base adoption.	2.2.1.6
1.2.3	Dublin Automated System	New system in place in line with the new legal provisions	Activity did not start due to pending Dublin Recast legal base.	Cost – Schedule – Scope	Activity did not start. The system was withdrawn from legal base proposal.	2.2.1.21
1.2.4	24/7 first-level support for Operational management of the systems – eu-LISA Service Desk	Core business systems and Members States users receive efficient and reliable services	Delivered Member States' users receive efficient and reliable services at the first level of support and communication via the agreed communication channels.	Service Desk Performance indicators; Annual Customer Satisfaction survey.	Achieved KPI 19: Customer satisfaction: % of MS users satisfied or very satisfied with the overall service provided by the eu-LISA Service Desk: 95 % KPI 20: eu-LISA Service Desk performance: 99.9 %	2.1.1.9

1.2.4	24/7 second-level application support for operational management of the core business systems	CBS and Member States receive a reliable service of the applications including databases	Delivered Member States receive a reliable service of the applications, including databases.	Conformity with the operational SLA of the applications	Achieved Maintenance activities led to the system performing according to the SLA, anticipated improvements and prevented incidents.	2.1.1.7
1.2.4	Integration of the Single Integrated Monitoring solution with the event management process	Based on event management process across the systems and the improved quality of the alarms generation, the integration with Single monitoring solution will substantially enhance the monitoring efficiency and effectiveness	Phase 1 did not start in 2020 because the required human resources were not available.	Increased satisfaction of eu-LISA Level 1 and Level 2 support; Minimising the potential risk for omission for critical alerts;	The Agency postponed the activity.	2.2.1.15
1.2.4	eu-LISA ITSM framework processes run and regular reporting	Core business systems and MSs receive reliable services, based on the eu- LISA ITSM framework	Delivered CBS and MSs received reliable services.	Conformity with processes KPIs	Achieved	2.1.4.2
1.2.4	Release and deployment management activities	Better coordination and follow-up of all the activities related to the release and deployment management on all the phases: planning, build, test and validation, deployment, review and closure.	Delivered Delivery of the release plans was completed. Due to the pandemic, the Agency had to postpone some releases to 2021; hence, the Agency partially delivered the implementation of the releases.	Delivery of the release plans Implementation of the system releases	Achieved Delivery of the release plans was completed. Implementation of the systems releases according to release plans was partially delivered. Some releases for had to be postponed for 2021, due to the pandemic.	2.1.1.12
1.2.4	Application lifecycle management study	ALM use will start according to the defined processes and governance framework. Existing tools will be better used. The Agency has the knowledge and the different elements to prepare the full implementation of ALM	Delivered The study assessed and analysed the various options for the architectural design and development of an ALM platform according to the Agency's business needs, constraints and technical requirements. The study assessed future technological, organisational and process models that will allow the implementation of the ALM platform and integrate its tools within the existing landscape.	Cost – Schedule – Scope	Below target Amber – Amber – Green Cost and schedule exceeded the original plan, but the Agency successfully delivered the full scope of the study.	2.2.2.2 (in SPD 2019)
1.2.4	Improvements to the Application Lifecycle Management	Quicker delivery of releases	Postponed The new project for ALM improvements has not started yet.	Time to market (in comparison with previous year)	_	2.1.2.1
1.3.1	Regular operational management of the communication	Communication infrastructure performance remains within the SLA.	Delivered The Agency negotiated and set up support contracts for TESTA VIS and SIS network under the new TESTA framework contract and set up contracts for Sirenemail/VISmail and 2nd encryption layer components maintenance.	Conformity with the communication SLA	Achieved operation performed according to the SLAs.	2.1.1.16

	infrastructure contracts				KPI5: WAN availability (for SIS and VIS): 99.9931%	
1.3.1	Network services delivery	Delivery of a reliable service from the communication infrastructure and the related communication systems	Delivered The network service delivery was within the agreed SLAs. In particular, 50 % of the SIS II Certes encryption infrastructure, located at MSs and eu-LISA locations, have been successfully renewed. The Agency will deliver the remaining 50 % in 2021 as per the intended schedule.	Conformity with the communication infrastructure SLAs	Achieved According to the agreed SLA, the communication infrastructure and communication infrastructure systems (VIS Mail, SIS Mail) were available.	2.1.1.15
1.3.1	Transition to new TESTA network	Secured and reliable IP communication between National Systems and Central Systems is available; secured and reliable IP communication between Central Systems sites is possible.	Ongoing The European Commission (DG DIGIT) is managing the signature of the new TESTA contract. eu-LISA, together with other agencies and institutions, helped in the technical evaluation of the offers. The technical evaluation was 80 % completed by the end of 2020, and the evaluation is continuing in 2021.	Cost – Schedule – Scope	Below target Delay in the signature of the contract	2.2.1.19
1.3.2	Central Unit/Backup Central Unit (CU/BCU) daily operation management	Continuous maintenance and capacity follow-up of the both Data Centres (CU and BCU)	Delivered The scope of the activity was changed to cover only the operational management of the BCU. All operational contracts were maintained.	Availability of data centres resources (cooling, power)	Achieved BCU was available, shifts were continuously deployed despite the pandemic and the travel restrictions	2.1.1.14
1.3.2	Continuation of data centres reorganisation activities	Date centres will meet the new requirements in terms of high density to achieve bigger hosting capacity to cope with the business needs.	Delivered Daily operation of the 'data centre-as-a-service'. A data centre infrastructure management tool was deployed. The Agency carried out continuous improvements in allocations of resources to allow for further growth of the infrastructure capacity (additional new systems, extended mandate, development of existing systems).	Cost – Schedule – Scope	Achieved	2.2.1.14
1.3.2	Move of central systems WAN connections	improvement of the data centre capacity and increase the physical resiliency of the network	Postponed Technical assessment was provided by the telecommunication provider. The pandemic restrictions impacted the progress on the activity.	_	Delayed	2.2.1.17
1.3.3	Operational management/daily system management coordination and shared tasks	Delivery of reliable infrastructure services in line with agreed SLAs	Delivered The Agency continuously provided the 2nd level support for the systems' infrastructure despite the access restrictions due to the pandemic. The Agency deployed releases according to plan.	Conformity with CBS and CSI SLAs	Achieved See KPI 3 to 9	2.1.1.11
1.3.3	Licence management	Licences used at eu-LISA are supported in accordance with the SLA required by the systems.	Delivered The Agency renewed the Oracle licenses according to plan.	Amount of licences having their support contract managed centrally	Achieved	2.1.1.13
1.3.3	CSI maintenance	Mandatory maintenance within the CSI framework contract.	Delivered The Agency renewed the hardware of the CSI infrastructure according to the plan. Corrective maintenance of the CSI infrastructure was provided and performed within the agreed SLAs.	Conformity with maintenance SLAs CBS performance indicators	Achieved SLA targets met	2.1.1.10

1.3.3	Integration of the Asset Management with Configuration Management	A single, centralised and relational repository for contract, financial, operational status of the IT components and assets	Ongoing The integration of the financial asset management with configuration management has been taken into account in the updated versions of the processes for asset management and configuration management. The implementation started for the CSI infrastructure. The full integration to the CMDB is pending on the system upgrade and further configuration, which is delayed due to the access restrictions.	Project performance indicator	Achieved	2.2.2.1
1.4.0	Delivering the information security and assurance service for the core business systems	Assurance that information security risks will be managed down an acceptable level	Delivered The Agency developed and updated the risk assessments and security and business continuity plans for existing and new systems, and developed several standards as part of the Information Security Management System (ISMS). The Agency also continued the development of the Commission's ITSRM risk management method to align with DG DIGIT IT Security framework. With the support of external consultancy services, the Agency completed a comprehensive and independent review aimed at measuring the maturity level of the overarching eu-LISA (ISMS), with a focus on the ISMSs for the large-scale systems. In line with the Security Rules on the protection of Communication and Information Systems (CIS), the Agency established the IT Security Working Group, which ran its first meeting on January 2021. The Agency updated the reference security architecture based on SABSA (Sherwood Applied Business Security Architecture) and reviewed the security requirements for the TEF.	(1) % of business processes and their services covered by the information risk management process (2) % of staff that have completed the security awareness elearning training (3) % of security controls implemented in each Information System Security Plan (4) % of quarterly security tests conducted versus planned	Achieved Percentage of security incidents handled within the SLA within the response target: 73 % Percentage of security risk assessments done against systems (design, development, production): 100 % Percentage of information systems for which a BIA has run at least every three years identifying critical staff: 100 % Percentage of security objectives implemented as defined per legislation: 100 % Number of vulnerability scans performed on the information system portfolio: 10 Number of cybersecurity exercises performed annually: 1	2.1.1.18
1.4.0	Operate, plan and develop the Business Continuity/Disaster Recovery/Emergency Response parts from the Security and Continuity Management	Agency improve its resilience in its operational management	Delivered The Agency ran the business continuity activities and projects as intended, taking into account the necessary adjustments due to the COVID-19 situation.	The BC controls cover all the business areas of eu-LISA. The BC plans are tested and the tests demonstrate the effectiveness of BC controls in place. The Agency's personnel is subject of the specific training and awareness sessions as needed.	Achieved The BC controls are in place in all the relevant business areas, the corporate BCP and the BC implementing rules have been adopted. The corporate BIA will be updated to reflect the current situation. Two BC exercises were run Two evacuation drills (one for Tallinn site and one for Strasbourg site) were run. BC awareness sessions were held for the entire eu-LISA's personnel and few recurrent awareness sessions on BC and emergency response were held for newcomers.	2.3.8
1.4.0	Operate, plan and develop the protective elements of the security and continuity management	Agency ensure the appropriate level of the safety and security of the people and assets in its premises	Delivered The Agency was able to ensure and maintain the security, safety and order on its premises, protecting its personnel, systems, facilities and assets, as per its legal obligations. The Agency achieved this outcome despite the additional and unplanned challenges created by the pandemic situation, putting additional priority on staff health and safety.	Protective security measures comply 100 % to risk assessment, eu-LISA rules and regulations and ISO standards	Achieved The specific security risks were at an acceptable level through the entire year. The protective security measures were in place, in line with the specific rules and regulation and ISO standards.	2.3.8

1.4.0	Combined disaster recovery exercise for SIS, VIS and Eurodac	Ensure compliance with business continuity, disaster recovery and incident management in case of a disruption incident for the eu-LISA's Core Business Systems	Delivered The Agency executed the exercise, and the outcomes were evaluated as expected, despite the impact of the pandemic on all participants. The exercise report received a favourable opinion from SIS, VIS and Eurodac AGs.	Cost – Schedule – Scope	Achieved Green – Green – Green	2.2.1.27
1.4.0	Security and business continuity exercise for corporate IT services	Ensure compliance with business continuity, disaster recovery and incident management in case of a disruption incident for the eu-LISA's corporate IT services	Delivered The Agency executed the exercise project and evaluated the outcomes.	Cost – Schedule – Scope	Achieved Green – Green – Green There was a slight deviation in time. The execution phase took place in January 2021, instead of December 2020, because of more urgent tasks related to the pandemic situation.	2.3.8
1.4.0	Implementation of the recommendations coming from the security and business continuity exercises	Assuring the continuous improvement of the security and business continuity of the systems	Ongoing Implementing the recommendations stemming from the Security and BC exercises run in 2017–2019 has continued as planned.	Percentage of the implementation of the action plan	Achieved Some of the measures were implemented faster than planned, and some are still pending. The pandemic situation affected the implementation of all recommendations.	2.1.1.17
1.4.0	Refurbishment of the perimeter physical security controls for the site in Strasbourg	Ensure the fulfilment' of specific business and legal requirements for physical security at the level of eu-LISA's Strasbourg site in line with the current risk assessment.	Postponed Due to the re-assessment of the annual priorities because of the COVID situation, the project was reprioritised and postponed.	Cost – Schedule – Scope	The activity was postponed.	2.3.8
1.5.1	Contribution as an observer to Schengen evaluations in the fields of SIS/SIRENE and common visa policy (including VIS) and ensure better use of SIS II and VIS by Member States	EU Member States apply correctly the Schengen legislation in the fields of SIS/SIRENE and common visa policy and ensure better use of SIS II and VIS	Delivered The Agency contributed as an observer to SIS/SIRENE evaluations in Germany and Austria. Due to travel restrictions and the unstable pandemic situation, the Agency decided to provide desk support for two evaluations instead of sending staff as observer.	Fulfilment of Schengen evaluation requests	Achieved eu-LISA contributed on best effort basis to the Schengen evaluation mechanism.	2.3.1
1.5.2	Share best practices and services with other Agencies in the area of ICT	Validate that the critical requirements are collected and commented	Delivered The ICT services team were present in the ICTAC (ICT advisory committee) and JHA Agencies meetings organised during the year. They participated in the various ad hoc activities, such as the GovSEC project ⁷⁹ or groups related to various DIGIT contracts' beneficiaries.	Cost – Schedule – Scope	Achieved Green – Green – Green	2.3.6

1.5.4	Implementation of the training plan for provision of training to the Member States on the technical use of the IT systems managed by the Agency	A responsive and tailored systems training programme is in place that meets in full the needs of stakeholders	Delivered Due to COVID-19, the Agency transformed the entire training offer into an eLearning format. Besides one face-to-face session delivered, 22 new online courses were created, covering all major topics and aspects of eu-LISA training curricula, including 16 e-learning modules. They were made available on the eu-LISA Learning Management System. The Agency also delivered seven webinars.	Satisfaction rate (scale 1–5, 1 lowest, 5 highest) Satisfaction rate scale1–6 to be proposed to MC	Achieved In 2020, the satisfaction rate for eu-LISA trainings was 4.5/5 (following the eu-LISA KPI Scale for MS Training activities: 1-5, where positive KPI is considered: > 3). New KPI scale, 1–6, has been adopted by MB in March 2020. In the new scale the positive KPI is considered: >4.	2.1.1.19
1.5.4	Drafting technical reports and aggregating statistics	Fulfilment of all reporting obligations as outlined in the Establishing Regulation & legal bases for systems under management	Delivered The Agency timely submitted the five deliverables to the EU institutions and published them. In addition to those, the report on the technical functioning of VIS, covering 2017–2019, was also published. The collection of data from MS, an essential condition for the report, took a relatively long time and was the reason for the delay.	Submission to the EU institutions of the reports	Achieved Dates and references listed in section 1.5.4	2.3.1
1.6.1	Planning and reporting	eu-LISA provides its stakeholders with sufficient information on the planning and execution of the tasks entrusted to the Agency and its performance, thus ensuring high level of confidence and fulfilling the legal requirements.	Delivered The Agency delivered the CAAR, IR and SPDs. There were some delays due to the pandemic situation. However, these delays did not have any impact on the performance of the Agency.	SPD 2021–2023, IR 2020, CAAR 2019 adopted on time and without major amendments	Achieved	2.3.1
1.6.1	Implementation of an enterprise quality management exercise	The Corporate Governance Model, consisting of Risk Management, Internal Control Management and Quality Management is implemented and operated at the Agency according to its definitions and requirements	Ongoing The procurement-related questions delayed the full implementation of the Total Quality Management, and the Common Assessment Framework (CAF) exercise was ongoing. Preparatory activities were ongoing (customisation of the tool, communication plan) and on track. The Agency intends to complete the first round of CAF implementation (Self-Assessment report) in 2021 and complete the candidacy with the CAF Effective User label award in 2022.	A self-assessment report is delivered to the Management of eu-LISA during Q3- 2020	Below target Delayed as activities for the PI are ongoing.	2.3.1
1.6.1	Revision of eu-LISA long term strategy and corporate KPIs	The Agency has an up to date long term strategy, KPIs and multiannual programme/plan to better serve its stakeholders	Ongoing The draft new long-term strategy was delivered to the management of the Agency in June 2020. It is currently being finalised by the Agency's management committee.	Delivery of the updated long-term strategy of the Agency and the multiannual programme to the MB.	Below target The strategy is not yet submitted to the MB for adoption.	2.3.1

1.6.1	Providing governance and compliance management capabilities	The Agency sufficiently applies elements of good governance in its compliance management practices	Delivered The Agency maintained the register of exceptions and non-compliance events correctly and produced the monitoring report in due time. The Agency implemented the ICF under the supervision of the manager responsible for risk management and internal control.	Internal control register and monitoring reports are produced in time, scope and quality as required.	Achieved	2.3.1
1.6.1	Timely administrative support for the Management Board	The Management Board is sufficiently supported to perform effectively its duties	Delivered In total, three Management Board meetings took place. Due to the COVID-19 outbreak, the Agency cancelled the first planned physical meeting in March, and the MB adopted decisions in writing. Two remaining meetings, plus one extraordinary meeting, were delivered on time as web meetings.	Meetings delivered as planned. Stakeholder overall satisfaction rate as measured in satisfaction survey.	Achieved MB meeting planned on 17-18/03/2020 but cancelled due to COVID-19 outbreak and replaced with written procedure 23rd MB meeting held on 30/06/2020 delivered as a web meeting 24th Extraordinary MB meeting held on 17/09/2020 delivered as a web meeting 25th MB meeting held on 24/11/2020 delivered as a web meeting	2.3.2
1.6.1	Timely administrative support for the Advisory Groups	The Advisory Groups are sufficiently supported to perform effectively their duties	Delivered All Advisory Group meetings took place on time.	Meetings delivered as planned. Stakeholder overall satisfaction rate as measured in stakeholder satisfaction survey.	Achieved The physical meetings were held in January, February and March, then the AG meetings took place online due to COVID-19 pandemic.	2.3.2
1.6.1	Project portfolio management capability	Process Model for Portfolio Management 2. IT Roadmap for implementing the PPM (Project Portfolio Management) process model	Delivered Description in section 1.6.1	New process and IT roadmap approved within time, scope and budget	Achieved Process and roadmaps approved as planned	2.3.9
1.6.1	Develop and deploy processes and training programs, evaluate projects, perform project quality assurance reviews, appraise processes, and report project performance	Improved alignment between Agency's strategy and project execution, through the integration of main processes: Project Management, Programme Management and Portfolio Management.	Delivered Description in section 1.6.1	Achieving objectives agreed in the EPMO Roadmap	Achieved Objectives achieved as planned	2.3.9
1.6.1	Official Appraisal based on CMMI model	Agency officially rated against CMMI model	Ongoing The Agency conducted all planning and preparation activities as planned: completed the business case for the activity and delivered the kick-off meeting, including the roadmap proposal. A training session on CMMI (Foundation of Capability) took place for relevant staff members in December.	Maturity level of relevant process areas	Achieved In 2020, the focus was on preparatory tasks not on the appraisal	2.3.9

1.6.1	Corporate risk management evolutions	1. Process Model for Corporate Risk Management 2. IT Roadmap for implementing the Corporate Risk Management process model	Ongoing The annual exercise to monitor corporate risks and issues was performed as planned. Revision of eu-LISA Risk Management Policy was approved by the Management Committee in April 2020.	Corporate Risk Management process model and IT Roadmap	Achieved Redesign of the Corporate Risk Management Process Model is linked to the PPM Implementation (launched in 2020) and to eu-LISA's Risk Management under control of the MRMIC	2.3.9
1.6.1	Continuous service improvement services and processes reviews	Continuous service improvement validation of the existing ITSM processes as well as the provided services in order to serve better eu-LISA internal and external stakeholders;	Ongoing - identification of products, agreement of the product description template; describing all the identified products - full review and update of Service catalogue and transforming into Product and service catalogue, aligned with the Sourcing strategy - all the services are revised and updated, using the updated Service description template - the full package is created and published for everyday use - review and update of ITSM processes is ongoing - seven new processes are defined: Business relations management, Demand management, Requirements management, Asset management, Product management, IT Security management, Continuity management	Continuous service improvement process KPIs	Below target The updated set of processes KPIs is one of the key outcome from the project - still to be finalised. The project-related progress, controls and risks are measured and reported regularly by the project manager.	2.1.4.1
1.6.2	Implementation of the annual internal audit plan	Obtaining transparency for key stakeholders on the adequacy and effectiveness of the system of internal control. Providing trust in operations and confidence in the achievement of the Agency's objectives and an understanding of residual risk. All Advisory Group meetings foreseen took place on time.	Delivered Description in section 2.7.3	(1) Percent of processes with assured output meeting targets within tolerances (2) Percent of processes receiving independent review (3) Number of critical and very important internal control breaches (4) Number of critical non-compliance issues identified per year	There is insufficient data captured to compute the new four performance indicators agreed upon. Several relevant frameworks and activities needed to be fully implemented. Therefore, IAC continued to apply the same indicators as in previous years: (1) Delivering the Annual Audit Plan: 80 % (2) Audit reviews completed within budget and on time: 60 % (3) IAC 's staff training hours/year: 70 %	2.3.10
1.6.2	Internal control, procedures, audits related to finances and procurement	The Agency avails itself of a comprehensive set of procedures and checks which are fit for purpose to promote sound financial management and internal control	Delivered The Agency avails itself of a comprehensive set of procedures and checks that are fit to promote sound financial management and internal control.	A comprehensive and coherent set of procedures cover the main business processes in the financial and procurement area.	Achieved See the comment for the outcome	2.3.3

1.6.2	Solidification of the concepts imposed by new Regulation repealing the Regulation 45/2001	Ensure compliance of the internal rules with the applicable legal framework	Delivered New Decision on implementing rules adopted by eu-LISA's MB, register fully updated as per EDPS guidance, involvement of the DPO in DPIAs. The MB adopted a new decision on implementing rules adopted, and the Agency completed the update of the registry as per EDPS guidance.	New Decision on implementing rules adopted by eu-LISA's MB Number of DPIA performed or involved DPO register of processing operations.	Achieved 1. New Decision on implementing rules adopted by eu-LISA's MB: - Implementing Rules related to DPO adopted in October 2019 Adoption planned for 2021. In 2020: Draft version of the Implementing Rules on Art. 25 of Regulation (EU) 2018/1725 created and reviewed internally. 2. Number of DPIA performed or involved: - Five DPIA (EES, sBMS, ETIAS, Accuracy Check for BMS, ECRIS-TCN) 3. DPO register of processing operations: - Kept up to date, public, compliant (EDPS audit), reformatted as per request of EDPS.	2.3.5
1.6.2	Perform the Annual Data Protection survey	Recommendations on data protection compliance to be implemented in order to increase data protection compliance of the Agency.	Delivered The scope of the activity is updated to take into account: 1. EDPS SIS and VIS 2018 Inspection Report that was received in April 2020. It contains 43 recommendations and deadlines range from Q2 2020 to Q2 2021.eu-LISA has transposed all EDPS recommendations into an Action Plan. The DPO of eu-LISA monitors the progress of its implementation. 2. Draft Report from EDPS 2019 audit on Eurodac that was received in November 2020 to allow formal comments. These formal comments shall be adopted by Management Board of eu-LISA. The DPO of eu-LISA drives this exercise including internal consultation, consultation with Eurodac Advisory Group, consultation with Management Board and consolidation of comments for formal adoption by the eu-LISA Management Board. 3. EDPS order on International transfers following CJEU ruling on Schrems II case. In October 2020, EUIs have received an order from EDPS to conduct a mapping exercise of international data transfers to third countries and to report any identified risks and gaps based on the aforementioned exercise. The DPO of eu-LISA drives this exercise and supports data controllers in eu-LISA to complete this order within the deadline. The Agency updated the scope of the activity to take into account recommendations and deadlines from EDPS SIS and VIS 2018 Inspection Report by transposing these into an action plan. The Agency received the draft report from the EDPS 2019 audit on Eurodac to allow formal comments, which Management Board will adopt after the internal consultation and consultation with Eurodac Advisory Group. In October, EUIs received an order from EDPS to conduct a mapping exercise of international data transfers to third countries and report any identified risks and gaps.	Report presented to the eu-LISA ED The Performance Indicator is updated to take into account: 1. eu-LISA DPO's follow-ups on Action Plan re EDPS SIS and VIS 2018 Inspection Report that was received in April 2020. 2. eu-LISA DPO's exercise for compiling and consolidating comments to be formally adopted by eu-LISA MB concerning Eurodac Draft Report on 2019 EDPS audit. 3. EDPS order on International transfers following CJEU ruling on Schrems II case:	Achieved 1. Follow-up sessions organised quarterly: first follow-up session was held on 20 May 2020, Q2 in July 2020, Q3 in October 2020 and Q4 will be completed in February 2021. 2. Formal comments of eu-LISA sent back to EDPS within deadline: The internal review was completed. Consultation with Eurodac AG and eu-LISA MB was completed. All comments were consolidated and a written procedure was launched for the eu-LISA MB to formally adopting these comments. After formal adoption, comments from eu-LISA will be sent back to EDPS within deadline (18 January 2021). 3. eu-LISA DPO provided assistance and support to eu-LISA's data controllers to map data transfers of their processing activities (data transfer inventory created and meetings with data controllers organised). Report on identified risks and gaps on international transfers completed and sent back to EDPS within deadline (15 November 2020).	2.3.5

1.6.2	Increasing data protection awareness	Staff complies with data protection requirements	Delivered All staff got direct information and training on the new data protection obligations, rights and penalties on the Data Protection Day awareness session and Newcomers session. All necessary information was continuously updated. Staff were informed of the latest developments and news on data protection through the weekly eu-LISA newsletter and DPO Intranet, where a new section on Data Protection Impact Assessment, including step-to-step instructions and a template, were included.	Number of sessions carried out on data protection and personal data breaches. Number of DP newsletter issued.	Achieved 1. One session carried out on general data protection awareness on the Data Protection Day. (>100 participants) One session carried out on data protection for Newcomers. (31 participants) 2. Sixteen weekly eu-LISA newsletters issued including data protection awareness section. Two special newsletters including the data protection highlights of the first and second half of 2020.	2.3.5
1.6.2	Drafting the Annual Work Report 2019 and reporting the intermediate status on data protection compliance to the Management Board	MB is informed on the level of compliance as regards to the data protection.	Delivered Annual Work Report 2019 submitted for approval to eu-LISA's Management Board and published. Intermediate status report on Data protection presented to the Management Board.	Deliverables provided according to the agree deadlines	Achieved Annual Work Report 2019 was delivered to the MB according to the agreed deadlines. Intermediate status on DP compliance shared with the MB in April and November 2020. Annual Work Report 2019 was also published on eu-LISA website.	2.3.5
1.7.1	Consolidation of the Agency following change, growth and transformation	Agency's and HRTU organisational structure will reflect the organisational development. The new staff will be integrated in the organisation. The change management related to the rapid growth will be implemented.	Delivered The Agency recruited additional staff in line with the recruitment plan. HRU encoded new staff data and launched time and leave management modules, followed the entitlements granting process following the rules and established practice and implemented the onboarding programme for the newcomers. The HRU regularly adjusted the service organisation to the growing Agency's needs despite insufficient human resources and the COVID-19 pandemic. The use of electronic tools for interviewing and testing supported the recruitment process. The Agency implemented induction of newcomers by the planned schedule. The Agency organised a total of 40 sessions. 81% were satisfied with the overall onboarding experience during their first week and month in eu-LISA. No major update of the organisation structure was necessary to accommodate changes to the tasks of the Agency; a few minor adjustments in the form of individual transfers between units and sectors occurred, and the Agency split one sector between two units.	(1) Number of selections during the year and (2) Awareness session to staff on use of Sysper for each deployed module. (3) Induction and onboarding of newcomer finalised within 2 months from entry to (4) Number of staff selected to fill in vacant or new posts.	Achieved (1) 20 new selections and 1g closed selections. The number of recruited staff was 51 No target value for this KPI was set. (2) Three awareness sessions to staff and managers were delivered on use of Sysper (on TIM) and regular (once or twice a month) a session to the newcomers as well as one session on RIG and HR certificates' modules to all staff within an Hour with HR - a target of at least 1 session. (3) 74%of the induction and onboarding of newcomer finalised within 2 months from entry to service. 40 sessions for newcomers were organised - a target of at least 3 onboarding finalised in 2 months from entry to service. (4) 73 staff were selected to fill in vacant or new posts including change of a contract.	2.3.4
1.7.1	Cultural change and transition to eu-LISA 2.o operational model	eu-LISA 2.0 is able to optimise the operating model and processes	Postponed Due to extended evaluation and administrative issues in completing the procurement phase, the Agency signed a specific contract with a consultancy company in December. Therefore, the project milestone for the first phase was shifted to Q2 2021.	Cost – Schedule – Scope	Below target Green – Amber – Green Project kick-off to be held on Q1 2021.	2.2.2.2

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1.7.2	Standard (business as usual) Human Resources activities in terms of organisational structure, processes and practices performed in compliance with the relevant rules and decisions	Agency's and HR unit organisational structure will reflect the organisational development and accommodate for a future growth. eu-LISA will fulfil its obligations towards staff in accordance with the regulatory framework.	Delivered The Agency implemented the organisational structure reflecting the development, and with further minor adjustments (e.g. transfers of some staff between the sectors or units), executed a new operational model. The new staff was granted the respective entitlements along the onboarding process, and the Agency implemented payroll and other payments, contract renewals, career and talent management on time. The Agency adopted two new Implementing Rules on leave and prevention and management of the conflicts of interests); one will enter into force automatically (on the transfer of pension rights), and the other rules relevant for the Human Resources management as appropriate. The Agency also put further improvements in place to be fully in line with the prevention of harassment rules and increase awareness and increased communication around the Agency's values.	1. Ratio (%) of administrative resources to operational resources 2. Percentage (%) of uncertified vs certified absence days from work within reporting period 3. Annual Percentage (%) Staff Turnover 4. Staff performance index 5. Staff engagement level 6. prevention of conflict of interest: number and percentage of Dols submitted on time 7. implementation of Annual learning plan 8. Number of teambuilding events and social activities organised	Achieved 1. 16.5 % of administrative resources to 72.5 % of operational resources – a target respectively 20 % and 70 % 2. 17 % – a target to be below 25 % of uncertified absence days 3. 3.7% – a target below 5 % of staff turnover, 4. This KPI was replaced by a talent retention index with a target of being a positive number. KPI: "Average performance of people leaving VS people remaining in the Agency". +0.25 (meaning that performance of people remaining o.25 higher than the ones leaving the Agency) 5. Staff engagement level: 7.4 6. 82 % a target above 80 % in time (the scope of this KPI has been reduce in 2019/2020); 7. 86 % – a target at least 85 % of planned activities implemented, 8. Due to COVID-19, only three activities were organised –target of at least ten teambuilding and social activities organised.	2.3.4
1.7.2	eu-LISA staff training on operations (technical training) and knowledge management	eu-LISA's staff will be able to better perform; eu-LISA will be acknowledged as a hub of expertise and knowledge	Delivered The COVID-19 pandemic situation forced HR and the operational teams to either postpone some training or reprioritise. The Agency did not put the certification process in place.	1. Number of training activities organised 2. General satisfaction level 3. Increase awareness about Knowledge Management Database 4. 100% newcomers have followed technical onboarding programme 5. Number of study visits performed 6. Number of staff passing the certification process	Below target (1) 24 trainings (2): 81 % (3) increased awareness on iLearn (4) 74 % newcomers have followed onboarding programme (5) not applicable due to COVID-19 pandemic (6) Certification process not in place	2.1.4.3
1.7.2	Continuation of the further development and implementation of the Competency Framework	Continuation of the further development and implementation of the Competency Framework	Ongoing Leadership Development Programme was prepared and launched. 45 managers and Head of Sectors took part in the Programme Module 1.	(1) Roadmap implemented as planned. (2) Leadership	Achieved (1) An update of the competency framework planned and scheduled under cultural transformation project	2.3.4

		to ensure that "right people in right function"		programme developed.	(2) Leadership programme developed and implementation started	
1.7.2	Further development of the learning culture, developing HR function towards business partnership and strengthening staff development and retention	eu-LISA staff take more active role in sharing their knowledge, providing constructive feedback to colleagues and discussing openly mistakes and achievements	Delivered A survey was conducted during the reporting period to measure employee engagement. Employee engagement contributes to staff retention, productivity and efficiency. The data was collected anonymously with an overall participation rate of 86 %. A dedicated task force analysed the results further and proposed actions. Due to the COVID-19 restrictions, many of the planned training courses were shifted online and reprioritised. The Agency focused its efforts on the well-being of people and the support of management through business partnering activities and coaching.	(1) Number of informal learning activities taken place; (2) Study on appropriate spaces for learning experience exchange is created; (3) Staff Engagement survey results increased; (4) Study ready. (5) Roadmap followed for IT tools.	Achieved (1): 5 (2): Performed (3) 7.4 (1.1 increase) (4). Study performed and implemented (5) IT tool for engagement measurement put in place	2.3.4
1.7.3	Timely delivery of services related to budgetary, asset and financial management	High quality and timely services of budgetary, asset and financial services are provided throughout the year. Processes are continuously revised to improve efficiency and effectiveness, wherever possible through dematerialisation.	Delivered The FPU provided high-quality and timely services of budgetary, procurement and financial services throughout the year. Processes are continuously revised to improve efficiency and effectiveness.	KPI 10: Cancellation rate of payment appropriations KPI 11: Rate of budgetary commitments implementation KPI 12: Rate of payment implementation KPI 14: Ratio of payments completed within the statutory deadlines	Achieved KPI 10: 13.6 % (above target) KPI 11: 99.1 % KPI 12: 99.0 % KPI 13: Ratio (%) of administrative resources and ratio (%) of operational resources compared to all human resources (staff and SNEs): administrative 16.5 %; operational 72.5 % KPI 14: 95.9 %	2.3.3
1.7.3	Supporting the Activity Based Management model	The Agency is capable of precisely measuring its performance in the execution of its main business processes. The project is an evolution of the ABB initial model designed in 2018, capable of better integration with project management data.	Delivered	The Agency is capable of implementing an ABB system	Achieved	2.3.3
1.7.3	Execution of the Procurement and Acquisition Plan	The Agency's acquisition needs are addressed in compliance with statutory obligations and within budgetary framework.	Delivered The Agency's acquisition needs have been addressed in compliance with statutory obligations and within the planned budgetary framework.	KPI 17: Efficiency of the procurement process KPI 18: Acquisition management – procurement projects on schedule	Achieved KPI 17: 11 % (target: below 25 %) Procedures cancelled: 2 Procedures launched: 18 KPI 18: 163.6 % (target: above 60 %) Procedures in Annex IX of SPD 2020— 2022: 11	2.3.3

1.7.4	Facility operations for a full and effective usage of the HQ building in Tallinn	Improved working conditions for staff and ability to effectively use the HQ	Ongoing The headquarters building was fully operational and usable even during the COVID-19 pandemic providing a safe and clean working environment to the workers of the Agency.	Conformity to applicable standards	Achieved Headquarters were fully operational and provided a high-level working environment.	2.3.6
1.7.4	Facility operations for full and effective usage of the liaison office in Brussels	Improved working conditions for staff and ability to effectively use the LO.	Ongoing Liaison office in Brussels was operational and provided an adequate working environment to the Liaison Office colleagues.	Conformity to applicable standards	Achieved	2.3.6
1.7.4	Implementation of logistics and supplies services in the Agency	Improved working conditions for staff and ability to effectively use the facilities in all Agency locations	Ongoing All services were timely provided, as a supporting business resource to the fulfilment of business objectives.	Cost – Schedule – Scope	Achieved Green – Green – Green	2.3.6
1.7.4	Maintenance activities of all equipment and assets in the operational site	running facilities	Ongoing All equipment and assets were maintained according to a continuously optimised maintenance program, ensuring a secure, efficient and fully functional working environment.	Number of corrective actions Number of preventive measures Number of technology or other developments Number of faults	Achieved Conformity to applicable standards	2.3.6
1.7.4	Extension of the operational premises in Strasbourg to host current and future projects	Adequate working and operational conditions as well as implementation of technical, logistical and operational best practices	Ongoing All mandatory preliminary studies performed and reports received. The formal land transfer occurred; the Agency is the formal owner. The Agency completed tasks on time and within the scope and provided the building programme, updated budget, and documentation for the designer.	Cost – Schedule – Scope	Achieved Green – Green – Green	2.3.7
1.7.4	Corporate applications evolution	Enhanced capabilities of the Agency's SharePoint and Project Server platforms "	Delivered The Agency performed operational management of the existing infrastructure appropriately, including the regular upgrades and security updates of the systems supporting the ICT Applications services. The Agency delivered and supported the regular yearly corporate applications, such as Planning tool, Reporting tool, as well as other corporate applications, including ones that supported the pandemic response (electronic pay-slips, borrowing IT equipment).	Cost - Schedule - Scope	Achieved Green - Green - Green	2.3.6
1.7.4	Evolutive System Architecture for Corporate IT	Provide services in the field of Corporate IT management. Improved working conditions for staff. Enhanced communication abilities.	Delivered The Agency performed operational management of the existing infrastructure appropriately, including the regular upgrades and security updates of the systems supporting the ICT Systems services. The Agency improved the backup capabilities for the ICT systems, implemented a follow-me printing system, hybrid identity management for internal users, multifactor authentication for webmail and a mobile device management infrastructure.	Cost – Schedule – Scope	Achieved Green – Green	2.3.6

1.7.4	Delivering the cybersecurity operations & assurance service for the corporate infrastructure	Assurance that information security risks will be managed down an acceptable level	The Agency developed the Corporate IT Security Plan, several standards part of the Information Security Management System; extended the CERT-EU Service Level Agreement; completed an Offensive Security Test with CERT-EU (Phishing). The Agency continued with developing the Information Security Management System and implementing the European Commission ITSRM risk management method to align with the COM DIGIT IT Security framework. In line with the Security Rules on the protection of Communication and Information Systems, the Agency established the IT Security Working Group, which run its first meeting on January 2021. The Agency also updated the security architecture of the corporate infrastructure, particularly in regards to the design and implementation of robust authentication solutions, mobile device management and security information, and event monitoring.	1. Percentage of security incidents handled within the SLA within the response target 2. Percentage of security risk assessments done against Systems (design, development, production) 3. Percentage of Information Systems for which a BIA has run at least every three years identifying critical staff 4. Percentage of security objectives implemented as defined per legislation 5. Number of vulnerability scans performed on the information system portfolio 6. Number of cybersecurity Exercises performed annually	Achieved 1. 73 % 2. 100 % 3. 100 % 4. 100 % 5. 10 6. 1	2.3.8
1.7.4	Conferencing capacity improvement and streaming capabilities	Enhancement of the Agency's VC and web conferencing capacity, better integration with third party vendors and streaming capabilities. Replacement of the WebEx solution with a more advanced Meeting Server and streaming functionalities.	Delivered New Video Conferencing System, Cisco Meeting Server was delivered successfully, providing interconnection with the main conference rooms (Neptune in Tallinn and Robert Schuman in Strasbourg). Both conference rooms equipped with the latest Audio Visual technology to provide enhanced in-house conference services. The solution is the state of the art suite of products, and it will offer professional conference services and interconnection with the Agency's existing Video Conference system.	Cost – Schedule – Scope	Achieved Green – Green – Green The Agency revised the timeframe due to the pandemic.	2.3.6
1.7.4	Maintenance and evolution of corporate network architecture	Provide network services in the field of Corporate IT. Improved working conditions for staff. Enhanced communication abilities.	Delivered The Agency performed operational management of the existing infrastructure appropriately, including the regular upgrades and out-of-band security updates of the systems supporting the ICT Networks and communications services. The Agency addressed the increased need for client VPN and videoconferencing services due to the pandemic situation.	Cost – Schedule – Scope	Achieved Green – Green – Green	2.3.6

1.7.4	Mission portfolio and creation of an internal mission tool	Mission tool is implemented and widely used by staff	Delivered eu-LISA started to use the Commission's mission management tool MIPS. The implementation took take place after the deployment of SYSPER II in the Agency. MiPS was rolled out to production for eu-LISA on 2nd November 2020. The Agency started to use the Commission's mission management tool MIPS, which the Agency implemented after the deployment of SYSPER II.	Number of missions accomplished timely when requests submitted on time via mission tool.	Achieved	2.3.6
1.7.5	Implementation of the External Communication and Information Action Plan	Better knowledge and improved awareness of the primary stakeholders on the role and tasks of the Agency in providing the added value for the benefit of the citizens.	Delivered In line with the set objectives, to foster transparency and increase public awareness, the Agency prepared and carried out a coordinated online awareness campaign (discover.eulisa.europa.eu), presenting the Agency and its core business areas freshly and interactively. Additionally, the Agency launched the very first biannual digital newsletter (bit.ly/eu-LISA-Bits-Bytes) in the format of a modern, responsive and self-contained website, to showcase the Agency's progress and highlight its priorities in the JHA domain. The targeted outcome and several JHAAN joint tailored campaigns were very successful and showed significant positive growth trends of outreach across all the channels. The communication sector prepared and updated several crucial documents (eu-LISA External Communication Strategy 2021-2017, eu-LISA Social Media Guidelines for Employees and Editorial Workflow) that are essential to managing the function in line with the strategic objectives of the Agency.	Ensure that content production follows the approved editorial workflow and quality standards and performance is carried out in compliance with the set quarterly milestones of the 2020 Annual External Communication Action Plan. - web-based visibility and engagement-level are regularly measured through web-analytics and social media monitoring tools - The satisfaction rate of the participants with the event management is measured through evaluation sheets.	Achieved eu-LISA external communication met the KPI 29 targets for 2020 and exceeded them with regards to stakeholder engagement at events, as well as trends in social media performance, as recorded in the social media and web monitoring analytics for 2020.	2.3.2
1.7.5	Implementation of eu-LISA Internal Communication Action Plan	The staff at all the sites of the Agency is informed and engaged on the corporate level allowing to make informed decisions regarding their professional tasks and having access to internal communication tools for information sharing and feedback	Delivered The COVID-19 outbreak had a clear impact on eu-LISA internal communication throughout the entire year. It made the Communication Sector swiftly comply with the additional needs of all internal stakeholders for timely, organised and forward-looking information concerning the impact of the pandemic on changed working regimes, health and safety-related issues and restrictions introduced by national authorities and EU institutions. The Agency performed regular COVID-19 internal communication efficiently, and the output met a very high - 89% - satisfaction rate, based on feedback from the Agency's staff.	Compliance of the Annual Internal Communication Action Plan with the set milestones and time-schedule	Achieved According to the 2020 Staff Satisfaction Survey, the overall satisfaction rate with internal communication was 93 %.	2.3.2

Annex VIII	Maintaining the accounts of the Agency	Presenting the annual accounts so that they represent fairly and transparently the financial position of the Agency facilitating the discharge procedure	Delivered	Timely delivery of provisional, consolidated, final accounts to the Budgetary Authority and ECA	Achieved	2.3.3
	Providing Legal Advice to eu-LISA	Compliance by eu-LISA with applicable regulations	Delivered The Legal Sector provided legal advice and opinion on various topics, such as staff matters, procurement and contracts, and issues related to the large-scale IT systems. Furthermore, the Legal Sector dealt with seven complaints under Article 90(2) of the SR. Also, the Sector handled eleven (11) requests and six consultations on access to documents. Five (5) court cases are currently at the European Court in Luxembourg, and two (2) at the Strasbourg Courts.	Provision of legal advise and opinion	Achieved The legal sector provided the legal advice and opinion promptly and in compliance with the applicable legislative framework.	2.3.6

Annex X. Report on public access to documents

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 documents⁸⁰, and in accordance with Article 34 of the Agency's establishing regulation, eu-LISA shall annex a report on access to documents to its 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.

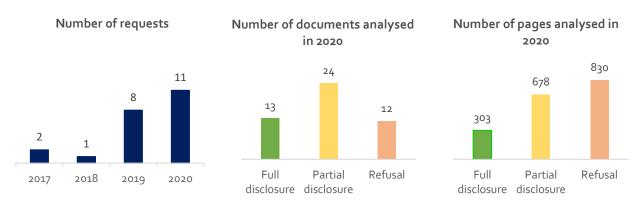
Report on requests for access to documents in 2020

The Agency strives to guarantee transparency in all of its processes, including the procedure for access to documents. In 2020, the Agency maintained the highest levels of good administrative conduct and respected all deadlines specified by Regulation (EC) No 1049/2001.

During 2020, the Agency received eleven requests to access documents, an increase from the previous years. There were no confirmatory applications against the Agency's decisions.

The Agency's decisions on access to documents were not challenged before EU Courts. Additionally, no complaints relating to the Agency's handling of the requests for access to documents were made before the European Ombudsman.

In the course of 2020, eu-LISA analysed 49 documents, of which 13 were fully disclosed to the applicants, 24 partially disclosed with parts of the documents redacted, and 12 for which the request of access was refused. These documents consisted of a total of 1811 pages, out of which 303 were fully released, 678 partially released, and access to the remaining 830 pages was refused.



The partial redaction of documents by eu-LISA and the refusal of access to documents were based on the exceptions specified in Article 4 of the Regulation (EC) No 1049/2001, in particular on the protection of privacy and the integrity of the individual (in accordance with the relevant EU legislation regarding the protection of personal data⁸¹), public interest as regards public security and international relations, ongoing decision-making processes, and commercial interests.

In addition, three of the requests for access to documents concerned documents that were not held by eu-LISA and, accordingly, to which the Agency could not grant (or refuse) access. The applicants were duly informed of the fact and directed towards other appropriate institutions, where possible.

⁸⁰ Regulation (EC) No 1049/2001 of the European Parliament and of the Council of 30 May 2001 regarding public access to European Parliament, Council and Commission documents (OJ L 145, 31.5.2001, p. 43–48).

⁸¹ 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, pp. 39-98).

Other activities related to access to documents performed in 2020

The Agency has been continuously striving to guaranteeing full compliance with the legal requirements and to improve the practice of handling requests for access to documents.

Following a process started in 2019, a public document register was published in February 2020 on eu-LISA's public website. 82 This document register provides open access to the Agency's publicly available documents, and is regularly updated. The Agency continued to work on reviewing the practical arrangements for public access to documents, in order to improve the efficiency and operational effectiveness of the process.

In the beginning of July 2020, the Legal Sector organised a training on public access documents, which was held by an expert from the European Institute of Public Administration. Further trainings are planned in 2021.

^{82 &}lt;u>https://www.eulisa.europa.eu/About-Us/access-to-documents/public-register</u>