

2017-116 REV 2

PROGRAMMING DOCUMENT 2018-2020

From Executive Director
To Management Board
Prev. Doc.
Subject eu-LISA Programming Document 2018-2020



Protection level PUBLIC

eu-LISA Programming Document

2018-2020

Table of Contents

Foreword	8
List of Acronyms	9
Mission statement	12
Section I General context	14
Section II Multiannual programming 2018-2020	16
1. Multiannual objectives	16
1.1. Strategic goals 2014-2020	16
1.1.1. <i>Strategic Goal 1: Continue to grow as a contributor to and facilitator for freedom, security and justice policies in the EU</i>	16
1.1.2. <i>Strategic Goal 2: Become an acknowledged EU information and communication technology (ICT) centre of excellence and service provider</i>	16
1.1.3. <i>Strategic Goal 3: Grow as the principal EU ICT technology centre and expertise hub</i>	17
1.1.4. <i>Strategic Goal 4: Develop a modern, efficient and agile organisation</i>	17
1.2. The strategic multiannual objectives 2018-2020	18
2. Multiannual programme (2018-2020)	30
2.1. Strategic action areas in the scope of Strategic Goal 1	30
2.1.1. <i>The operational management of the systems</i>	30
2.1.2. <i>Evolution of the systems</i>	31
2.1.3. <i>Communication infrastructure</i>	34
2.1.4. <i>Development and operational management of new systems</i>	36
2.1.5. <i>Security</i>	37
2.1.6. <i>Data protection</i>	38
2.1.7. <i>Statutory reporting</i>	38
2.1.8. <i>Provision of training on the technical use of the systems to Member States</i>	39
2.2. Strategic action areas in the scope of Strategic Goal 2	39
2.2.1. <i>Evolving as a centre of excellence</i>	39
2.2.2. <i>Evolving the Agency's governance framework</i>	41
2.2.3. <i>Monitoring and applying developments in research for system evolution</i>	42
2.3. Strategic action areas in the scope of Strategic Goal 3	43
2.3.1. <i>Partnerships with Member States, EU institutions and other stakeholders</i>	43
2.3.2. <i>Partnerships with agencies and other relevant EU bodies</i>	44
2.4. Strategic action areas in the scope of Strategic Goal 4	44
2.4.1. <i>Strategic and operational planning</i>	44
2.4.2. <i>Financial management and procurement</i>	45
2.4.3. <i>Facilities management</i>	45
2.4.4. <i>Human resources management</i>	46
2.4.5. <i>Audit</i>	47
2.4.6. <i>External and internal communication</i>	47
3. Human and financial resource outlook for 2018-2020	49

3.1	<i>Overview of the past and current situations</i>	49
3.1.1	<i>Staff population overview for 2016</i>	49
3.1.2	<i>Expenditure for 2016</i>	49
3.1.3	<i>Other information</i>	50
3.2	<i>Resource programming for 2018-2020</i>	50
3.2.1	<i>Financial resources</i>	50
3.2.2	<i>Human resources</i>	51
Section III Work Programme 2018		64
1.	Executive summary	64
2.	Activities in 2018	69
2.1.	Horizontal business-as-usual activities	69
2.2.	Horizontal project activities	82
2.2.1.	Activities within the scope of Strategic Goal 1	82
2.2.1.1.	<i>Implementation of an enterprise IT solution for managing eu-LISA personnel's personnel security clearance processes and the fulfilment of security requirements for the contractors</i>	82
2.2.1.2.	<i>Physical security improvement in Tallinn</i>	83
2.2.1.3.	<i>Physical security improvement in Strasbourg</i>	84
2.2.1.4.	<i>Annual Data Protection Survey</i>	85
2.2.1.5.	<i>Provide privacy-by-design guidance</i>	86
2.2.2.	Activities within the scope of Strategic Goal 2	87
2.2.3.	Activities within the scope of Strategic Goal 3	88
2.2.3.1.	<i>Share services on data protection with other relevant agencies</i>	88
2.2.4.	Activities within the scope of Strategic Goal 4	89
2.2.4.1.	<i>Translation of outcomes of Governance Model Review into refinement proposals</i>	89
2.2.4.2.	<i>Increasing the Agency's planning capabilities</i>	90
2.2.4.3.	<i>Introduction of activity-based budgeting</i>	91
2.2.4.4.	<i>Establishment of corporate and other services in the new HQ</i>	92
2.2.4.5.	<i>Logistical and organisational operations for final occupation of the newly constructed or refurbished buildings in Strasbourg</i>	93
2.2.4.6.	<i>Logistical and organisational operations for final occupation of the newly constructed headquarters building in Tallinn</i>	93
2.2.4.7.	<i>Establishment of corporate and other services in new Strasbourg building</i>	94
2.2.4.8.	<i>Maintenance and development of corporate network architecture</i>	95
2.2.4.9.	<i>Maintenance and development of system and storage architecture</i>	96
2.2.4.10.	<i>Development of corporate IT Infrastructure in the new headquarters</i>	97
2.2.4.11.	<i>Corporate applications enhancement</i>	98
2.2.4.12.	<i>Further development of enterprise architecture</i>	99
2.2.4.13.	<i>Monitoring implementation of HR Strategy and Staff Retention Policy</i>	100
2.2.4.14.	<i>Implementation of Health and Safety Policy</i>	101
2.2.4.15.	<i>Contracting eu-LISA medical service</i>	102
2.2.4.16.	<i>HR IT tools developed and implemented in production (Allegro, Sysper II and/or dedicated application for time management)</i>	103
2.3.	Operational business-as-usual activities	104
2.3.1.	Activities within the scope of Strategic Goal 1	104

2.3.1.1.	<i>VIS maintenance</i>	104
2.3.1.2.	<i>Ensure uninterrupted and high-quality operation of the core business systems</i>	106
2.3.1.3.	<i>Operate, manage and maintain the backup data centre and backup operational site in Sankt Johann im Pongau, Austria</i>	106
2.3.1.4.	<i>BMS maintenance</i>	107
2.3.1.5.	<i>SIS II Maintenance</i>	108
2.3.1.6.	<i>Operational management of SIS II (transition for the new SIS II MWO contract, continuation from 2017)</i>	110
2.3.1.7.	<i>Support for Member States (SIS II)</i>	110
2.3.1.8.	<i>Eurodac maintenance</i>	111
2.3.1.9.	<i>VIS Mail maintenance</i>	112
2.3.1.10.	<i>Level 2 management of the IT infrastructure of the core business systems</i>	113
2.3.1.11.	<i>Regular operational management of the communication infrastructure contracts (budget execution, acquisition, renewal, contract management)</i>	114
2.3.1.12.	<i>DubliNet operational management</i>	116
2.3.1.13.	<i>Drafting technical reports, aggregating statistics and publishing updated list of authorities</i>	117
2.3.1.14.	<i>Providing training on the technical use of the systems to the Member States</i>	118
2.3.2.	Activities within the scope of Strategic Goal 2	119
2.3.2.1.	<i>Implementation of Research and Technology Monitoring Roadmap</i>	119
2.3.3.	Activities within the scope of Strategic Goal 3	121
2.3.3.1.	<i>Planning, coordination and participation of the Agency as an observer in the Schengen Evaluation missions</i>	121
2.3.4.	Activities within the scope of Strategic Goal 4	122
2.3.4.1.	<i>Training to eu-LISA staff related to operations</i>	122
2.4.	Operational project activities	123
2.4.1.	Activities within the scope of Strategic Goal 1	123
2.4.1.1.	<i>Develop reference Technical Tender Specifications for Call for Tenders of Large Scale IT Systems</i>	123
2.4.1.2.	<i>Core business systems integrated monitoring</i>	124
2.4.1.3.	<i>Performing of Service Desk benchmarking</i>	126
2.4.1.4.	<i>Conducting a study on virtual desktops for administrators</i>	127
2.4.1.5.	<i>Implementation of the second phase of shared services (continuation from 2017)</i>	129
2.4.1.6.	<i>Centralise Oracle licensing</i>	130
2.4.1.7.	<i>Conducting an automated data quality control study followed by a test</i>	132
2.4.1.8.	<i>BMS database increase (continuation from 2017)</i>	134
2.4.1.9.	<i>BMS 1.0 decommissioning</i>	134
2.4.1.10.	<i>Implementation of VIS/BMS end-to-end testing platform (continuation from 2017)</i>	136
2.4.1.11.	<i>Tuning of VIS transactional throughput (continuation from 2017)</i>	137
2.4.1.12.	<i>Tuning of BMS transactional throughput (continuation from 2017)</i>	138
2.4.1.13.	<i>USK renewal</i>	139
2.4.1.14.	<i>VIS database increase from 60 million to 100 million records (continuation)</i>	140
2.4.1.15.	<i>Reinforcement of the VIS/BMS testing infrastructure (continuation)</i>	142
2.4.1.16.	<i>Conducting a study on implementing service-oriented architecture</i>	144
2.4.1.17.	<i>Evolution of common test tools</i>	145
2.4.1.18.	<i>Implementation of a virtualisation test phase</i>	146
2.4.1.19.	<i>SIS II AFIS consolidation and preparation of implementation for Phase 2</i>	147
2.4.1.20.	<i>SIS II evolutions</i>	148
2.4.1.21.	<i>SIS II recast</i>	149
2.4.1.22.	<i>SIS II Return Decision</i>	150
2.4.1.23.	<i>Eurodac integration with shared service architecture standards</i>	150
2.4.1.24.	<i>Eurodac reform: functional changes and capacity upgrade</i>	151

2.4.1.25.	<i>Study/Impact Assessment for splitting the underlying biometric matching services from the front-end/business layers in Eurodac</i>	153
2.4.1.26.	<i>Conducting a unified network test phase</i>	154
2.4.1.27.	<i>Preparation for TESTA-ng second generation</i>	155
2.4.1.28.	<i>Operational management of the systems' communication infrastructure and related communication systems</i>	156
2.4.1.29.	<i>Handover of the activities related to implementation of the budget, acquisition, renewal and contractual matters of the VIS and SIS II communication infrastructure</i>	157
2.4.1.30.	<i>Data warehouse implementation to improve automated reporting and statistics generation Phase 2 (continuation from 2017)</i>	159
2.4.1.31.	<i>Entry/Exit System implementation</i>	162
2.4.1.32.	<i>Development of ETIAS</i>	163
2.4.1.33.	<i>Development of new system for the Dublin Allocation Mechanism follow-up</i>	165
2.4.1.34.	<i>ECRIS-TCN implementation</i>	166
2.4.1.35.	<i>Common shared infrastructure security implementation second phase</i>	167
2.4.1.36.	<i>Implementation of an EU-Restricted information exchange system (continuation from 2017)</i>	168
2.4.1.37.	<i>Implementing a secure, isolated web-browsing infrastructure on the corporate IT</i>	169
2.4.2.	Activities within the scope of Strategic Goal 2	170
2.4.2.1.	<i>Introduction of advanced network statistics (continuation from 2017)</i>	170
2.4.2.2.	<i>Implementing of Advance Reporting mechanism for ITSM processes KPIs and SLAs/OLAs</i>	171
2.4.2.3.	<i>Implementation of Maturity Model assessment</i>	173
2.4.2.4.	<i>Implementation of additional systems development life cycle</i>	175
2.4.3.	Activities within the scope of Strategic Goal 3	176
2.4.4.	Activities within the scope of Strategic Goal 4	176
	Annexes	177
	<i>Annex I: Resource allocation per activity 2018-2020</i>	177
	<i>Annex II: Human and financial resources 2018-2020</i>	196
	<i>Table 1 – Expenditure</i>	196
	<i>Table 2 – Revenue</i>	200
	<i>Table 3 – Overview of revenue and expenditures</i>	203
	<i>Table 4 – Budget outturn and cancellation of appropriations</i>	206
	<i>Annex III:</i>	207
	<i>Table 1 – Staff population and its development: overview of all categories of staff</i>	208
	<i>Table 2 – Multiannual staff policy plan 2018-2020</i>	211
	<i>Annex IV:</i>	220
	<i>A. Recruitment policy</i>	220
	<i>B. Appraisal of performance and reclassification/promotions</i>	225
	<i>Table 1 – Reclassification of temporary staff/promotion of officials</i>	226
	<i>Table 2 – Reclassification of contract staff</i>	229
	<i>C. Mobility policy</i>	231

<i>D. Gender and geographical balance</i>	233
<i>E. Schooling</i>	239
<i>Annex V: Buildings</i>	241
<i>Annex VI: Privileges and immunities</i>	245
<i>Annex VII: Evaluations</i>	250
<i>Annex VIII: Risks 2018</i>	254
<i>Annex IX: Procurement plan Year 2018</i>	256
<i>Annex X: Organisation chart 2018</i>	257
<i>Annex XI: Standard SLA</i>	259
<i>Annex XII: Common Service Level indicators</i>	260

Foreword

The Programming Document 2018-2020 of the European Agency for the Operational Management of Large-Scale IT Systems in the Area of Freedom, Security and Justice (eu-LISA) has been drawn up based on the established internal process of aligning the existing financial and human resources with the legally obligatory activities and projects for organisational development. This document reflects eu-LISA's strong commitment to contributing to the EU area of freedom, security and justice by providing high-quality services and to developing as a centre of excellence.

The intention of this document is, on the one hand, to serve as a basis for decisions on financing the Agency, to provide information to eu-LISA's stakeholders on its 2018 activities and resource distribution, and to give a general overview for 2019 and 2020. Furthermore, it is intended to provide eu-LISA's staff with guidance on the Agency's priorities and to help plan the work of the different units.

For 2018-2020, the Agency has set three high-priority areas:

- **Operational management and evolution of the existing systems:** eu-LISA will continue to keep the systems entrusted to it functioning in accordance with the legal instruments applicable to them, in particular the maintenance work and technical development necessary for the smooth running of the systems, taking into account the needs of Member States.
- **Introduction of new systems:** the Agency is expected to continue the implementation of the Entry/Exit System (EES), which is planned to start in the second half of 2017 upon adoption of the EES Regulation by the co-legislators. Upon the adoption of the European Travel Information and Authorisation System (ETIAS) proposal, eu-LISA will start the development of ETIAS. In addition, also subject to the adoption of the recast Eurodac Regulation, the Agency is expected to continue the implementation of necessary changes to the Eurodac system. Subject to the adoption of the recast Dublin Regulation, the new Dublin Allocation System should be implemented. Relevant legal bases for both tasks are expected to be adopted in 2017. Furthermore, based on the proposal submitted by the Commission on 21 December 2016, the Agency is planning to start implementation of the necessary changes to the Schengen Information System (SIS II), following the adoption of the SIS II recast.
- **Organisational reinforcement and development:** this broad area covers various actions intended to make the organisation more solid and agile. It covers the introduction of measures such as activity-based budgeting (ABB), the improvement of the strategy-planning capacity, the strengthening of human resources (HR) management-related capabilities, the finalisation of the transfer of the Agency to its new premises, and cooperation with different European bodies and institutions.

List of Acronyms

ABB	Activity Based Budgeting
AFIS	Automated Fingerprint Identification System
AG	Advisory Group
AMMU	Applications Management and Maintenance Unit
BC	business continuity
BCU	Backup Central Unit- backup centre in St. Johann im Pongau
BMS	Biometric Management System
CA	Contract Agent
COTS	commercial off-the-shelf
CSI	Common Shared Infrastructure
CSS	Corporate Service Sector
CU	Central Unit - the main data centre in Strasbourg
DG DIGIT	Directorate-General for Informatics
DP	data protection
DPO	Data Protection Officer
ECA	European Court of Auditors
ECRIS-TCN	European Criminal Records Information System for Third Country Nationals
EDPS	European Data Protection Supervisor
EES	European Entry/Exit System
EIGE	European Institute for Gender Equality
EiO	Entry into Operation
EMCDDA	European Monitoring Centre for Drugs and Drug Addiction
ENISA	European Union Agency for Network and Information Security
EPMO	Enterprise Project Management Office
EPSO	European Personnel Selection Office
ESP	external service provider
ER	establishing Regulation
ETIAS	European Travel Information and Authorisation System
EU	European Union
eu-LISA	European Agency for the Operational Management of Large-Scale IT Systems in the Area of Freedom, Security and Justice
Eurojust	European Union's Judicial Cooperation Unit
FG	Function Group
FPU	Finance and Procurement Unit
FTE	full-time equivalent
GCU	General Coordination Unit
H&S	health and safety
HLEG	High-Level Expert Group set up by European Commission in the context of the April 2016 Communication <i>Stronger and Smarter Information Systems for Borders and Security</i>
HQ	headquarters

HR	human resources
HRTU	Human Resources and Training Unit
IA	internal audit
IAC	Internal Audit Capability
IAS	Internal Audit Service of the European Commission
ICS	internal control standard
ICT	information and communication technology
ISKE	An information security standard that is developed for the Estonian public sector
ITIL	Information Technology Infrastructure Library
ITSM	Information Technology Service Management
JHA	justice and home affairs
JHA	Justice and Home Affairs
KPI	key performance indicator
LE	legal envelope
LFS	legislative financial statement
LMS	learning management system
MB	Management Board
MOM	message-oriented middleware
MoU	memorandum of understanding
MS	Member States
MSP	Microsoft Project
MWO	maintenance in working order
OD	Operations Department
OIU	Operations and Infrastructure Unit
OJ	Official Journal
OLA	operational level agreement
PAP	Procurement and Acquisition Plan
PD	Programming Document
PIA	privacy impact assessment
PKI	public key infrastructure
pm	pour mémoire
PRINCE ₂	Projects in Controlled Environments 2
QM	Quality Management
QMS	quality management system
R&D	research and development
RAD	Resources and Administration Department
RPO	recovery point objective
RTO	recovery time objective
SEC	Security Unit
SIRENE	Supplementary Information Request at the National Entry
SIS II	Schengen Information System
SLA	Service Level Agreement
SMART	senior management administration report

SNE	Seconded National Expert
SOA	Service-Oriented Architecture
SON	Security Officers Network
SRP	Staff Retention Policy
sTESTA	Trans European Services for Telematics between Administrations
SXB	Strasbourg
TA	Temporary Agent
TBD	to be determined
TESTA-ng	Trans European Services for Telematics between Administrations – new generation
ToR	terms of reference
USK	user software kit
VAAS	Virtualisation Active/Active Study
VIS	Visa Information System
WAN	wide area network

Mission statement

OUR MANDATE

The European Agency for the Operational Management of Large-Scale IT Systems in the Area of Freedom, Security and Justice was established by Regulation (EU) No 1077/2011 of the European Parliament and of the Council of 25 October 2011 (OJ L 286, 1.11.2011, p. 1), which entered into force on 21 November 2011, providing that the Agency should take up its main responsibilities from 1 December 2012. eu-LISA is responsible for the provision and management of large-scale IT systems in the fields of asylum, border management and law enforcement.

The Agency is mandated to provide effective operational management of the Schengen Information System (SIS II – the largest information system for public security and law enforcement cooperation in Europe), the Visa Information System (VIS – a system that allows Schengen states to exchange visa data relating to applications for short-stay visas to visit, or to transit through the Schengen area) and Eurodac systems (a large-scale fingerprint database that assists primarily in the processing of asylum applications) on behalf of its stakeholders, i.e. the European public through Member States and European Institutions. In addition, the Agency is also responsible for the communication networks that support the above systems. In terms of networks, eu-LISA is the provider of the communication infrastructure for SIS II, Eurodac and VIS. The Agency is also responsible for VIS Mail and DubliNet, the communication tools for VIS and Eurodac systems respectively.

The Agency might become responsible for other systems if the applicable legal instruments are adopted.

OUR MISSION

The Agency's core mission is to be dedicated to continuously adding value to Member States, supporting through technology their efforts for a safer Europe.

OUR VISION

- To provide high-quality and efficient services and solutions to our stakeholders;
- To earn the trust of our stakeholders, continuously aligning the capabilities of technology with the evolving needs of Member States;
- To grow as a centre of excellence.

OUR VALUES

The Agency has a number of core values that drive and underpin operational activities and the strategic development of the organisation:

- **accountability:** deploying a sound governance framework, cost-efficient operations and sound financial management;
- **transparency:** providing regular and open communication to the Agency's key stakeholders and engaging them in a continuous dialogue to define a long-term strategy for the development of the Agency;

- **excellence:** through having the right organisational structure, the right people and the right processes in place to ensure service continuity and functional comprehensiveness of tools provided to Member States;
- **continuity:** ensuring that the Agency will make the best use of expertise, knowledge and investments made by Member States and will continue to develop them;
- **teamwork:** seek to empower each individual team member to make the best use of their knowledge and experience, contributing to the common success;
- **customer focus:** ensure that the Agency is aligned at any time with the needs and demand of its stakeholders.

Section I General context

It should be noted that the area of freedom, security and justice has gone through a significant transformation in recent years. While, as a consequence of irregular migration and terrorist threats, the pressure on it has significantly increased today, at the same time it has become highly reliant on modern technologies and information sharing. Moreover, there is a process of very fast convergence between border management, internal security and migration management, which raises demand and expectations in respect of technologies and systems – at the present and in future.

The policy outlook for the current programming period focuses on specific measures aiming to provide operational support to Member States facing internal security threats, as well as disproportionate pressure at their external borders (deriving from irregular migration and requests for international protection). The efficient tackling of growing security risks requires joint efforts by Member States and EU institutional stakeholders, with Justice and Home Affairs (JHA) agencies playing a stronger operational role in particular. Joint efforts should, however, be framed by action plans agreed between eu-LISA and contributing JHA agencies, driven by the operational demands.

In this challenging and demanding environment, eu-LISA's role in the area of freedom, security and justice becomes more and more prominent, with the business demands on the Agency being continuously expanded to accommodate additional and new tasks. In particular, the Agency must look into the continuous development and adaptation of the systems it operates and of any new systems entrusted to it within the legal framework, in order to efficiently and effectively support the business needs of concerned stakeholders (e.g. end users) in an increasingly challenging security environment.

eu-LISA understands its key role in the area of freedom, security and justice, given the increased focus placed on IT systems, and will continue its close cooperation with Member States (MS and partner JHA agencies in operational projects, such as the Hotspots and the EU Regional Task Forces, if and as requested by the Commission, by providing dedicated support to specific MS affected in particular by irregular migration.

As an example of the increased demands placed on the Agency, the 'Communication on Stronger and Smarter Information Systems on Borders and Security', issued by the European Commission on 6 April 2016, sets out eu-LISA's enhanced role in developing new systems and working on exploring the various dimensions of interoperability of the systems. Thus, the Agency will continue its efforts together with the Commission and Member States within the mandate of the High Level Expert Group created by the Commission, as regards the four interoperability dimensions outlined in the Communication (development of a Single Search Interface, interconnectivity of existing systems, shared biometric matching system and the development of a common repository of data).

Several dedicated activities will look into the evolution of existing systems, such as the second phase of the Automated Fingerprint Identification System (AFIS) for SIS II (looking at new biometric modalities). In addition, subject to the outcome of the HLEG, the Agency will explore the possible setting up of automated data quality control. Pending the adoption of the relevant legal instruments, the Entry/Exit System (EES) will be under development in 2018, preparing the ground for the testing, deployment and entry into operation of the system in Member States.

In 2016, the Commission finalised a comprehensive overall evaluation of SIS II, 3 years after the entry into operation of its second generation. However, notwithstanding the system's operational success, the evaluation also resulted in a number of recommendations, formed with the purpose of enhancing the effectiveness and efficiency of the system, from both a technical and an operational point of view. To address these issues, the

Commission proposed changes to the SIS legal basis on 21 December. Further changes may follow in 2017 in conjunction with the final report of the High-Level Expert Group on Information Systems and Interoperability. The negotiations on the legislative proposals will most likely commence in 2017 and eu-LISA will follow them closely in order to assist the Commission and the EU Member States, whenever its technical expertise is needed.

The current pressure from irregular migration/increased number of asylum applications at the EU's external borders is not likely to diminish in the coming years. In this respect, through the systems it operates, eu-LISA remains one of the main contributors to the efficiency of border checks and the security of the European Union borders. As an example, Eurodac will most likely evolve beyond its current legal framework and will become an even more useful tool for the effective application of the Dublin Regulation and assisting with the control of the illegal immigration to and secondary movements in the Union.

Following the VIS evaluation performed by the Commission in 2016 and the submission of an impact assessment and legislative proposal to revise the legal basis of VIS in 2017, the related negotiations will be ongoing in 2018. The Agency will closely follow these consultations and will assist the Commission and Member States with technical expertise when necessary.

Furthermore, eu-LISA will continue its active participation in the Justice and Home Affairs network of agencies, and will position itself as a key partner in the area by coordinating the extended network of agencies in 2018.

Section II Multiannual programming 2018-2020

1. Multiannual objectives

1.1. Strategic goals 2014-2020

The strategic goals for the Agency, as described below, reflect the mandate of the Agency at the time of writing and its priorities as defined through dialogue with Member States and the Commission. These goals were established in the long-term strategy of the Agency adopted by the Management Board in March 2014.

The goals will be regularly monitored and subject to regular reviews and development over the duration of the long-term strategy in order to meet the evolving needs of the organisation and its stakeholders.

In addition to the long-term strategy of the Agency, a number of collateral strategies that relate to relevant business areas were drawn up (e.g. External Communications Strategy, Research and Technology Monitoring Strategy, Stakeholder Management Strategy, Learning and Development Strategy for eu-LISA personnel and HR Strategy). Most of these internal strategies are primarily concerned with maximising the resource productivity of the business units in question, but they are consistent with, and seek to reinforce and support the delivery of, the wider strategic aims of the organisation outlined in this paper.

1.1.1. Strategic Goal 1: Continue to grow as a contributor to and facilitator for freedom, security and justice policies in the EU

The Agency will develop its operational model further in order to maintain stable and continuous operation of the systems entrusted to its management (currently SIS II, VIS, Eurodac and the underlying secure communication infrastructure), ensuring delivery of the tasks related to the operational management of the systems and their evolution. The Agency will also continue to operate VIS Mail (to be replaced by VIS Mail 2) and DubliNet. The Agency will proactively support Member States through the whole life cycle of the systems under its control, ensuring their continuous evolution and the alignment of their capabilities in accordance with legislation. In addition to the continuous improvement of appropriate technical capabilities, the Agency will focus on acting as a technical advisor and contributor, analysing and acquiring additional knowledge about its customers' business processes related to relevant policy areas. The Agency may also take responsibility for the development and implementation of new systems, such as ETIAS, subject to the adoption of the relevant legal instruments and the adjustment of its mandate, and also considering fundamental rights implications and data protection aspects.

1.1.2. Strategic Goal 2: Become an acknowledged EU information and communication technology (ICT) centre of excellence and service provider

The Agency will implement and develop comprehensive governance and operational frameworks based on best practice and current industry standards. It will ensure efficient and cost-effective management of the systems by continuously monitoring and evolving operational processes, seeking opportunities to optimise its operations through an initial baselining and then improvement of the total cost of ownership of existing systems in accordance with the legal framework of each of the systems.

The Agency will also seek to create synergies and economies of scale, establishing partnerships with other agencies in the JHA area on the grounds of its mandate and following the principle of complementarity.

1.1.3. Strategic Goal 3: Grow as the principal EU ICT technology centre and expertise hub

The Agency will further develop partnerships with the EU agencies in the relevant policy area. The Agency will also seek to exchange ICT best practices, experience and knowledge with identified partners. The Agency will continue to grow its internal expertise in relevant technical areas related to its mandate.

1.1.4. Strategic Goal 4: Develop a modern, efficient and agile organisation

Management and administrative services are brought together primarily under Strategic Goal 4, to ensure that the core horizontal (cross-cutting) activities are planned, implemented, monitored and reported in a coherent and consistent way to facilitate the efficient and effective delivery of eu-LISA's work programme and to ensure sound financial and resource management. The Agency will focus its efforts on the professional and career development of its staff. In parallel, it will continue the integration of the organisation based on the mission, vision and values of the Agency, aligning the capabilities of the organisation, its technology and the extensive abilities of its human capital in order to maximise its added value.

1.2. The strategic multiannual objectives 2018-2020

Since its establishment, eu-LISA has worked out a planning approach that allows the organisation to streamline its efforts to constantly develop a way to accomplish its mission and fulfil its vision. Taking a step-by-step approach, the Agency has drawn up its long-term strategy, which establishes the strategic goals and corresponding strategic objectives for the period 2014-2020. The document sets the framework of the desired scope of the Agency's development. To achieve its strategic goals and objectives, the Agency has also drafted a Multiannual Work Programme for 2015-2020 (incorporated in the current document as regards the period 2018-2020) that details the main elements of the strategic objectives and the relations between the elements, the objectives and the strategic goals. It also describes the specific areas of action that need to be addressed. These areas of strategic action aim to support and ensure cohesion between, on the one hand, the business functions entrusted to the Agency by its founding regulation and the horizontal activities carried out to support the core business and, on the other, the organisation's strategic ambitions. They also aim to provide facilitation, guidance and support for planning the practical activities and actions that will deliver the desired results. This way, the Agency is confident that all its actions are in line with the statutory requirements and lead to achieving its vision and fulfilling its mission. The intention of the organisation is to draft its programming documents in such a way that they reflect the logic and scope of the long-term strategy.

The interrelations between the goals, the objectives, the indicators of achievement, the elements and the strategic action areas are described in the tables below. It should be noted that each strategic goal with a specific strategic objective can be cascaded down to more than one strategic action area. As an example, Strategic Goal 1 and the strategic objective 'Provide reliable and cost-effective solutions to Member States as per mandate' relate to three strategic action areas: (a) 'Operational management of the systems', (b) 'Evolution of the Systems' and (c) 'Communication infrastructure'.

Table 1: Strategic goals and indicators of achievement¹

Strategic goal	Indicators of achievement
Strategic Goal 1: Continue to grow as a contributor to and facilitator of freedom, security and justice policies in the EU	Number of identified critical shortcomings during security tests
	Percentage (%) of identified security risks treated by assured security controls
	Eurodac central system availability
	Eurodac central system response time
	Wide area network availability (for SIS II and VIS systems)
	SIS II central system availability
	SIS II central system response time

¹ As adopted by the Management Board of the Agency in March 2017.

Strategic goal	Indicators of achievement
	VIS/BMS central system availability
	VIS/BMS central system response time
Strategic Goal 2: Become an acknowledged EU ICT centre of excellence and service provider	Cancellation rate (%) of payment appropriations
	Rate (%) of budgetary commitments implementation
	Rate (%) of payment implementation
	Ratio (%) of administrative resources to operational resources
	Ratio (%) of payments completed within the statutory deadlines
	Average square metres of office space per FTE (m ²)
	eu-LISA training course external participant satisfaction
	Strategic Goal 3: Grow as the principal EU ICT technology centre and expertise hub
Procurement project management: % of main procurement projects on schedule	
Customer satisfaction: % of MS customers satisfied or very satisfied with the overall service provided by eu-LISA Service Desk	
Strategic Goal 4: Develop a modern, efficient and agile organisation	Ratio (%) of activities identified in the Annual Work Programme met or on schedule
	Member States Systems Service Desk performance
	Project management: assessing completed projects against defined quality/cost/time parameters
	Percentage (%) of audit recommendations implemented within stipulated deadlines
	Percentage (%) of uncertified vs certified absence days from work within reporting period
	Annual Percentage (%) Staff Turnover
	Staff performance index
	Staff engagement level
	eu-LISA web-based visibility

Table 2: Elements of the strategic objectives, projected outcomes and strategic action areas

REF	Strategic goal	Strategic objective 2015-2020	Elements of strategic objective 2018-2020	Projected outcome(s) in 2020	Programming Document strategic action area
1	1	Provide reliable and cost-effective solutions to Member States as per mandate	<ul style="list-style-type: none"> Ensure timely, effective and efficient management of all systems 	<ul style="list-style-type: none"> Continuous full service availability to the Member States Introduction of a unified service model for all systems by 2020 Additional services (e.g. statistics, reporting) available to stakeholders² 	Operational management of the systems
2	1	Achieve and maintain operational excellence	<ul style="list-style-type: none"> Embed a continuous improvement culture throughout operations through the adoption and application of relevant industry best practice standards and/or certifications Continuously improve key contract management processes, tools, reporting and capabilities within the Agency Improve the efficiency of the Agency's operations and continuously monitor and optimise total cost of ownership 	<ul style="list-style-type: none"> Continuous improvement of performance in all operational areas, & increased levels of automation where appropriate and possible Optimised total cost of ownership of the systems under management Identified potential synergies between systems, infrastructure and services identified (where technology and business and legal requirements allow) 	Operational management of the systems

² Only if applicable within the Establishing Regulation of the Agency and the Systems' Regulation.

REF	Strategic goal	Strategic objective 2015-2020	Elements of strategic objective 2018-2020	Projected outcome(s) in 2020	Programming Document strategic action area
3	1	Provide reliable and cost-effective solutions to Member States as per mandate	<ul style="list-style-type: none"> Timely, effective and efficient evolution of systems under management Continuous improvement of service offering and capabilities to Member States 	<ul style="list-style-type: none"> Increased added value of systems to the MS through their evolution Improved interoperability of systems (subject to changes in the relevant legal instruments) 	Evolution of the systems
4	1	Increase the added value of the data and technology to Member States	<ul style="list-style-type: none"> Refined visibility of the Agency's corporate and systems performance to all stakeholders through the production and publication of appropriate performance data Transition from ex-post data analysis (statistics) to analytics subject to legal instruments 	<ul style="list-style-type: none"> Improved analytics and business intelligence (subject to legal review) Analytical reports provided to relevant stakeholders³ 	Evolution of the systems
5	1	Provide reliable and cost-effective solutions to Member States as per mandate	<ul style="list-style-type: none"> Effective supervision, security and coordination of relations between Member States and third party network service providers for systems' communication infrastructure 	<ul style="list-style-type: none"> Optimum network solution in place for the Agency to ensure that system data is processed as efficiently, securely and cost-effectively as possible, complying with the legal framework 	Communication infrastructure

³ The key stakeholder in this sense is the Commission, which requires analytical reports.

REF	Strategic goal	Strategic objective 2015-2020	Elements of strategic objective 2018-2020	Projected outcome(s) in 2020	Programming Document strategic action area
6	1	Increase the added value of the data and technology to Member States	<ul style="list-style-type: none"> • Development and implementation of new/additional systems, if so provided by relevant legislative instruments • Provide new and improve existing services and solutions to meet stakeholder requirements • Increase visibility of the Agency's corporate and systems performance to all stakeholders through the production and publication of appropriate technical performance data 	<ul style="list-style-type: none"> • Entry/Exit System delivered on schedule provided the relevant legislative instrument is adopted • Data warehouse implementation subject to an impact assessment⁴; • Other new/additional systems to be implemented if required by relevant legislative instruments 	Development and operational management of new systems
7	1	Strengthen security, cyber security and information management capabilities	<ul style="list-style-type: none"> • Improve, test and refine Agency business continuity management and disaster recovery procedures • Strengthen and evolve the Agency's cyber security framework for its systems and communication networks 	<ul style="list-style-type: none"> • Ensure common Agency security standards • Business continuity and disaster recovery management policy and procedures regularly tested in house and in conjunction with Member States (a business continuity and security exercise for SIS II will be 	Security

⁴ Implementation of the data warehouse would aim initially to establish the technical platform and automate the regular daily, weekly and monthly technical reports on the functioning of SIS II, VIS and Eurodac. Depending on the result of the work of the High-Level Expert Group on interoperability and evolution of legal instruments governing the systems under the management of eu-LISA, capabilities of the platform might be further used for data quality monitoring and implementation of various statistical and analytical reports.

REF	Strategic goal	Strategic objective 2015-2020	Elements of strategic objective 2018-2020	Projected outcome(s) in 2020	Programming Document strategic action area
			<ul style="list-style-type: none"> Continued progress towards compliance with relevant Information Security Management System standards Maintain and evolve the Agency's security strategy Continue to develop Security Officers Network (SON) 	performed with the Member States on a voluntary basis)	
8	1	Strengthen data protection capabilities	<ul style="list-style-type: none"> Evolve robust and appropriate data protection (DP) mechanisms for corporate and operational aspects of the business Personal data in the systems under management processed in accordance with accepted DP principles; that data is secure at all times and safe from unauthorised access, alteration, use or loss 	<ul style="list-style-type: none"> Continued full compliance with all relevant DP legislation and the specific data protection, and security requirements of the legislative instruments for the systems and the Agency, and best practice Timely response to formal data protection requests from the relevant authorities such as the European Data Protection Supervisor (EDPS) 	Data protection
9	1	Achieve and maintain operational excellence	<ul style="list-style-type: none"> Full and timely compliance with all statutory reporting obligations Ensure adequate follow-up to and compliance with the findings and recommendations of evaluations of the 	<ul style="list-style-type: none"> Agency will continue to successfully meet all statutory reporting obligations as stipulated in the relevant legal bases 	Statutory reporting

REF	Strategic goal	Strategic objective 2015-2020	Elements of strategic objective 2018-2020	Projected outcome(s) in 2020	Programming Document strategic action area
			Agency as per Art. 31 of the Agency's establishing Regulation		
10	1	Increase the added value of data and technology to Member States	<ul style="list-style-type: none"> Deliver appropriate systems training for Member States 	<ul style="list-style-type: none"> A responsive and tailored systems training programme in place that meets in full the needs of stakeholders Full implementation of an appropriate e-learning platform solution Annual training plans agreed with relevant stakeholders 	Provision of systems training to Member States
11	2	Develop and maintain an efficient and cost-effective governance and service model	<ul style="list-style-type: none"> Base Agency's governance framework on industry standards for corporate governance of ICT and fully integrate performance reporting in Agency's management structures Evolve the Agency's operational model towards compliance with industry standards for IT Service Management (ITSM)/Information Technology Infrastructure Library (ITIL) Further develop the Agency's Project management Office (PMO) 	<ul style="list-style-type: none"> Regular benchmarking exercises of organisation's activities in place Annual assessment of the Agency's ITSM processes and service model Corporate key performance indicators (KPIs) monitored and reported, and relevant corrective actions taken as required Service level agreements (SLAs) agreed with MS are monitored and reported ISO 20 000 (international standard for IT service management) certification 	Evolving as a centre of excellence

REF	Strategic goal	Strategic objective 2015-2020	Elements of strategic objective 2018-2020	Projected outcome(s) in 2020	Programming Document strategic action area
12	2	Provide ICT support and expertise to other agencies	<ul style="list-style-type: none"> Develop and implement appropriate service model for ICT consultancy and support 	<ul style="list-style-type: none"> Synergies with other agencies in the use of ICT and resources 	Evolving as a centre of excellence
13	3	Develop and implement sourcing strategy that offers required agility to provide cost-effective ICT solutions and services	<ul style="list-style-type: none"> Implement sourcing strategy to offer agility to the Agency to incorporate customer needs, organisational goals and market conditions Implement biennial total cost of ownership benchmark report 	<ul style="list-style-type: none"> Continuous alignment established between total cost of ownership benchmark reporting and Agency procurement and sourcing activity Alignment of existing human and technological capabilities of the organisation with stakeholder requirements 	Evolving as a centre of excellence
14	4	Continuously improve management and efficiency of resource allocation through the introduction of industry best practices and standards	<ul style="list-style-type: none"> Identify key business areas and processes that need improvement, diagnose and analyse the reasons behind poor performance, plan and implement changes necessary to improve performance in a quantifiable or measurable way Maintain and operate a sound and adaptive governance framework that includes processes and procedures 	<ul style="list-style-type: none"> Implementation of a quality management system based on applicable standards Implementation of relevant industry standards: ITSM, Projects in Controlled Environments 2 (PRINCE2), ISO 27001 (international standard for developing an information security management system) Governance framework, processes and procedures in line with statutory requirements and relevant business needs 	Evolving the Agency's governance framework
15	2	Monitor new technologies and implement new	<ul style="list-style-type: none"> Further develop research-monitoring and engagement tools to enable rapid 	<ul style="list-style-type: none"> Regular monitoring reports and recommendations to management 	Monitoring and applying developments in research for system evolution

REF	Strategic goal	Strategic objective 2015-2020	Elements of strategic objective 2018-2020	Projected outcome(s) in 2020	Programming Document strategic action area
		solutions to facilitate optimisation of business processes	<ul style="list-style-type: none"> integration of relevant aspects of research into Agency business processes Develop structured technology-monitoring and assessment process 	<ul style="list-style-type: none"> regarding applicable new technologies and solutions The systems' evolution roadmaps⁵ of the systems to be updated with the outcomes of relevant research and development (R&D) 	
16	3	Become a trusted advisor to the EU institutions on ICT matters within mandate of the Agency	<ul style="list-style-type: none"> Provide effective advice to stakeholders about matters relating to the mandate and activities of the Agency Evolve and maintain relations with relevant EU institutions and other stakeholders 	<ul style="list-style-type: none"> Consistently high stakeholder confidence in the Agency's ability to deliver the tasks mandated to it, quantified through targeted stakeholder surveys 	Partnerships with Member States, EU institutions and other stakeholders
17	3	Become a technical enabler of, and advisor to, relevant JHA policy actors	<ul style="list-style-type: none"> Improve capability of internal Agency business expertise in identification and authentication systems 	<ul style="list-style-type: none"> Enhanced capabilities in identification and authentication systems Technical analytical papers and advice provided as required 	Partnerships with Member States, EU institutions and other stakeholders
18	3	Lead collection and sharing of best practices in the area of ICT	<ul style="list-style-type: none"> Seek relevant synergies with other private and public sector ICT actors and develop appropriate learning programmes and opportunities for information exchange 	<ul style="list-style-type: none"> Internal process for knowledge management in place 	Partnerships with other agencies and other relevant EU bodies

⁵ Available in the Communication and Information Resource Centre for Administrations, Businesses and Citizens (CircaBC).

REF	Strategic goal	Strategic objective 2015-2020	Elements of strategic objective 2018-2020	Projected outcome(s) in 2020	Programming Document strategic action area
				<ul style="list-style-type: none"> Sharing expertise, 'lessons learned' and best practice in relevant subject areas or large-scale projects exchanged on a regular basis with relevant internal and external parties Formal cooperation agreements signed with all relevant JHA agencies Joint initiatives and projects 	
19	4	Continuously align operational and strategic planning as well as capabilities of the organisation to best serve stakeholders' needs	<ul style="list-style-type: none"> Implement and manage the Agency's long-term strategy and evidence this through the production of relevant and accurate management information 	<ul style="list-style-type: none"> Implementation of the Agency's strategic goals as described within its 6-year strategy document Relevant collateral strategies (sourcing, technology, HR, etc.) developed and implemented 	Strategic and operational planning
20	4	Continuously improve management and efficiency of resource allocation through the introduction of industry best practices and standards	<ul style="list-style-type: none"> Develop and further strengthen the Agency's finance and procurement procedures in line with relevant EU norms, guidance and best practice, including from the private sector 	<ul style="list-style-type: none"> Full implementation of activity-based budgeting (ABB) Systematic achievement of budgetary implementation goals Improved provision of office accommodation at eu-LISA's Strasbourg site and continued progress toward the establishment of a permanent headquarters (HQ) in Tallinn 	Financial management and procurement

REF	Strategic goal	Strategic objective 2015-2020	Elements of strategic objective 2018-2020	Projected outcome(s) in 2020	Programming Document strategic action area
21	4	Continuously improve management and efficiency of resource allocation through the introduction of industry best practices and standards	<ul style="list-style-type: none"> Improvement of productivity through enhanced working conditions of all staff 	<ul style="list-style-type: none"> Improved provision of office accommodation at eu-LISA's Strasbourg site and continued progress towards the establishment of a permanent HQ in Tallinn 	Facilities management
23	4	Retain and continuously develop staff of the Agency through robust knowledge and skills management, in parallel with personalised employee development path	<ul style="list-style-type: none"> Identify, attract, develop and retain talented employees and ensure they are developed through appropriate career advancement opportunities Create appropriate knowledge management strategy and framework for the Agency 	<ul style="list-style-type: none"> Individual and team commitment to the Agency consistently aligned through the provision of knowledge-sharing, development and training opportunities Knowledge management system in place 	Human resources management
24	4	Continuously align operational and strategic planning as well as capabilities of the organisation to best serve stakeholders' needs	<ul style="list-style-type: none"> The Agency's internal audit (IA) function will continue to objectively examine, evaluate and report on the adequacy of eu-LISA's internal controls as a contribution to the proper, economic and effective use of its resources 	<ul style="list-style-type: none"> Full cooperation with external auditors and compliance with all audit recommendations Full implementation of the Internal Audit Capability Model for the Public Sector 	Audit

REF	Strategic goal	Strategic objective 2015-2020	Elements of strategic objective 2018-2020	Projected outcome(s) in 2020	Programming Document strategic action area
25	4	Deliver clear, targeted and effective communications on the Agency's activities to external stakeholders	<ul style="list-style-type: none"> • Increase the visibility, credibility and accurate understanding of the Agency's work and mandate among external stakeholders • Strengthen the Agency's external communication capacity 	<ul style="list-style-type: none"> • Increased visibility of the Agency as a key enabler of the implementation of the EU security policy • Key external stakeholders informed of the Agency's successful progress towards achieving its strategic goals by 2020 	External and internal communications
26	4	Develop and maintain strong corporate culture and positive image to its stakeholders and the EU institutions	<ul style="list-style-type: none"> • Promote and maintain a positive image of the Agency through effective external and internal communications (including outreach programmes and legal and statutory reporting obligations) 	<ul style="list-style-type: none"> • Cohesive and coherent corporate identity established to maintain positive perceptions of the Agency • Regular stakeholder surveys performed to identify areas for improvement • Uniform corporate culture established throughout the Agency • The Agency has sound internal communication process in place • Inspire all staff to create positive perceptions of the Agency • Quality improvement ethos embedded into all Agency processes 	External and internal communications

2. Multiannual programme (2018-2020)

2.1. Strategic action areas in the scope of Strategic Goal 1

Continue to grow as a contributor to and facilitator of freedom, security and justice policies in the EU

2.1.1. The operational management of the systems

eu-LISA will ensure continuous service availability to the Member States through uninterrupted and high-quality 24/7 operation of the systems entrusted to it. This goal will be achieved through constant monitoring, incident management and interactions with Member States. Efficient management and maintenance of the backup data centre and backup operational site in Sankt Johann im Pongau, Austria, will equally be ensured.

In order to further develop its operations in line with international best practices, the Agency will continue with the development of its Service and Process Model based on an ITIL/ITSM implementation roadmap, as adopted by the Management Board in 2013. Based on the roadmap, the eu-LISA ITSM Framework for Phase 1 processes was officially adopted in February 2016. In the following year, the Agency will implement the agreed processes in the scope of ITSM Project Phase 2. It will also seek opportunities to further automate and rationalise processes wherever applicable, hereby benefiting from the integrated ITSM tool and its further integration with other monitoring tools. Focus will also be given to the integration of the ITSM process model with the established project management process, with the aim of standardising and more efficiently controlling the transition to operations. In this respect, the annual assessment of the maturity of the processes is also planned as a prerequisite for the attempted ISO 20 000 certification.

In 2018-2020, eu-LISA will continue its efforts to improve its performance in all operational areas, and increase levels of automation wherever appropriate. The combination of organisational enhancements and technical projects/solutions will help to achieve:

- introduction of Service Desk benchmarking;
- annual process maturity assessment;
- centralisation of Oracle licensing;
- implementation of the Event Monitoring Solution for Core Business Systems⁶, which will be integrated with the Central Monitoring Solution within the Common Shared Services Area;
- development of the reference technical tender specifications for call for tenders of large scale it systems;
- harmonisation of eu-LISA's data centre infrastructure management by continuing the implementation of shared services (started in 2017). Shared services implementation is expected to end in 2019. The

⁶ Core business systems are the systems entrusted to the Agency for operational management.

focus will be on ensuring the alignment of processes and contractual arrangements of the different MWOs with the shared service provisions and standards.

In addition, in 2018-2020, eu-LISA will continue identifying and implementing synergies between systems, infrastructure and services with the implementation of an integrated solution for all existing core business systems monitoring tools, based on the relevant event management process. The integrated monitoring will contribute to further increasing the efficiency of the operational management of the systems entrusted to eu-LISA and will support the Agency to deliver its objectives in accordance with Article 2 of the establishing Regulation.

The Agency will further develop its contract management capabilities for the systems under its management, by standardising and optimising the maintenance in working order (MWO) contracts portfolio. The benefits will include (but might not be limited to):

- alignment of duration of MWO contracts managed by the Agency;
- establishment of unified control system with regard to the contractors;
- implementation of unified performance metrics for all contractors;
- alignment of the number and scope of the contracts with architecture of the systems (present and future) managed by eu-LISA.

The Agency will implement all activities stemming from the proposed changes to VIS and SIS regulations following the related evaluations of VIS and SIS II.

2.1.2. Evolution of the systems

As a result of the success of the ongoing operations, and considering the current tension and needs appearing in the internal security area in Europe, Central SIS II faces a number of challenges from both a technical and a business perspective.

From a technical perspective, Central SIS II has to evolve in order to ensure that additional capacity for alerts and queries can be properly managed with the very demanding performance requirements associated with the system. The availability of the system has to be considered in order to reduce even more the possibility of unavailability, especially for the query functionality, which is extremely sensitive. A horizontal active/active solution to support the availability of the system needs to be considered for the horizon of 2019-2020⁷.

From a business perspective, beginning in 2018, Member States will actively use the biometric matching capabilities of Central SIS II. At the same time, the Agency plans to initiate the second phase of the project for AFIS. It will aim to develop further capabilities of AFIS, focusing on its response time and other technical aspects. The Agency will execute necessary tasks to implement the registration of return decisions⁸ and entry bans into SIS II, thus improving the capabilities of SIS II to support the EU return policy, in particular:

- creation of SIS II alerts on irregular migrants who are the subjects of return decisions⁹;
- use of facial images for biometric identification, in addition to fingerprints;

⁷ In 2017, the Agency will deliver an impact assessment exploring various aspects of the active/active setup.

⁸ Stemming from a legislative proposal dating from end 2016 and subject to legislative adoption.

⁹ Stemming from a legislative proposal dating from end 2016 and subject to legislative adoption.

- storing of hit information on discrete and specific check alerts;
- creation of a new alert category of 'Wanted Unknown Person', for which forensic data may exist in national databases (e.g. a latent print left behind at a crime scene).

Subject to the adoption of the legal framework following the SIS II Evaluation, another important aspect would be to consider the implementation of a common national SIS II (with or without a national copy) that is fully developed as part of a central project or, at least, describe a common configuration blueprint for national implementations focused mainly on the infrastructure elements, which were identified as sources of business continuity problems.

The Eurodac system will continue to evolve technically, including in terms of capacity, to keep it aligned with the Member States' needs. Following the adoption by the co-legislators of the new recast Eurodac Regulation, eu-LISA will initiate the implementation of the changes in Eurodac's functionalities.

The Eurodac recast proposal reflects the developments in the field of asylum and migration following the escalation of the refugee crisis, and is extending the scope of the system to serve other important needs in the field of migration, alongside asylum issues. The system will better enable Member States to identify irregular migrants within the EU and facilitate the follow-up of returns of third country nationals to their country of origin.

The evolution of Eurodac, aiming to comply with the new legal framework, should include, once adopted, (a) extension of search and storage to all categories of data (asylum seekers, third country nationals illegally present in the EU territory, third country nationals apprehended illegally crossing the EU borders), (b) lowering the age of fingerprinting to 6 years old (compared with 14, which is the current limit) to better cope with the arrivals of minors, applications for international protection and secondary movements, (c) extension of the data model to cover additional personal biographical data, (d) extension of data retention periods and (e) introduction of facial images: the Eurodac recast includes the transmission of facial images to the central system¹⁰. The facial images would initially be stored and sent back to the Member States as part of the search-result sets. eu-LISA will initiate a study during 2018 in order to further investigate the inclusion of face recognition capabilities in the system and alignment of it with the shared biometric matching system. The study will focus on the modalities and different technical options, the impact on Member States, and the current architecture and alternatives, as well as providing indications for the implementation roadmap for face recognition.

In addition to the Eurodac evolution stemming from the recast of the legal basis, a number of other technical evolutions might be implemented, such as (a) further capacity upgrades to cope with the impact of functional changes to the system's storage and transaction throughput, (b) possible changes to align or facilitate interoperability¹¹, (c) alignment with the shared services¹² provisions and standards¹³ (outcomes of the common shared services project) and (d) adaptations and technological improvements (e.g. on the infrastructure or monitoring level). Based on the outcomes of the HLEG (final report issued in May 2017), on a study on a shared biometric matching service that has been conducted by eu-LISA as well as on other ongoing efforts and studies

¹⁰ For details, please refer to the Communication of the Commission 205 Final from 6 April 2016.

¹¹ Subject to the outcome of the work in the High-Level Expert Group.

¹² For the shared services project, please refer to section 2.4.1.5.

¹³ Benefits for Eurodac will be improving access management (from Lightweight Directory Access to Active Directory), improving security, compliance verification, creation of log centre, etc.

conducted by the European Commission that will help to shape the relevant legislative framework, the architecture of the central Eurodac system may need to be re-examined. Eurodac might need to be reengineered to use the common biometric matching service and to move the business logic into a front-end application layer, as not all business logic could be implemented in the core database of a shared biometric matching service.

All evolutions of Eurodac will be contractually tackled through the new Eurodac MWO contract in place at the beginning of 2018 (in the absence of a legal framework at the time of drafting, the budget needed for the Eurodac recast implementation is not included in the Eurodac MWO contractual planning, which will have to be reconsidered accordingly).

One of the main goals in the context of Interoperability is to find the most efficient way to harmonise the modalities of the biometric matching mechanisms of the different systems managed by eu-LISA, through the building of a shared Biometric Matching Service. The way that Eurodac is built, since its start of operations in 2003, does not help to achieve this goal as there is no clear split between the core biometric matching mechanism of the system and its business layer making use of the biometric services. These two layers are tightly coupled within the system's architecture and appear as a 'black box' for eu-LISA. This design introduces additional complexity and lack of visibility with regards to assessing the feasibility of future alignment of the current Eurodac with the common specifications that the different biometric matching mechanisms of the large scale IT systems managed by eu-LISA should adhere to. In that framework and without prejudice to the concrete specifications for the shared Biometric Matching Services, which will be put in place under the interoperability context, eu-LISA shall perform a Study for assessing the impact of splitting the underlying Eurodac biometric matching services from the front-end/business layers. The study will be carried out in 2 phases: 1. Identification and high level assessment of feasibility and possible architectural options enabling the split, and 2. Selection of preferred option(s) and detailed impact assessment.

The Eurodac recast proposal includes provisions formalising the already existing responsibility of eu-LISA for DubliNet as per a memorandum of understanding (MoU) of 2014. Upon approval of the above legal framework and in agreement with Member States, changes to DubliNet will be assessed, to modify, for example, the predefined PDF forms exchanged for more automated/XML web forms¹⁴.

For the period 2018-2020, eu-LISA will continue to ensure continued service from VIS and BMS through regular and comprehensive maintenance. Subject to an amendment of the VIS Regulation, eu-LISA will need to perform the necessary activity to ensure that all necessary changes stemming from this amendment are sufficiently introduced into the system. In 2018, BMS 1.0 will be decommissioned to release Central Unit (CU) and Backup Central Unit (BCU) data centre space. In 2019, eu-LISA's main efforts will be focused on keeping the transactional capacity of VIS and BMS aligned with business requirements. At the end of the period, a mechanism to control flow between VIS and BMS will be implemented to ensure more efficient use of the system throughput and to better manage traffic variations. This will be implemented with dynamic load allocation and VIS flow control¹⁵. Furthermore, VIS Storage Area Network components will be upgraded or

¹⁴ The implementation of these tasks depends on the full transfer of responsibility for managing DubliNet to eu-LISA.

¹⁵ Dynamic load allocation and VIS flow control are compensatory measures in case an active/active set up for VIS would not be technically feasible.

replaced. Finally, the capacity of the system's pre-production environment will be aligned with the test environment.

Although not yet a system in production, the EES should be in its development phase in 2018, when existing systems (e.g. VIS/BMS applications) will have to be adapted to factor in the changes required by the EES legal base for interconnection between systems. These activities may have an influence on the VIS system and will require vigorous coordination and convergence activities. In addition, eu-LISA will also need to take preparatory measures to start the development phase of the ETIAS and the European Criminal Records Information System on third country nationals and stateless persons (ECRIS-TCN) (see section 2.1.4, 'Development and operational management of new systems', for more details).

In addition, a central data warehouse¹⁶ should be put in place to enable the production of data quality reports and regular and ad hoc statistical and analytical reports, to facilitate decision-making in the Member States, as well as in the Commission and the relevant JHA agencies¹⁷. Continuing the activity started in previous years and, if necessary, subject to the adoption of amendments of the relevant legal bases, eu-LISA will improve its reporting and statistics capabilities by building up a standard solution for the data warehouse and improve its capabilities to detect and address data quality issues for all its systems.

To ensure timely, effective and efficient evolution of systems, the Agency is planning to verify that the result of the Virtualisation Active/Active Study regarding the choice of infrastructure technologies meets the business requirements for applications.

Continuing from (a) the virtualisation test phase to be conducted in 2018 and (b) the virtualised test environments of the different core business systems, the aim for 2019-2020 will be to prepare the virtualisation of the core business systems and to integrate them step by step into the already implemented common shared infrastructure.

2.1.3. Communication infrastructure

The Agency currently shares the responsibility for the tasks related to the communication infrastructure with the Commission: eu-LISA is responsible for the supervision, security and coordination of relations between Member States and the relevant service provider for the communication infrastructure for Eurodac, VIS and SIS II and the exchange of data between Supplementary Information Request at the National Entry (SIRENE) bureaux. The Commission remains responsible for all other tasks related to the communication infrastructure, in particular the tasks related to the implementation of the budget, acquisition and renewal, and contractual matters. Following the review of the establishing Regulation of the Agency and of the systems' instruments, a transfer of the Commission's responsibilities for the network to eu-LISA is expected to happen within the reference period. In addition, eu-LISA also manages VIS Mail and DubliNet.

Upon the expiry of the Trans European Services for Telematics between Administrations (sTESTA) contract and completion of the migration of SIS II, VIS and Eurodac to the new network, Trans European Services for

¹⁶ Implementation of the data warehouse aims initially to establish the technical platform and automate the regular daily, weekly and monthly technical reports on the functioning of SIS II, VIS and Eurodac. Depending on the result of the work of the High-Level Expert Group on interoperability and the development of legal instruments governing the systems under the management of eu-LISA, capabilities of the platform might also be used for data quality monitoring and implementation of various statistical and analytical reports.

¹⁷ Access of other Agencies to relevant data is subject to the relevant legislative provisions.

Telematics between Administrations – new generation (TESTA-ng), the Agency will continue to strive to optimise the communication infrastructure on the basis of the study carried out in 2017, and aiming for a unified secure network for all systems under its management if the applicable legal base is adopted. Furthermore, the Agency will initiate, within the boundaries of its legal mandate, the preparatory activities for the successor of TESTA-ng, as the TESTA-ng framework contract will expire at the latest in 2020. In this context, the Agency plans to carry out activities related to the TESTA-ng network improvements and optimisation, which will lead to a better quality of communication infrastructure services offered to Member States.

Indicatively, such activities will include the introduction of the additional encryption layer for VIS to increase the security of the VIS business data (started already in 2017) to the same level of protection used for SIS II; the introduction of advanced network statistics provision, which will allow eu-LISA to measure and evaluate the real performance of the communication infrastructure towards proactive reaction to 'bottlenecks'; and faster troubleshooting of issues raised by Member States.

Moreover, the Agency intends to study the trends in Unified Network¹⁸ provisions with a view to optimising the communication infrastructure of the core business systems, which currently relies on multiprotocol label switching and on dedicated links (point-to-point, etc.) and related equipment (turnkey access points), which is, sometimes, replicated/duplicated among Member States as well as the central sites, leading to, among other things, higher complexity and less flexibility. The Agency plans also to address in the study the possible ways to achieve a more resilient communication infrastructure between the central systems in order to contribute to increasing overall availability.

Tasks related to the operational management of the communication infrastructure will continue to be entrusted to a third party private sector provider. This network provider will continue to be bound by the security measures laid down in the basic instruments for each system and in the SIS II and VIS Networks Commission decisions and shall have no access to SIS II, VIS or Eurodac operational data. If the relevant legislation is amended, the Agency will take over from the European Commission and ensure proper management of the communication infrastructure.

Finally, the Agency will continue in the implementation of core business systems network test platform to improve the operational management of the end-to-end communication infrastructure, by providing the environment for comprehensive testing, training, simulations and validation of new technologies/architecture approaches.

In 2018-2020, eu-LISA will continue to grow as a contributor to and facilitator of freedom, security and justice policies in the EU by:

- developing further the vision of the necessary evolution of the communication infrastructure (in 2018);
- ensuring that the Agency possesses the necessary means for testing the improvements of the system and a proper pre-production environment/network development environment, through the implementation of a unified and standardised test platform and processes;
- executing the preparatory activities for the successor of TESTA-ng within the limits of the Agency's legal basis, taking into account the outputs of the executed studies;

¹⁸ Any further implementation might be subject to legislative amendments.

- maintaining and monitoring networks and systems under eu-LISA's management to ensure the security and reliability of the communications infrastructure.

2.1.4. Development and operational management of new systems

On 6 April 2016, the European Commission submitted a Communication to the European Parliament and the Council on Stronger and Smarter Information Systems for Borders and Security and a revised proposal for a Smart Borders package. It included a proposal for a Regulation establishing an Entry/Exit System as well as a proposal for revising the Schengen Borders Code. According to the European Commission's document MEMO/16/1495, the adoption of the proposals by the co-legislators was expected to be finalised by the end of 2016 in order for the Entry/Exit System to be operational by early 2020, after the required 3 years for the implementation of the system. Negotiations on the proposal on the EES continue but are expected to be finalised by the end of the Estonian Presidency of the Council (i.e. by the end of 2017). eu-LISA will start the procurement activities for the implementation of the new system as soon as the legal basis is approved. In order to enable a swift start of the development of the Entry/Exit System in 2017, the Agency initiated necessary preparatory tasks in 2016, including preparation of draft technical specifications for the EES. The development of the EES will require the prior adoption of implementing measures by the European Commission and will include software development, delivery of hardware, system software and communication infrastructure, and development of necessary technical documentation. In 2018, the EES project is expected to be in its development phase.

The abovementioned Communication also requires that eu-LISA look at the possibility for adding AFIS to SIS II (project already under execution) and develop a central monitoring capacity for data quality. The European Commission together with eu-LISA will work towards establishing a standardised solution for a single search interface, shared biometric matching service, interconnectivity, common data repository, etc. These were already addressed in the report from the HLEG, issued in May 2017 (please see also section 2.1.2, 'Evolution of the systems').

On 16 November 2016, the European Commission also submitted a proposal for a Regulation of the European Parliament and of the Council establishing a European Travel Information and Authorisation System and amending Regulations (EU) No 515/2014, (EU) 2016/399, (EU) 2016/794 and (EU) 2016/1624. The proposed system will be an EU system for visa-exempt third country nationals crossing the EU external borders. The system would enable the authorities to determine whether or not the presence of such persons on the territory of Member States would pose an irregular migration, security or public health risk. The proposal envisages that a mandate be given to eu-LISA to develop the system and to ensure its technical and operational management. The Agency will need to start the development of the system once the proposal is adopted by the co-legislators.

The migratory crisis has exposed structural weaknesses in the design and implementation of the EU's asylum and migration policy. As part of its efforts to put in place the tools to better manage migration flows in the medium and long terms, and in line with the approach set out in the European Agenda on Migration, the Dublin Reform proposal (Dublin 'IV' proposal) introduces a new system for allocating asylum applications in the EU based on a distribution key. The new automated system will be developed¹⁹ to follow up on the automatic

¹⁹ Subject to legislative amendments.

allocation mechanism and (re)distribute the asylum applications across the EU. It is expected that the necessary legal base will be adopted in 2017 and that in 2018 eu-LISA will be in the process of developing the system.

The European Commission has recently published the legislative proposal for establishing a centralised system for the identification of Member States holding conviction information on third country nationals and stateless persons (TCN) to supplement and support the European Criminal Records Information System (ECRIS or the ECRIS-TCN system). The creation of a centralised ECRIS-Third Country National system with a centralised database in the background will make it possible to quickly verify if any Member State holds conviction information on a non-EU citizen. The proposed improvements will enable Member States to request the detailed conviction information through the ECRIS system directly from the identified Member States. The tasks to be performed by eu-LISA are two-fold: implement the new ECRIS-TCN system, which includes project management, development follow-up, and quality assurance and quality control activities; and perform the operational management and maintenance of the system. In addition to this, as part of the 'pre-project' phase, eu-LISA will continue supporting the European Commission in the creation of the implementing act and related functional and technical challenges.

2.1.5. Security

The Agency will continue, throughout the period 2018-2020, to focus on ensuring the highest level of security and business continuity in order to facilitate the fulfilment of its mandate. Methods to achieve the above include the following:

- eu-LISA will continue to ensure compliance with the security and data protection requirements within the regulations of the systems under its responsibility.
- The Agency will continue to deliver added value to its stakeholders by enhancing its security and continuity framework, including the development of the security architecture for the systems and management of communications networks.
- The Agency will continue to refine and adjust its security policy architecture, taking a proactive approach in monitoring and addressing all relevant risks and security events, for the protection of its personnel and of its physical, information and organisational assets.
- As the Agency becomes the owner of two new buildings, it will ensure the security and the maintenance of order within those premises and the land during and after the transition period (and the two premises will be used simultaneously to ensure business continuity); and the safety and security of everyone in eu-LISA's premises will be continuously facilitated by a timely and adequate emergency response.
- A security risk management process will be in place to monitor and control the risks and vulnerabilities that may affect the Agency and the systems under its responsibility; eu-LISA will also cooperate with the local authorities of the Member States where the Agency sites are located to run an accurate risk assessment.
- The business continuity and disaster recovery plans for the Agency and the systems under its responsibility will be further refined and tested through the implementation, operation, improvement and continuous maintenance of the approach captured in the Security and Continuity Strategy 2016-2020.
- A business continuity and disaster recovery exercise on the SIS II central and national systems will be performed together with the Member States (in 2018).

- Following the implementation of an integrated security and business continuity management system, eu-LISA will continuously apply the relevant standards, such as ISO 27001, ISO 27031 and ISO 22301, to enhance the trust of the Agency's stakeholders.
- The Agency will also provide assurance on industrial security for its MWO contractors by means of external visits.
- The existing network allowing the exchange of information, best practices, advice and guidance at the level of security experts – the Security Officers Network – will continue to serve as an informal network of security experts exchanging best practices on security and business continuity, advising the Management Board and the Advisory Groups at their request.

The processes set out above are implemented through a continuously enhanced cooperation with Member States, the Commission and relevant EU agencies, including tests and large-scale exercises. The instruments used for this process will cover exchange of best practices, meetings, development of common standards for security and joint responses to security incidents.

2.1.6. Data protection

The Agency plans to keep upholding data subjects rights among eu-LISA post-holders by performing an annual survey of specific units and by raising awareness through organised sessions with eu-LISA post-holders. The Data Protection Officer (DPO) will continue monitoring activities on processing operations with personal data and will continue to follow his/her obligations to inform the data subjects, as well as keeping the Processing Operation on Personal Data Register updated accordingly.

The impact that the new General Data Protection Regulation will have on compliance in data protection matters will need to be assessed and incorporated in the processes at eu-LISA. Privacy impact assessment (PIA)²⁰ and the concept of privacy by design are methods that the deployment of new systems needs to incorporate in the project management process.

Cooperation with the EDPS will continue to be a key element of the DPO's tasks by providing assistance with the inspections of the large-scale systems and also by requiring guidance or opinions for privacy impact assessments. Alongside that, the cooperation with Member States' data protection supervisory authorities represented on the supervision coordination groups will continue to be strong, in order to raise the level of trust in data protection matters. To strengthen the collaboration with other EU agencies, it is planned to continue to grow by sharing experiences and adopting best practices.

2.1.7. Statutory reporting

In the period 2018-2020, the Agency will continue to comply with all management and statutory reporting requirements (as laid down in the legal bases for each system under management and referred to in the establishing Regulation). It will continue to report to the European Parliament, the Council and the Commission, in particular on:

- publishing every year SIS II statistics as per Article 66(3) of Council Decision 2007/533/JHA and parallel provision in Regulation (EC) No 1987/2006;

²⁰ Privacy impact assessment is the identification of the risks in terms of data protection as perceived by the General Data Protection Regulation, with suggested controls to mitigate those risks.

- submitting in 2019 the biennial technical report on the functioning of SIS II including security pursuant to Article 46(8) of Council Decision 2007/533/JHA and parallel provision in Regulation (EC) No 1987/2006;
- submitting in 2018 and in 2020 the biennial technical report on the functioning of VIS including security pursuant to Article 50(3) of Regulation (EC) No 767/2008 and Article 17(3) of Council Decision 2008/633/JHA;
- submitting every year an annual report on the activity of the Eurodac central system including on its technical functioning and security pursuant to Article 40(1) of Regulation (EU) No 603/2013;
- publishing every year the Eurodac annual statistics as per Article 8(2) of Regulation (EU) No 603/2013.

In addition, eu-LISA will continue to ensure publication (on an annual basis, in the Official Journal (OJ) of the EU) of the list of competent authorities which are authorised to search directly the data contained in SIS II, together with the list of national (N.SIS II) offices and the national SIRENE bureaux (as per Article 31(8) of Regulation (EC) No 1987/2006 and parallel provision in Council Decision 2007/533/JHA), as well as to publish annually on its website the updated list of designated authorities, specifying the exact unit that has access to data recorded in the Eurodac central system as per Article 27(2) of Regulation (EU) No 603/2013.

2.1.8. Provision of training on the technical use of the systems to Member States

The Agency will continue to provide high-level training on the technical use of SIS II, VIS and Eurodac or any future system in its remit to participating national authorities in cooperation with and supported by the European Commission. In the period 2018-2020, special focus will be given to the creation of the training portfolios related to the Entry/Exit System and ETIAS.

Besides current training courses offered to the main eu-LISA stakeholder group concerned here, the National IT Operators, further enhancement of training for SIRENE staff and Schengen evaluators is planned as well.

In order to achieve technical readiness for integration into SIS II, VIS or Eurodac, eu-LISA will prepare and deliver tailored newcomer training programmes for Member States or EU bodies joining the systems. At present, the expected candidates for newcomer programmes are Ireland, Cyprus and Europol.

In addition, eu-LISA will further enhance its cooperation with other JHA agencies in the training area, especially with CEPOL, Frontex and EASO, and, where relevant, with FRA. The e-learning component of eu-LISA training activities should be further developed, resulting in the establishment of an effective learning management system (LMS) with high-level offers of e-courses.

2.2. Strategic action areas in the scope of Strategic Goal 2

Become an acknowledged EU ICT centre of excellence and service provider

2.2.1. Evolving as a centre of excellence

The Agency will continue to maintain and refine the processes in place for operational management of the systems by following standards and best practice in ITIL/ITSM. Thus, eu-LISA will be able to further identify and implement activities to improve service quality and improve the efficiency and effectiveness of the established ITSM processes and the service model, improving significantly the cost effectiveness of delivering IT services

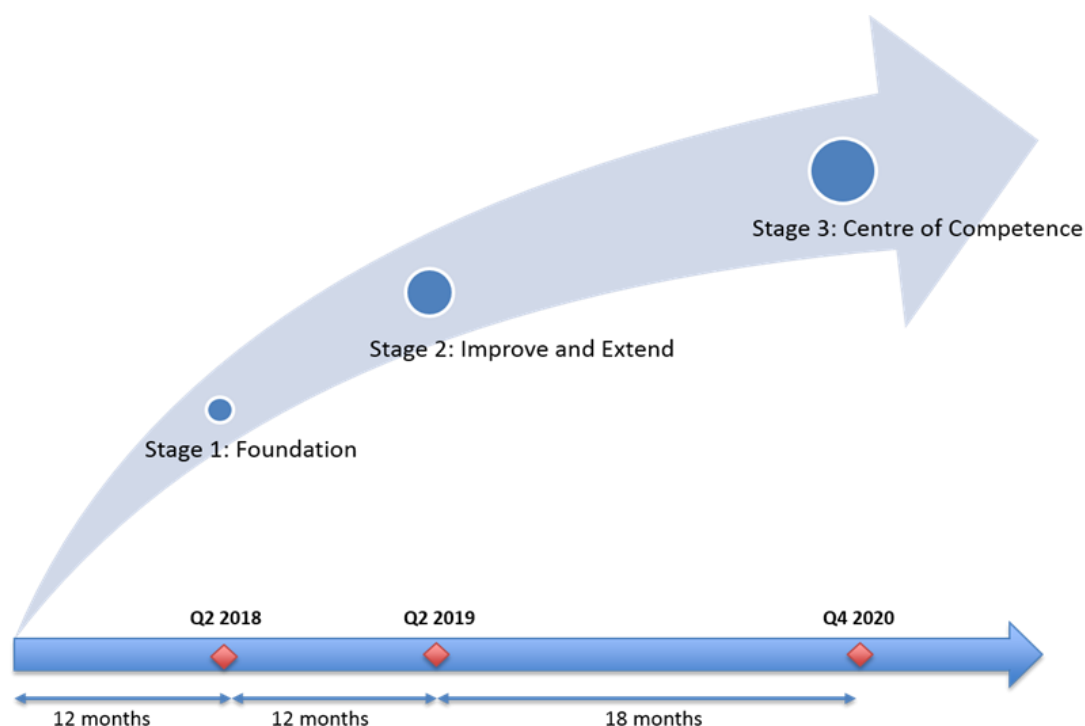
without sacrificing customer satisfaction²¹. The main objective is to improve the figures for its services' 'fit to use' attributes, namely for availability, performance and continuity as well as improved performance of processes, based on the respective processes' KPIs. For example, the planned implementation of the Continuous Service Improvement Process and Advanced Reporting Solution will enable a real-time view of the 'fit for use' service attributes and the process KPIs. The further coordinated integration of the IT Service management processes aims to provide ongoing control, greater efficiency and opportunities for continuous improvement of eu-LISA services.

Moreover, the Agency built its IT governance framework on industry standards for corporate governance of ICT, and it integrated performance reporting in the Agency's management structures, e.g. by implementing the advanced network statistics system (second part), to allow eu-LISA to measure and evaluate the real performance of the communication infrastructure used by all core business systems.

The Agency will further develop its operational model towards higher compliance with industry standards for IT service management (ITSM/ITIL), by developing the Advance Reporting mechanism for ITSM processes, KPIs and SLAs/operational level agreements (OLAs) and the implementation of Maturity Model assessment.

eu-LISA will continue to strengthen its capabilities to plan and implement its projects and programmes, by enhancing its project management process, putting in place the necessary tools to support its activity and building up mechanisms closely linked to the Agency's governance. An Enterprise Project Management Office (EPMO) will be established within eu-LISA in order to provide a robust organisational project management system and a pragmatic governance framework that establishes a consistent, predictable and efficient way to manage programmes and projects. It will further implement and promote best practices, and standardise processes and project and portfolio management methodologies to effectively manage project resources and project goals. The aim is to act as an organisational enabler for the Agency in implementing the corporate strategy, while maximising value, gaining efficiency and achieving cost savings when possible. By its mission and vision, the EPMO will support the eu-LISA strategic objectives mentioned in the 2014-2020 strategy paper. The eu-LISA EPMO will evolve progressively in stages, up to the achievement of 'Centre of Competence' status by the end of 2020. Each stage represents a step forward on both the capability (services delivered by the EPMO) and maturity dimensions.

²¹ For this purpose, the Agency conducts annual stakeholder satisfaction surveys.



One of the key milestones is the completion by Q4 2017 of the pilot of the enterprise project management solution, which will be followed by full deployment by users together with a gradual enhancement of tool capabilities within Stage 2.

The lessons learned and industry best practices will be continuously used to enhance the project delivery capabilities.

To enhance the efficiency and the effectiveness of the delivery, the internal tools will be upgraded based on the study of the systems development life cycle tools that started in 2016. This development supports the internal development life cycle. The purpose of the tools is to support the validation of the delivery of the contractors, to ensure that the stakeholders' requirements are met. This will mainly consist in introducing specific tools available on the market to support the automation of the different phases or areas involved in the systems development life cycle and ITSM, such as requirement analysis and design, version control, software testing, release management and change management. It will also guarantee cross-tool visibility to ensure end-to-end compatibility, traceability and configuration control for each new requirement or change.

2.2.2. Evolving the Agency's governance framework

The Agency's governance model, as operated and maintained through a sound governance framework that includes processes and procedures, will support the implementation of eu-LISA's long-term strategy. It will mainly affect the strategic objectives, most of all the development and maintenance of an efficient and cost-effective governance and service model, and will support the continuous alignment of operational and strategic planning.

As in previous years, the governance framework, including elements such as stakeholder consultation and management, corporate risk management, corporate KPI performance management, internal control management and providing legal advice, will ensure that statutory requirements and relevant business needs are met and that the Agency adheres to the concept of practising and delivering good governance in its actions

and activities. A dedicated planning and reporting process is established to support the Agency and its stakeholders with a clear and transparent approach for delivering its elements according to requirements and expectations.

As a continuation of the 2017 quality management exercise, performed by applying the Common Assessment Framework methodology, in 2018 eu-LISA will further implement agreed measures for maintaining and improving quality in its processes and activities, based on the agreed quality improvement plan. In 2019, and as part of the continuous quality improvement efforts, the Agency aims to run a follow-up quality management exercise.

Last but not least, the governance model, processes and procedures are established in a robust but agile way based on the eu-LISA Service Catalogue and lower level process documentation, not only to support eu-LISA sufficiently to make sure that stakeholder needs are identified, evaluated and further incorporated into organisational objectives, but also to take up new or amended activities and tasks in 2018-2020. For this purpose, the Agency's governance approach will be maintained and fine-tuned if needed, and new requirements will be gradually incorporated to enhance its continuous contribution to and added value for the Agency and its stakeholders.

2.2.3. Monitoring and applying developments in research for system evolution

Work in this domain between 2018 and 2020 will proceed according to the Research and Technology Monitoring Strategy for the period. The Strategy for 2015-2017 focused on establishment of core activities and capabilities that would set a baseline for further work. Prioritisation of particularly relevant topics and engagement of collaborative partners were cornerstones of the proposed approach to work. The 2018-2020 Research and Technology Monitoring Strategy will take stock of work undertaken to date, evaluate feedback and lessons learned, and modify the approach if appropriate to increase the added value of work. Increased added value from system development and evolution projects will be sought, with new priority topics being identified that are of particular relevance to new systems unforeseen in the previous planning period (e.g. ETIAS) and examinations undertaken that are aligned with operational project planning (e.g. a focus on data quality related topics and, within work on biometrics, an increased focus on testing aspects in line with planning for BMS capacity increases and the future development of a shared BMS). While the proposal for a new Agency regulation foresees significant evolution in terms of research-monitoring activities – including a role in the implementation of EU-funded projects – and an associated increase in the number of staff involved, it is not foreseen that the new regulation will be adopted at the time of planning for 2018-2020. The strategy prepared will therefore be reformulated as necessary once any new mandate becomes applicable.

The Agency will continue to inform the Commission and Member States of developments in research relevant to the operational management of SIS II, VIS, Eurodac and other large-scale systems, at least twice a year. The Commission, on its side, will consult the Agency during the preparation of research activities relevant to the Agency's work (Framework Programmes, calls for proposals).

It is expected that prioritisation of topics will continue to be important given the likely limitation on resources for work. As the Agency's systems evolve, new technology domains will become more important (e.g. technologies associated with online web interfaces that may be utilised for the future EES and ETIAS) and it is proposed that more emphasis will be placed on these specific areas. Challenges in the area of Justice and Home Affairs have become apparent in the recent past, such as fluctuating patterns of migration that are difficult to predict and the development of new threats in terms of terrorism and cybercrime. Development of new system

architectures that enable flexibility and adaptability will be necessary, and evolution of systems in this direction subject to the relevant legislative amendments will be supported through research and technology monitoring. Innovations in infrastructure will also be monitored more heavily as the drive towards excellence in service provision gathers pace.

Given that the goal of driving system evolution will be placed at the heart of work, interactions with the Agency's Advisory Groups will be more relevant than ever. Frequent presentation of planning and results at Advisory Group meetings will remain important. The work in the programme period will be shaped by the input provided from a questionnaire disseminated to the Advisory Group members in the second half of 2017.

Collaboration will also continue to be important in the framework of working arrangements with other EU bodies. Given that state-of-the-art and evolving technologies may be deployed and open source software²² should be favoured as far as possible, monitoring of the work of academia and research institutes will be pursued more heavily than previously. Recent interactions with the Commission's Joint Research Centre have highlighted the added value of interaction with it, and this collaboration will be strengthened in the period under discussion.

The role of technology monitoring within specific project structures has been very apparent in recent years with contributions to projects through the provision of input based on such monitoring to the Smart Borders pilot, the SIS II AFIS and BMS evolution studies and examination of IT security improvements being notable. A specific role for technology monitoring within project structures is also envisaged in the future. In particular, the R&D Officer of eu-LISA will be assigned to take up roles in relation to the development of the Entry/Exit System, projects focused on systems interconnectivity and interoperability, and projects involving new biometric modalities or functionalities based on evaluated pilot projects requested by the European Commission²³. This will allow appropriate leveraging of the knowledge gained from monitoring technologies within these areas in the period between 2015 and 2017.

Furthermore, the organisation of events such as the Agency's annual conference and industry roundtables will continue in the period 2018-2020. Given that new facilities will be available at both sites in Strasbourg and Tallinn for the hosting of such events, an increase in the number of events hosted may be considered if demand arises.

2.3. Strategic action areas in the scope of Strategic Goal 3

Grow as the principal EU ICT technology centre and expertise hub

2.3.1. Partnerships with Member States, EU institutions and other

²² Open source refers to a software, application or program in which the source code is publicly available for use, sharing and/or modification. Such software is typically available free of charge.

²³ As regards interoperability-related projects, eu-LISA will respect the fundamental right to the protection of personal data as recognised in Article 8 of the Charter of Fundamental Rights, and in particular the purpose limitation principle. In exploring the interoperability of large scale IT systems, special consideration will be given to data protection by design, referred to in Article 25 of Regulation (EU) 2016/679 and Article 20 of Directive (EU) 2016/680.

stakeholders

In terms of fostering cooperation with EU institutions and bodies, eu-LISA will continue to position itself as a trusted partner and advisor on topics pertaining to the operational management of large-scale IT systems in the area of freedom, security and justice.

A key focus will be on providing technical expertise and sharing knowledge with the rotating Presidencies of the Council of the EU, thus ensuring that eu-LISA's considerable breadth of knowledge in the management of large-scale IT systems will serve as a basis for informed political decision-making. eu-LISA's liaison office in Brussels will also develop further and enable effective working relations with Member States, EU institutions and relevant policy and operational actors. The Agency will seek to further reinforce strong working relationships and to intensify cooperation with JHA Counsellors and the European Parliament through regular exchanges of views.

In 2018, eu-LISA will look into the development of existing partnerships with entities of the European Commission, such as the Joint Research Centre and DG DIGIT. The overall aim is to correlate actions, creating synergies and ensuring regular dialogue. In this way, the Agency will continue to build an inclusive and holistic approach towards stakeholder management throughout 2018, through tailored external communication and outreach events.

2.3.2. Partnerships with agencies and other relevant EU bodies

eu-LISA will continue the implementation of the working arrangements with several EU agencies, with a specific focus on partners in the family of JHA agencies: CEPOL (the working arrangement was already signed in 2013 and has been followed up by agreements on cooperation concerning training activities, organised jointly by eu-LISA and CEPOL in 2016 and 2017), Frontex and EASO (both working arrangements were signed in 2014), FRA and Europol (the working arrangement with FRA and the memorandum of understanding with Europol were signed in 2016). The Agency seeks to sign agreements with Eurojust and ENISA in 2017. Further collaboration will continue at strategic level with other agencies, such as EIGE and EMCDDA, in the context of the JHA Agencies Network. Moreover, eu-LISA will continue to cooperate closely with the agencies coordinating the Justice and Home Affairs Agencies Network and the wider network of EU agencies.

In the years up to 2020, further steps will be taken to enhance collaboration with academia, research entities and related industries at the European and global scales. This will help to boost the expertise of the Agency with a view to the development of existing and new large-scale IT systems in Europe, and overall enhance service provision to end users. The objective of these activities will remain to support the Agency in the delivery of its mandate and tasks, as well as in promoting its image as an open, trustworthy and efficient European agency.

eu-LISA will also seek to further reinforce strong working relationships and to intensify cooperation with JHA Counsellors of Member States and the diplomatic corps of EU Member States.

2.4. Strategic action areas in the scope of Strategic Goal 4

Develop a modern, efficient and agile organisation

2.4.1. Strategic and operational planning

For the period 2018-2020, the intention is to further refine and strengthen the strategic planning and reporting process and procedures within the Agency. The focus of the operational planning will be on fine-tuning the use of the Single Programming Document template to better satisfy the needs of eu-LISA's stakeholders and also to use the approach to better perform the internal planning of units' and sectors' work and usage of resources. The Agency will further upgrade its application for automating the collection of information for annual planning. In order to improve the quality of the planning, the Agency will provide specific training to ensure that the staff involved in planning activities have the necessary skills.

2.4.2. Financial management and procurement

The Agency will continue to stabilise its internal financial processes and procedures by ensuring the transparent and effective management of available budgetary and financial resources. In particular, eu-LISA will aim to reach the intended targets in budget execution through improved accuracy of its budgetary forecasting. eu-LISA will also continue to monitor and evolve its financial and procurement procedures, establishing the elements necessary for implementation of ABB.

In addition, the Agency's procurement activities will be further streamlined by consolidating and reinforcing its procedures, building and maintaining capabilities to provide proficient advice on best practices, and increasing pricing transparency in contracts supporting the systems. A particular focus in the period 2018-2020 will be on ensuring the required agility to procure goods and services, or to source additional external resources to be able to address evolving political priorities in the EU and their impact on eu-LISA in a timely manner, optimising the life cycle cost of contracts.

2.4.3. Facilities management

In 2018, facilities management will focus on the move of the Agency to its new premises both in Tallinn and in Strasbourg, as well as on ensuring the logistical and organisational operations for final occupation of the newly constructed or refurbished buildings. The aim will be to carry out the necessary organisational undertakings envisaged for the handover and relocation (e.g. removal of furniture and equipment). This will include the preparation and launching of the new office supplies tender to permit the smooth delivery of necessary supplies and a further elaboration of the logistics plan.

A main effort will be the establishment of a new and redesigned corporate IT data centre for the headquarters, while the data centre for the Strasbourg building is expected to remain in place and to be further modernised and extended. Furthermore, this will include the envisioning of a new online building management system²⁴ at the Agency.

In addition, activities will be carried out to re-establish required corporate services in both new facilities, such as cleaning, waste disposal, supplies and post. These efforts will be accompanied by the implementation of a dedicated logistics plan for the new HQ.

With regard to corporate applications and technologies, the further main priorities in 2018, besides the HQ building's new data centre, will be the maintenance and evolution of the corporate network, corporate system

²⁴ A building management system, otherwise known as a building automation system, is a computer-based control system installed in a building that controls and monitors the building's mechanical and electrical equipment such as ventilation, lighting and power systems.

and storage architecture of the Agency, as well as the (re)establishment and rehabilitation of services and corporate IT systems and applications (e.g. Microsoft SharePoint, Microsoft Project Server or dedicated tools for document and HR management). Furthermore, the Agency's aim is to develop eu-LISA's Enterprise Architecture during this period, taking into account the European Interoperability Framework and the European Interoperability Reference Architecture.

The achievement of an enhanced disaster recovery solution and a high level of availability for all components of corporate IT infrastructure is planned for 2019. In parallel, the maintenance and evolution of the corporate network, system and storage architecture of the Agency will continue to be pursued and achieved with diverse initiatives.

The replacement and modernisation of most of the Agency's corporate infrastructure after a 5-year period for most components will be carried out in 2020. Furthermore, the focus will be on provision of better, safer and faster communication capabilities in regard to email, telephony, internet and web communication, as well as on delivering a paperless Agency as far as possible by having automated a number of the services in the Corporate Services catalogue.

With regard to the facilities and buildings, from 2019 on, the main focus will be on the assessment of the new premises in Tallinn and Strasbourg, verifying that they fulfil their purpose and improve working conditions from a functional perspective. The necessary regular maintenance works and facilities improvements in accordance with the Agency's strategic objectives will also be carried out. Finally, this will include the preparation and launching of the new office supplies tender to permit the smooth delivery of necessary supplies, and a further elaboration of the logistics plan. In 2020, it is planned to further fine-tune the HQ building in order to reflect revised staff needs, accompanied by regular maintenance work and facilities improvements, in accordance with the Agency's strategic objectives.

2.4.4. Human resources management

The HR function of the Agency will continue to ensure that adequate human resources are available to meet the strategic goals and operational plans of the Agency.

There are a number of HR-related challenges for the Agency to face between now and 2020, but of immediate concern is to continue to attract, develop and retain people with relevant experience and skills, to meet the increased workload, while at the same time implementing the measures outlined by the European Commission in its communication to the Council and Parliament to reduce staff by 5% by the end of 2018²⁵.

At the time of drafting this programming document (PD), the Agency is preparing for the adoption of the EES Regulation and ETIAS Regulation, which will result in the augmentation of its establishment plan with effect from their entry into force, which is expected to be in 2017. The Agency will require additional human resources to deliver these significant additional tasks, and needs to recruit staff for these projects. The number of additional staff for these and the other new activities that are expected in relation to the Communication on Stronger and Smarter Information Systems for Borders and Security²⁶ and to the envisaged amendment of the

²⁵ Communication from the Commission to the European Parliament and the Council on Programming of Human and Financial Resources for Decentralised Agencies 2014-2020 of 10 July 2013, COM(2013) 519 final.

²⁶ Communication from the Commission to the European Parliament and the Council on Stronger and Smarter Information Systems for Borders and Security of 6 April 2016, COM(2016) 205 final.

establishing Regulation, once adopted, will influence the work in the area of human resources and training, in particular recruitment and on-boarding of the new staff.

eu-LISA will continue to proactively review the Agency's tasks and their impact on staffing levels and human resources management, e.g. the potential impact of new systems entrusted to eu-LISA or additional tasks related to the systems already managed by the Agency.

It will continue to improve internal processes, work organisation and infrastructure within HR as well as focusing on the further implementation of its HR Strategy, the Staff Retention Policy and the Health and Safety Policy that is planned to be developed in 2017.

eu-LISA will also try to further strengthen its culture of excellence through targeted technical and other relevant training and development programmes for staff and sustainable initiatives to develop a high-performing organisation. Following a full skills-gap analysis, the Agency will develop an organisation-wide training plan to ensure that staff are aware of their training needs and can access appropriate training courses and material.

2.4.5. Audit

The Management Board and the Executive Director will continue to rely on eu-LISA's Internal Audit Capability (IAC) for independent, objective assurance that the existing internal controls are adequate to mitigate the Agency's risks, its governance and risk management processes are effective and efficient, and its annual goals and strategic objectives are met.

eu-LISA will continue to use the IAC as a key enabler for the enhancement of risk assessment and process improvement. Accordingly, the Agency will continue to cooperate with the European Court of Auditors (ECA) and the Internal Audit Service of the European Commission (IAS), hosting their audit missions and taking measures to respond to the resulting recommendations where necessary. The IAC will continue to coordinate work in this area.

The work of the IAC includes the preparation of audit plans, reports, missions, follow-up activities and ensuring that the management and staff of the Agency are generally aware of the principles, objectives and procedures of internal and external auditing.

The Internal Audit Capability Model has levels 1 to 5. In 2018, eu-LISA will implement level 3, 'Integrated', and level 4, 'Managed', thus allowing the Agency to embed its internal audit function into the most relevant operations.

2.4.6. External and internal communication

The Agency will focus its external communication efforts on strategic communication, implemented through integrated communication activities following coordination with the Commission as indicated in the memorandum of understanding signed with the Commission. This will be managed in accordance with the applicable legal provisions of the establishing Regulation and of the MoU with the Commission and in line with the External Communication Strategy of eu-LISA for 2017-2020. The aim is to foster transparent and mutually beneficial relationships between the Agency and its stakeholders. eu-LISA will continue to build on proactive relations with target audiences such as Member States, the EU institutions and the industry, and be accountable to the general public with regular, factual and timely on- and offline information regarding its mandate, activities and new responsibilities.

The Agency will develop and execute its internal communication with the aim of promoting eu-LISA's corporate standards, culture and values. The organisation will further enhance the sharing of information and knowledge

as well as employee engagement initiatives across the different locations of the Agency in line with eu-LISA's updated Internal Communication Strategy 2016-2020 and in accordance with the annual action plans. Emphasis will be put on further facilitating two-way communication between the staff and the management by making use of a variety of communication tools and channels for the benefit of the staff.

3. Human and financial resource outlook for 2018-2020

3.1 Overview of the past and current situations

3.1.1 Staff population overview for 2016

The staff population of eu-LISA consist of temporary agents²⁷, contract agents and seconded national experts.

In 2016, the establishment plan of the Agency is set at 118 posts for temporary agents, including 44 posts for the AST function group and 74 posts for the AD function group.

Given that some tasks have grown and new tasks have been allocated to the Agency, the number of contract agents reached 29 created posts²⁸ by the end of 2016, which shows a remarkable increase from the situation in 2015 and the number of CA posts authorised under the 2016 budget.

In 2016, the total staff population of eu-LISA consisted of 155 posts including all of the above stated categories of staff: 118 temporary agents, 29 contract agents and 8 seconded national experts. In 2016, the turnover of staff exceeded the target KPI of 5% and reached 7.64%.

Staff category	Strasbourg	Tallinn	eu-LISA as a whole
TA	4.11%	14.63%	7.89%
CA	0.00%	28.57%	8.33%
SNE	0.00%	0.00%	0.00%
All	3.19%	16.00%	7.64%

For 2017, according to the authorised budget, the staff population shall consist of 131 temporary agents (115 posts in the establishment plan and 16 new posts; 88 in function group AD and 43 in function group AST), 30 contract agents and 9 seconded national experts.

The more detailed description of the developments is provided in section 3.2.2, 'Human resources', b), 'Growth of existing tasks', where perspective and planning for 2018-2020 is included.

3.1.2 Expenditure for 2016

²⁷ These are posts in the establishment plan of the Agency. eu-LISA does not have Officials' posts in its establishment plan.

²⁸ By the end of 2016, 24 CA posts were occupied, 2 job offers had been accepted with starting dates in Q1 of 2017 and 3 posts remained vacant, with recruitment ongoing.

In 2016, eu-LISA managed a budget of EUR 80.02 million received from the EU subsidy. The Agency maintained its high budget implementation rate at the end of the year:

- 97.9% for commitment appropriations;
- 97.6% for payment appropriations including the carry-forward of administrative expenditure to 2017.

Of the total budget, 28.2% was spent on running the Agency (Title 1 and Title 2), amounting to EUR 22.1 million, of which EUR 14.2 million was staff expenditure and EUR 7.9 million was infrastructure and operating expenditure. The total executed operational budget amounted to EUR 56.2 million (71.8% of the total budget), out of which EUR 12.8 million was committed for SIS II, EUR 31.2 million for VIS, EUR 1.3 million for Eurodac and EUR 7.0 million for shared system infrastructure and system security and business continuity. Another EUR 4.0 million was committed for, among other things, training related to operations and external support services related to core systems etc.

3.1.3 Other information

Information regarding human resources, recruitment policy, appraisal of performance and reclassification, mobility policy, gender and geographical balance, and schooling is provided in Annex IV A-E.

3.2 Resource programming for 2018-2020

3.2.1 Financial resources

Over the next few years, the Agency will have an increasing budget because new tasks will be assigned to it. At the time of drafting this document, they are still subject to the adoption of the respective legal bases. The table below provides an overview of the new tasks and the corresponding budget for the planning period 2018-2020.

New tasks subject to the adoption of the legal basis originally included in eu-LISA Financial Statement of Expenditure and Revenue (January 2017)			
New tasks subject to new legal basis	Estimated expenditures (million EUR)		
	2018	2019	2020
LFS EES development*	59.389	146.202	25.827
LFS Eurodac*	12.138	5.868	0.268
LFS Dublin Allocation	0.983	0.135	0.735
LFS SIS II recast border/police cooperation*	13.103	2.261	2.192
LFS SIS II recast return*	2.590	0.517	0.517
LFS ETIAS*	26.763	14.231	59.879
Total budget subject to new legal basis	114.966	169.214	89.418

* Estimates include administrative expenditures, which will be allocated in accordance with the budgetary nomenclature in Title 1, 'Staff expenditure', and Title2, 'Infrastructure and operating expenditure'.

Compared with the initial budget ceilings set in the Multiannual Financial Framework 2015-2020, the introduction of the new tasks will increase expenditures by more than 200% over the envisaged programming period.

Alongside the new tasks listed above, for which the Agency requested within the 2018 budget circular the respective commitment and payment appropriations, additional tasks amounting to EUR 30 million are expected to be added to the 2018 budget upon the adoption of the legal basis (see table below for details).

New tasks subject to the adoption of the legal basis not originally included in eu-LISA Financial Statement of Expenditure and Revenue (January 2017)			
New tasks subject to new legal basis	Estimated expenditures (million EUR)		
	2018	2019	2020
LFS ECRIS*	4.029	4.116	4.116
LFS revised ER – additional staff revision*	2.902	3.178	3.454
LFS revised ER – insourcing of CAs*	-0.281	-0.281	-0.281
LFS revised ER – transfer of network	19.221	19.221	19.221
LFS revised ER – studies/consultancy	4.000	4.000	4.000
Total budget subject to new legal basis	29.871	30.234	30.510

* Estimates include administrative expenditures, which will be allocated in accordance with the budgetary nomenclature in Title 1, 'Staff expenditure', and Title2, 'Infrastructure and operating expenditure'.

The estimated commitment appropriations for the core activities in 2018, 2019 and 2020 match the ceiling of the Multiannual Financial Framework. External support services will be required for tasks linked to administrative and operational expenditure and specifically include external service providers that support the Agency for tasks that cannot be covered by the Agency's staff because of human resource limitations or the specialised nature of the qualifications or knowledge required, if they are not available at the Agency.

As regards administrative expenditure, it is forecast that expenditure will increase in line with the further growth in numbers of statutory staff and contract agents as requested and subject to the adoption of the new legal bases. The budget for premises is expected to rise in order to accommodate the furnishing and equipping of both the extended Strasbourg site and, starting in 2018, the new HQ in Tallinn currently planned by the Estonian government at its own expense. A further breakdown of estimates by budgetary chapter is presented in Annex II.

Annex I provides detailed information of operational expenditure by system as set out in the PD 2018 and the multiannual planning and justification of the budget. Annex II contains a budget breakdown according to the budgetary structure of the Agency, where operational expenditures are grouped for each system by budgetary chapter.

3.2.2 Human resources

Detailed information about the planning of the Agency's human resources is presented in Tables 1 and 2 in Annex III, which provide the staff planning for the length of the multiannual plan: 2018-2020.

It takes into account the position of the European Commission as outlined in its Communication²⁹ to the European Parliament and the Council on Programming of Human and Financial Resources for Decentralised Agencies 2014-2020 of 10 July 2013, as concerns the establishment plan figures. The cuts include 5% of the staff (equal to six posts) and one post for the deployment pool of the European agencies. In this context, the establishment plan of eu-LISA shall decrease between 2016 and 2018 from 120 posts in 2015 to 113 posts.

At the same time, this programming document includes the staffing needs for the Entry/Exit System and the Eurodac recast³⁰ as from 2017, thus increasing the establishment plan by 16 posts.

The abovementioned developments shall result in the establishment plan for 2017 consisting of 131 TA posts (115 from the establishment plan and 16 new), split between 88 AD posts and 43 AST posts.

In 2018, the establishment plan will be increased by an additional 7 posts for the new ETIAS³¹, reaching 136 TA posts (113 from the establishment plan and 23 new), split between 94 AD posts and 42 AST posts.

An increase in the number of SNEs is also envisaged, from 9 posts in 2017 to 11 in 2018, in order to cover the need to strengthen the cooperation with the relevant Member States' authorities.

The contract agents are not part of the establishment plan, but remain relevant from both budgetary and workforce-planning perspectives. The detailed information presented in Table 1 in Annex III reflects the decisions of the Management Board and the Executive Director of eu-LISA on the additional contract agent posts for 2016 and their impact on planning the staff in 2018-2020. They are also described in point b) (Growth of existing tasks) below.

Resource outlook over 2018-2020

The main focus as regards the human resources of eu-LISA will continue to be on combining a regular and flexible development of in-house human resources with the outsourcing approach wherever this will add value to the activities performed in order to reach the objectives of the PDs of the Agency in 2018-2020.

a) New tasks

The Agency remains prepared to take responsibility for the development and operational management of other systems, subject to the adoption of the relevant legal instruments, for example the Entry/Exit System or ETIAS.

Entry/Exit System (EES)

The EES will become a new task for eu-LISA once the EES legal basis is adopted by the European Parliament and the Council: Regulation of the European Parliament and of the Council establishing an Entry/Exit System (EES) to register entry and exit data and refusal of entry data of third country nationals crossing the external borders of Member States of the European Union and determining the conditions for access to the EES for law

²⁹ COM (2013) 519 final. It foresees that a decrease in staff (temporary agents) will result in the following staff levels: 120 in 2015 followed by 118 in 2016, 115 in 2017 and 113 in 2018-2020.

³⁰ Proposal for a Regulation of the European Parliament and of the Council on the establishment of 'Eurodac' for the comparison of fingerprints for the effective application of [Regulation (EU) No 604/2013 establishing the criteria and mechanisms for determining the Member State responsible for examining an application for international protection lodged in one of the Member States by a third-country national or a stateless person], for identifying an illegally staying third-country national or stateless person and on requests for the comparison with Eurodac data by Member States' law enforcement authorities and Europol for law enforcement purposes (recast).

³¹ Proposal for a Regulation of the European Parliament and the Council establishing a European Travel Information and Authorisation System (ETIAS) and amending Regulations, (EU) No 515/2014, (EU) 2016/399, (EU) 2016/794 and (EU) 2016/1624.

enforcement purposes and amending Regulation (EU) No 1077/2011 establishing a European Agency for the operational management of large-scale IT systems in the area of freedom, security and justice and Regulation (EC) 767/2008 concerning the Visa Information System.

This Regulation will also amend the establishing Regulation in order to reflect the new tasks of the EES.

In order to facilitate the process, preparatory work has been scheduled for the development of the Entry/Exit System and the recruitment of the additional staff required.

An increase in the establishment plan by 14 posts is planned with effect from 2017 for the additional human resources required for the EES. Table 1 below presents the grading and responsibilities of these posts.

Table 1: Forecast of the additional posts required for the Entry/Exit System

Temporary agents (TAs)						
Unit	Post	Grade	2017	2018	2019	Cumulative 2017-2020
AMMU	Programme Manager	AD 8	1			1
	Project Manager	AD 7	1			1
	Project and Technical Quality Assurance	AD 5	1			1
	Test Manager	AD 5	2			2
	Application Administrator	AD 5	1			1
	Application Architect	AD 7	1			1
	Database Engineer/Service-Oriented Architecture-Middleware Specialist	AD 5	1			1
	Business Analyst/Solution Architect	AD 7	1			1
OIU	System Administrator	AD 5	1			1
SEC	Information Security Officer	AD 5	1			1
FPU	Finance Officer	AD 7	1			1
	Procurement Officer	AD 5	1			1
	Finance/Budget Officer/Assistant	AST 4	1			1
Total TAs: 1 × AD 8, 4 × AD 7, 8 × AD 5 and 1 × AST 4			14	0	0	14

For the above posts, the proposed grading is in accordance with Article 53 of Conditions of Employment of Other Servants of the European Union, in the range AD 5 to 8 for Administrators, and AST 1 to 4 for Assistants. Entry-level grading is used for the majority of the posts. Grades that are more senior are planned for the posts where substantial or specialised previous experience is strictly required (programme and project management, technical architecture analysis and design, senior financial management). This is the minimum required by the Agency to design, develop, evolve and maintain a new high-availability system, with additional budget doubling the operational appropriations. Because of the specialised tasks, it will be difficult to attract the required professionalism unless the seniority in the grading reflects the level of responsibility for the EES-related tasks.

ETIAS

Temporary agent posts

The European Commission prepared a Proposal for a Regulation³² of the European Parliament and the Council establishing a European Travel Information and Authorisation System (ETIAS) and amending Regulations (EU) No 515/2014, (EU) 2016/399, (EU) 2016/794 and (EU) 2016/1624 which envisages an increase in the establishment plan of eu-LISA by seven posts in the AD function group for the development and implementation of ETIAS.

Table 2: Forecast of the additional TA posts for ETIAS

Temporary agents (TAs)						
Department/unit	Profile of the post	Grade	2018	2019	2020	Cumulative 2018-2020
OD	Programme/project management – Head of Unit	AD 10 ³³	2	2	2	2
AMMU	Programme/project management	AD 7	2	2	2	2
AMMU	Quality assurance	AD 6	2	2	2	2
FPU	Contract management	AD 5	1	1	1	1
Total TAs: 2 × AD 10, 2 × AD 7, 2 × AD 6 and 1 × AD 5			7	7	7	7

Contract agent posts

In addition, for ETIAS some additional posts for contract agents are planned: 10 for Technical Experts from 2018, 2.5 for testing activities from 2019 and 2.5 more for testing from 2020. From 2020, five additional posts will also be allocated to helpdesk support (24/7) and five to the operators monitoring the central system (24/7).

Table 3: Forecast of the additional CA posts for ETIAS

Contract agents (CAs)						
Unit	Posts	Function group	2018	2019	2020	Cumulative 2018-2020
AMMU	Technical Experts	FG IV	10	10	10	10
AMMU	Testing	FG IV	0	2.5	5	5
OIU	Helpdesk Support	FG III	0	0	5	5

³² COM(2016) 731 final.

³³ Two AD 10 posts are planned in the Operations Department in order to ensure the level of professional experience required to perform the role of the Head of Unit, potentially allowing internal mobility. Should the establishment plan be increased in general for some additional middle management posts, this plan could be revised. The organisational structure of eu-LISA will have to be revised following the implementation of the additional project and the corresponding staff increase.

OIU	Operators Monitoring Central System	FG III or FG IV ³⁴	0	0	5	5
Total CAs: FG IV and FG III			10	12.5	25	25

Following the legislative initiatives of the European Commission and subject to the adoption of the legal base by the co-legislators, the Agency will have to initiate in 2018 steps for the development of the ECRIS-Third Country National system. ECRIS-TCN will be the new system developed and managed by eu-LISA. The tasks performed by eu-LISA during the implementation phase are planned for project management, development follow-up, and quality assurance and testing of the system³⁵.

Table 4: Forecast of the additional CA posts for ECRIS-TCN

Unit	Profile	Function group	2018	2019	2020	2021	Cumulative 2019-2021
TBD ³⁶	Project Manager	FG IV	1	1	1	1	1
TBD	System Engineer	FG IV	1	1	1	1	1
TBD	Application Expert	FG IV	2	2	2	2	2
TBD	Software Quality Engineer	FG IV	1	1	1	1	1
Total CAs: FG IV			5	5	5	5	5

b) Growth of existing tasks

Tasks derived from the decisions taken in 2015-2017 that affect planning for 2018-2020

Temporary agent posts

In the current political situation and the current stage of technology developments, the Agency remains focused on the improvement or further development of the systems it manages.

The implementation of the Eurodac recast will become an extended task for eu-LISA once the following proposal is adopted by the co-legislators: proposal for a Regulation³⁷ of the European Parliament and of the Council on the establishment of 'Eurodac' for the comparison of fingerprints for the effective application of [Regulation (EU) No 604/2013 establishing the criteria and mechanisms for determining Member State responsible for examining an application for international protection lodged in one of Member States by a third-country national or a stateless person], for identifying an illegally staying third-country national or stateless person and on requests for the comparison with Eurodac data by Member States' law enforcement authorities and Europol for law enforcement purposes (recast).

An increase in the establishment plan by two posts is planned with effect from 2017 for the additional human resources required for the Eurodac recast. Table 5 presents the grading and responsibilities of these posts.

³⁴ A more precise distribution of the function groups will take place when the proposal for the project is accepted. For the purpose of staff overview, function group IV has been used in Table 1 in Annex III.

³⁵ The initial request of eu-LISA was for the 6 FTEs as temporary agents. Table 4 presents the staffing level in line with the legal LFS of the Commission.

³⁶ „TBD” stands for „to be determined”.

³⁷ COM(2016) 272 final/2.

Table 5: Forecast of the additional posts for Eurodac recast

Temporary agents (TAs)						
Unit	Post	Grade	2018	2019	2020	Cumulative 2018-2020
AMMU	IT Specialist	AD 5	2	0	0	2
Total TAs: AD 5			2	0	0	2

Contract agent posts

Initially 12 posts were planned for 2016 and were authorised in the 2016 budget. In addition to them, at the end of 2015 and in the first quarter of 2016 the following 11 posts were created by the decisions of the Management Board and 1 post by the decision of the Executive Director because of the expanding tasks:

- six CA FG IV posts for the Network administrators (TESTA-ng);
- one CA FG IV post for Corporate Business Continuity;
- four CA FG IV posts for Eurodac;
- one CA FG III post for an HR Assistant to replace a staff member on extended leave, with the possibility of being transformed into a post of long duration if the legal basis for the EES is adopted in 2016.

In addition, in 2016 the Management Board of eu-LISA approved and amended the Annual Work Programme 2016 by inclusion of the SIS II AFIS project³⁸ for the integration of the fingerprint identification technology into SIS-II. Although the legal and financial statements to the SIS II AFIS proposal were not included, following this decision a request³⁹ from the Head of the AMMU to ensure the relevant human resources was accepted and two additional CA posts (IT Specialist and Application Administrator) were recruited. In future, one additional SNE post (for a Business Analyst) is reflected in the staff overview for this project starting from 2018.

In Q3 of 2016, the Executive Director approved the creation of **three additional CA** posts to address the needs and workload that could not be managed by outsourcing the tasks which are of a core business nature in the Corporate Services Sector and in the General Coordination Unit. These posts are for the following positions: Network Engineer in Strasbourg, Policy Officer in the Liaison Office in Brussels and Assistant to the Head of the General Coordination Unit in Tallinn.

As the abovementioned CA posts were not included in the planning document for 2016, the situation has been regularised within the procedure amending Work Programme 2017 and the 2017 budget.

In 2016, the European Commission prepared two proposals for Regulations of the European Parliament and of the Council: on the use of the Schengen Information System for the return of illegally staying third-country nationals⁴⁰ (SIS II returns) and on the establishment, operation and use of the Schengen Information System (SIS) in the field of border checks, amending Regulation (EU) No 515/2014 and repealing Regulation (EC)

³⁸ Decision 2016-012 of the MB of eu-LISA of 15 March 2016 (ref. document 2016-024).

³⁹ Note from the Head of AMMU to the Head of RAD of 20 May 2016 (reference eu-LISA/AMMU/RP/1-97/2016).

⁴⁰ COM(2016) 881 final.

No 1987/2006⁴¹ (SIS II Borders/LE). They would require eu-LISA to upgrade the system in place in order to respond to the new tasks. For this development, four contract agent posts have been planned.

Table 6: Forecast of the additional posts for SIS II returns and SIS II Borders/LE

Contract agents (CAs)						
Unit/project	Post	Function group	2018	2019	2020	Cumulative 2018-2020
AMMU/SIS II Borders/LE	IT Specialist	FG IV	3	3	3	3
AMMU/SIS II returns	IT Specialist	FG IV	1	1	1	1
Total CAs: FG IV			4	4	4	4

In November 2016, the Management Board authorised⁴² the Agency to request one internal full-time equivalent (FTE) and one external expert to assist the task of the Internal Auditor in the implementation of the Internal Audit Plan. Therefore, an additional CA post is presented as from 2018 and reflected in Table 7 below.

Staffing needs for the tasks deriving from this WP 2018-2020

A summary of the additional staff required to implement the tasks and perform the activities described in this PD 2018- 2020 is presented in Table 7.

Table 7: Forecast of additional staff for the activities listed in the PD 2018, in Annex I

Unit	Title of the PD activity	Number of new staff required for the task/project	Justification	Type of post	2018	2019	2020	Cumulative 2018-2020
GCU	Timely administrative support for the Advisory Groups	1	1 FTE for EES AG Assistant	CA FG III	1	1	1	1
GCU	Providing legal advice to eu-LISA	1	1 FTE to support the work of the Legal Officer	CA FG IV	1	1	1	1
AMMU	Data warehouse implementation to improve automated reporting and statistics generation Phase 2 (continuation from 2017), subject to the outcome of the HLEG and possible legislative amendments	1	1 FTE for System Reports Officer	CA FG IV	1	1	1	1

⁴¹ COM(2016) 882 final.

⁴² Decision of the Management Board of eu-LISA No 2016-123 (agenda point B 14, reference document 2016-129).

HRTU	HR IT tools developed and implemented in production (Allegro, Sysper II and/or dedicated application for time management)	1	1 FTE required for assisting with the project and serving as a helpdesk to HRTU and staff members in first 2 years of implementation and use of the IT tools	CA FG IV	1	1	1	1
IA ⁴³	Implementation of the annual internal audit plan	1	1 FTE for Audit Assistant if the Agency is entrusted to develop and manage a fourth large-scale IT system, the EES. The budget attached to it is about EUR 59.4 million, which would double the Agency's budget and add new risks and challenges to the internal control system. In order to ensure the minimum audit coverage, 1 additional FTE would be required	CA FG III	1	1	1	1
DPO	Monitor closely the notification of processing operations, Annual Data Protection Survey, provide privacy-by-design guidance	1	1 FTE for DPO Assistant. This has become a critical request, as the amount of work is increasing heavily, especially with the new tasks entrusted to eu-LISA. This request is based on the recent findings of the evaluation report on eu-LISA, and also on the recommendations issued by letter by the EDPS to the Executive Director. The post will serve to support all the activities listed in the DPO area of the WP 2018	CA FG III	1	1	1	1
CSS	Corporate network architecture	1	The activities and projects related to network architecture need project and technical coordination in which the partial involvement of staff members is needed to protect eu-LISA's interests and allow preservation of the knowledge in house.	CA FG IV	1	1	1	1

⁴³ This post has been included in the Commission's proposal for revised Regulation of eu-LISA..

			Currently eu-LISA has only 1 technical staff member for all corporate IT					
CSS	Corporate system and storage architecture	1	The activities and projects related to system and storage architecture need project and technical coordination in which the partial involvement of staff member counterparts is needed to protect eu-LISA's interests and allow preservation of the knowledge in house. Currently eu-LISA has only 1 technical staff member for all corporate IT	CA FG IV	1	1	1	1
CSS	IT Infrastructure in the new HQ	1	A Data Centre IT Expert is needed who can ensure compliance with ISKE ⁴⁴ and can advise on relocation of sensitive IT components	CA FG IV	1	1	1	1
CSS	Corporate applications enhancement	1	We need an Application Developer to cover the constant and continuous needs of the corporate applications	CA FG IV	1	1	1	1
CSS	Establishment of corporate and other services in new HQ	1	Efficient and effective planning and establishment of corporate and other services in the new Tallinn building (refurbishment, catering, meeting, cleaning, waste disposal, supplies, post, logistics)	CA FG IV	1	1	1	1
AMMU	Dublin Allocation mechanism development, subject to legislative amendments	2	New web-based system used for registering the share of applications for international protection and monitoring the application of the Dublin	CA FG IV	2	2	2	2

⁴⁴ ISKE is an information security standard that is developed for the Estonian public sector. According to Government Regulation no. 273 of 12 August 2004, ISKE is compulsory for state and local government organisations who handle databases/registers.

			allocation mechanism (users: MS, European Commission, EASO)					
AMMU	Entry/Exit System implementation	4 ⁴⁵	Test Engineers for the EES, to support the setup of test cases, configuration of test tools and preparation of test environments	CA FG IV	4	4	4	4
Total		17	3 × CA FG III and 14 × CA FG IV		17	17	17	17

In the November 2016 meeting, the Management Board invited the Agency to present a detailed plan for a cost-benefit analysis of using contract agents instead of interim staff for some functions currently being (or planned to be) outsourced. The detailed plan was presented to the Management Board in March 2017, with a preliminary analysis being presented in January. Elements of the detailed plan are presented in Table 8 below.

From a financial perspective, outsourcing is inherently more expensive than staffing provided by contract agents for equivalent interim functions in the external services contract, by:

- 37.7% for IT profiles (core and corporate);
- 34.4% for administrative support.

The Agency will carry out a case-by-case cost-benefit analysis of the conversion of services currently outsourced into non-permanent contract agent posts. The establishment of CAST (contract agents for specific tasks)-type reserve lists, based on open recruitment procedures, would form the pool from which the contract agents could be recruited.

Table 8: Additional staff through converting of the intra-muros profiles into contract agent's posts organisational entity of eu-LISA

Contract agent (CA) posts insourced (converted external service profiles)							
Department/unit/sector	Post	Number of posts	Function group	2018	2019	2020	Cumulative 2018-2020
AMMU	Test Engineer	1	FG III	3	3	3	3
	Release Analyst	1					
	Junior Project Officer	1					
	Senior Project Manager	1	FG IV	3	3	3	
	Senior Application Architect	1					
	Test Analyst	1					
OIU	Administrative Assistant	1	FG III	4	4	4	4

⁴⁵ Table 8 of the Technical Study on Smart Borders – Cost Analysis. Final Report of October 2014 (http://ec.europa.eu/dgs/home-affairs/what-we-do/policies/borders-and-visas/smart-borders/docs/smart_borders_costs_study_en.pdf, page 24) specifies 4.5 FTEs for testing purposes to be outsourced. eu-LISA plans to use contract agents to perform this task.

	IT System Administrator	2	FG IV	2	2	2	2
	Project Support Officer	1					
	Senior Project Manager (1)	1					
	ITSM Process Officer	1					
GCU	Planning Assistant	1	FG III	5	5	5	5
	MB/AG Secretariat Assistant	2					
	Junior R&D Officer	1					
	Internal Communication Assistant	1					
	Policy Officer	1	FG IV	2	2	2	2
	Planning Officer	1					
FPU	Procurement Legal Officer	1	FG IV	1	1	1	1
	Financial Junior Assistant	2	FG II	2	2	2	2
	Procurement Assistant	1	FG III	1	1	1	1
HRTU	Personal Files Manager	1	FG III	5	5	5	5
	Training Assistant	1					
	HR Administrative Support	2					
	Junior HR Administrative Support	1					
	HR Officer	1	FG IV	1	1	1	1
CSS	Assistant for Missions	1	FG III	2	2	2	2
	Project Support	1					
	Business Analyst	1	FG IV	4	4	4	4
	System Engineer	1					
	Database Administrator	1					
	Senior Network Engineer	1					
SEC	Junior Security Policy Expert	1	FG III	3	3	3	3
	(BC) and Exercise Expert	1					
	Assistant to Security	1					
	Cyber Security Expert	1	FG IV	3	3	3	3
	Physical Security Expert	2					
EPMO	EPMO Junior Officer	2	FG III	2	2	2	2
	EPMO Officer	2	FG IV	2	2	2	2
	Total:	45	2 FG II 25 FG III 18 FG IV	45	45	45	45

The expected increase in staff is presented in Table 9 below and in Table 1 in Annex III.

Table 9: Additional staff – summary of the planning for additional staff⁶

Elements	2017			2018			2019			2020		
	TA	CA	Total additional staff	TA	CA	Total additional staff	TA	CA	Total additional staff	TA	CA	Total additional staff
Baseline COM (2013) 519 final (est. plan with cuts)	115			113			113			113		
CA posts authorised in budget 2017		30			30			30			30	
LFS EES	14		14	14		14	14		14	14		14
LFS Eurodac	2		2	2		2	2		2	2		2
LFS ETIAS				7	10	17	7	12.5	19.5	7	25	32
LFS SIS II Borders/LE					3	3		3	3		3	3
LFS SIS II returns					1	1		1	1		1	1
ECRIS TCN					5	5		5	5		5	5
PD 2018-2020 additional staff					17	17		17	17		17	17
Additional CA posts due to insourcing					45	45		50	50		50	50
Total	131	30	16	136	111	104	136	118.5	111.5	136	136	124

c) Efficiency gains

The policy objectives are to be achieved taking into account the constraints affecting eu-LISA's budget and available human resources, including the foreseen reductions in staff for the tasks performed currently and the additional tasks to be taken over by the Agency in the future. Therefore, it is inevitable that every staff member will take a share of the additional work burden. Seeking efficiency gains and optimising the solutions will play a vital role in planning the activities and executing the tasks.

Some further efficiency gains should take place in the longer term with starting to work on the automation, and where possible, simplification of internal processes, especially in the area of administrative tasks, such as recording and monitoring the working time of the Agency's staff or document management. However, experience shows that customisation or development of IT solutions requires increased effort to prepare the technical specifications and to test any proposed solutions. Therefore, for a development phase some extra support is required in terms of human resources.

The Agency will continue to use a framework contract for external support services, as it has proven to be effective in dealing with relevant tasks on a short-term basis.

d) Negative priorities/decrease in existing tasks

⁴⁶ Pending the adoption of the general budget of the EU for 2018.

There are no negative priorities envisaged by the Agency in the immediate future, because it is still at an early stage of organisational maturity. At the time of drafting this document, however, it cannot be excluded that absorption of the unplanned additional tasks allocated to the Agency with a high priority may potentially result in the need to review the activities planned in the PD 2018, especially in the event of a lack, or delay in provision, of all the necessary resources, be they financial or human.

e) Redeployment of resources in view of budgetary constraints

At the time of drafting this document, many initiatives have been taken to enhance and further advance the operation of the Agency. Should the budgetary constraints affect the budget of eu-LISA, a prioritisation of the tasks will be considered.

Conclusion on changes in resources compared with the Commission Communication 2014-2020

As stated at the beginning of section 3.2.2, the Agency has taken into account for the planning of its human resources the position of the European Commission outlined in the Communication⁴⁷ to the European Parliament and the Council on Programming of Human and Financial Resources for Decentralised Agencies 2014-2020 and included in its establishment plan for the next 3 years the numbers of staff in line with Commission guidance. It is envisaged that natural turnover or the end of the employment contract will be used for this purpose, depending on the nature of the post becoming vacant. In the planning, the lowest grades in both function groups have been taken into account for the calculation of the staffing levels.

At the same time, a proposal to increase the establishment plan by 16 posts (15 AD and 1 AST) for the EES and the Eurodac recast has been presented. It is to be noted, though, that, considering the substantial role that eu-LISA plays in the context of the implementation of the Communication on interoperability, dated 6 April 2016, and a number of additional tasks assigned to the Agency in 2015 and 2016, further reinforcement with human resources might be required in the period 2018-2020, in order to ensure smooth implementation of all assigned tasks.

These changes to the establishment plan and human resources of eu-LISA, and how they will develop over the years, including plans for the perspective 2018-2020, have been reflected in Tables 1 and 2 in Annex III.

⁴⁷ COM (2013) 519 final.

Section III Work Programme 2018

1. Executive summary

Operational management of the systems

Further to the operational management of the VIS/BMS, SIS II and Eurodac systems, eu-LISA will implement a business analytics (2.4.1.2) and event-monitoring solution. The Agency will establish integrated monitoring of core business systems and will continue to implement the second phase of shared services, which started in 2017. Level 2 of the IT infrastructure of the core business systems (2.3.1.10) will continue to be managed, and uninterrupted, high-quality operation of the core business systems will be ensured. A study on virtual desktops for administrators will be conducted and the Oracle licensing will be centralised. Service Desk benchmarking will be also performed. To ensure uninterrupted service, the Agency will continue to operate, manage and maintain the backup data centre and backup operational site in Sankt Johann im Pongau, Austria.

DubliNet was entrusted to eu-LISA by a memorandum of understanding in July 2014. In order to formalise this in a legislative instrument, the recast Eurodac Regulation, once adopted by the co-legislators, will assign the operational management of DubliNet and related tasks to eu-LISA.

Evolution of the systems

In 2018, the Agency will conduct an automated data quality-control study followed up by a test phase, subject to the outcome of the HLEG and, if necessary, of the relevant legal amendments, and will redesign the statistical modules for all systems.

Other studies, such as a study of a shared biometric matching service⁴⁸ and a study for implementing service-oriented architecture⁴⁹, will also be carried out in the same year.

The Agency will finalise the project for increasing SIS II capacity and legal and functional evolutions. The AFIS project will continue with preparation of its second phase, and SIS II will develop further. As well as the second phase of the SIS II AFIS initiation, 2018 will see the implementation of return decisions functionalities: there will be a new alert category in SIS II and introduction of entry bans will be mandatory.

The virtualisation test phase will be carried out, as well as the study/impact assessment for splitting the underlying biometric matching services from the front-end/business layers in Eurodac..

Upon approval of the legal framework (Eurodac reform, expected to be approved during 2017), eu-LISA will initiate and continue to implement the substantive changes in the Eurodac functionalities, and in the way Member States use the system. The evolution of Eurodac to comply with the new legal framework will include (a) extension of search and storage to all categories of data (asylum seekers, third country nationals illegally present in the EU territory, third country nationals apprehended illegally crossing the EU borders); (b) lowering the age of fingerprinting to 6 years old (compared with 14, which is the current limit) to better cope with the arrivals of minors, applications for international protection and secondary movements; (c) extension of the data

⁴⁸ Subject to the outcome of the HLEG.

⁴⁹ A technical redesign with no legal implications. It would allow various changes, such as interoperability of the systems, to be implemented more easily.

model to cover additional personal biographical data; (d) extension of data retention periods; and (e) introduction of facial images: the Eurodac reform includes the transmission of facial images to Eurodac. The facial images will initially be stored and sent back to the MS as part of the search-result sets. eu-LISA will initiate a study during 2018 to further investigate the inclusion of face recognition capabilities in the system. The study will investigate modalities and options, the impact on MS, the effect on architecture and technical alternatives, as well as providing indications for the implementation roadmap for face recognition.

In addition to the extension of Eurodac's scope (due to the reform of the legal basis), a number of other technical evolutions will be implemented, such as (a) further capacity upgrades to cope with the impact of functional changes to the system's storage and transaction throughput, (b) possible changes to align or facilitate interoperability efforts when the relevant legal framework is ready, (c) further alignment with shared services and (d) adaptations and technological improvements (e.g. on the infrastructure or monitoring level).

eu-LISA will support, as necessary, the integration of Member States and Europol as per the requirements set out in the Eurodac recast proposal and upon approval of the legal basis.

In the context of Eurodac and with a view to shortening the development time for inclusion of new services and reduction of the time to market, a standard national architecture could be envisioned for the future. This could be based on a reference national architecture based on common standards and best practices that would reduce the development efforts for MS and would allow flexibility for quick changes and economies of scale for the maintenance of the standard solution. A study⁵⁰ will be conducted by eu-LISA on what such a solution could include, how it could be technically implemented and what options and technologies would be the most appropriate (study/impact assessment for splitting the underlying biometric matching services from the front-end/business layers in Eurodac).

Subject to the outcome of the HLEG, implementation of the data warehouse leading to an improvement in the drawing up of reports and statistics will be done in the same year⁵¹.

Communication infrastructure

Besides the operational management of communication infrastructure and related communication systems, the Agency will finalise the unified network study that started in 2017. Preparation for the TESTA-ng second generation will start, and, upon the adoption of the relevant legislation, eu-LISA will take the necessary steps to ensure the proper transfer of COM responsibilities related to the management of the communication infrastructure.

Development and operational management of new systems

The projects for the Entry/Exit System implementation will be a priority in 2018. This project will be in its second phase, with development of the interface with VIS/BMS; integration and test activities will have to take place, giving rise to major coordination activities. ETIAS and ECRIS-TCN development projects will also be initiated, if

⁵⁰ The study is focused on collecting best practices and proposed standards, and has no legal implications. The future realisation of the outcomes/proposals need not be done centrally.

⁵¹ If a decision is taken to expand the data warehouse's functionality beyond the production of technical reports, which is the current scope of the activity, a change in the legal base might be required.

the relevant legal base is adopted.

Upon adoption of the relevant legal framework (Dublin recast), eu-LISA will continue to development and transition to operations of the new system for the Dublin Allocation mechanism.

Security

The second phase of the common shared infrastructure security project will be implemented⁵². The first phase was part of the common shared services project executed in 2017. The Agency will operate, plan and develop the information security and business continuity/disaster recovery/emergency response elements of the Security and Continuity Management System and will operate, plan and develop the respective protective elements. The security staff will maintain and improve the Security Policy Framework and deliver relevant reports. The Agency will implement an enterprise IT solution for managing eu-LISA staff's personnel security clearance. eu-LISA will also implement a business continuity and security exercise together with the MS (on a voluntary basis). Clearance processes will ensure that physical security requirements for the contractors are fulfilled. Finally, a secure isolated web-browsing infrastructure for the corporate IT system will be implemented.

Data protection

The activities in the data protection area will cover drafting the Annual Work Report 2017, ensuring Data Protection awareness, carrying out the Annual Data Protection Survey and monitoring the notification of processing operations. Privacy-by-design guidance will also be provided in the context of the development of new IT systems.

Statutory reporting

Statutory reporting as requested by the legal mandate of the Agency will be continued in accordance with the existing legal requirements.

Provision of training on the technical use of the systems to Member States

The Agency will continue to provide tailored training for Member States on the technical use of the systems under its management.

Evolving as a centre of excellence

The evolution as a centre of excellence will be supported by the finalisation of the Advanced Network Statistics⁵³ project and the implementation of the Advance Reporting mechanism for ITSM processes, KPIs and SLAs/OLAs. Maturity Model assessment will be implemented, as well as the systems development life cycle.

Enhancing its capacity in life cycle development by implementing the application life cycle management tool

⁵² The project envisages implementation of a common shared security infrastructure comprising four elements: (1) security event and information management, (2) technical vulnerability management, (3) privileged information management services and (4) the Unified Threat Management Service.

⁵³ The objective of the activity is to increase eu-LISA's capabilities to supervise communication infrastructure and to coordinate network activities by selecting and implementing a solution measuring the real performance of the communication infrastructure up to the level of IP flows. The solution will also allow proactive identification and elimination of the bottlenecks, and faster issue and problem troubleshooting in the communication infrastructure.

(systems development life cycle project) will also contribute to the progress of eu-LISA towards being a centre of excellence. This will strengthen the organisation, enabling better and more secure control of all the application life cycles, which will also strongly support the businesses of the MS.

To strengthen its project management capabilities, tools to support the process will be adopted and adapted over the years.

Evolving the Agency's governance framework

eu-LISA will continue implementing the internal activities related to the corporate risk management process and the internal control standards. Quality measures as outcomes of the quality management exercise completed in 2017 will also be carried out, and the Governance Model Review will be finalised with refined proposals for changes.

Monitoring and applying developments in research for system evolution

During 2018, the Research and Technology Monitoring Roadmap (to be prepared at the end of 2017 based on the new Research and Technology Monitoring Strategy 2018-2020 described above) will be implemented. It is planned that two reports will be prepared for public dissemination on the eu-LISA website as well as for sharing with the appropriate EU authorities as specified in the Agency's regulation. The topics of these reports will be selected in late 2017 in consultation with the Agency's Advisory Groups. Regardless, as mentioned above, the focus will be on topics directly relevant to new systems to be developed by the Agency (e.g. ETIAS) and/or directly related to projects to be undertaken by the Agency and in which input from research monitoring would appear to be beneficial (e.g. approaches to testing biometrics, in support of projects on BMS upgrades and a future shared BMS). Other project-focused inputs from research and technology monitoring will also be specified (e.g. related to interoperability-focused studies and potentially proofs of concept delivered by the Agency and/or the European Commission), as will topics for joint activities with other agencies (e.g. Frontex, Europol). The eu-LISA library will be updated with new titles throughout 2018 based on overall Agency needs and the focus areas of work.

Partnerships with other agencies and other relevant bodies

Partnerships with other EU agencies and other relevant bodies, in particular Justice and Home Affairs agencies, will be further strengthened.

Partnerships with Member States, EU institutions and other stakeholders

The attention will be focused on monitoring the relevant developments in the JHA areas.

Strategic and operational planning

Further to producing its legally required documents such as the PD and the Annual Activity Report, the Agency will increase its planning capabilities to achieve an overall improvement in terms of project and resource justification.

Financial management and procurement

The main project beyond the business-as-usual activities will be the introduction of activity-based budgeting. Execution of the Procurement and Acquisition Plan and timely delivery of services related to budgetary, procurement and financial management will be the further priorities for 2018.

Facilities management

The Agency will focus on finalising the transfer of equipment and staff to the new premises in Tallinn and Strasbourg and on the establishment of corporate services in the new premises.

The main efforts in 2018 related to corporate information technologies will be on maintenance and evolution of network architecture, and system and storage architecture. In addition, the corporate IT Infrastructure in the new HQ will be developed and corporate applications will be enhanced. The enterprise architecture will be developed, as well as the Corporate IT Strategy.

Human resources management

The Staff Regulations and Conditions of Employment of Other Servants of the European Union, the implementing rules for them adopted by the Agency, the internal guidelines and the HR Strategy will continue to be implemented. A health and safety policy will be implemented and medical services will be procured in order to improve working conditions and to comply with the national regulations. The activities in the HR domain, such as the establishment of rights and entitlements, payroll and payments, leave, appraisal and reclassification processes, will be performed accurately and in due time. The relevant process to ensure timely recruitment and replacement of staff due to natural turnover and for the assigned tasks or projects will be further enhanced. The IT tool for HR will also be further developed and implemented. Finally, learning and development activities and tasks will be executed in accordance with the agreed plan.

Audit

The efforts in this strategic action area are focused on the implementation of the Annual Audit Plan developed by eu-LISA's internal auditor and adopted annually by the Management Board (MB).

External and internal communications

In this strategic action area, the main efforts will be on the execution of the External Communication Action Plan and the Internal Communication Action Plan.

2. Activities in 2018

2.1. Horizontal business-as-usual activities⁵⁴

This section covers all organisational cross-cutting activities that are performed on a daily basis to support the execution of the Agency's core operational business. These activities require 35.61 direct FTEs and will cost approximately EUR 2.6 million. The activities include the annual planning and reporting exercises, the management of the relations with the external stakeholders such as MS, the Commission or other agencies and bodies, the external and internal communication efforts, corporate risk management and activities related to the monitoring of implementation of the internal control standards. They also cover budgetary, procurement and financial management, as well as recruitment, staff learning and development, personnel administration and payroll. The internal audit and the data protection business-as-usual activities are also part of this section. It also provides information on the security day-to-day activities related to the physical and information security.

Unit	Title of the annual activity	Output(s) of the activity	Objective of the activity	Outcome from activity/activities	Short description of the activity
GCU	Planning, drafting and adoption of PD	PD 2019-2021 adopted by eu-LISA's Management Board. PD 2020-2022 planned, drafted and submitted for discussions to the AGs and MB.	To fulfil the legal requirements of eu-LISA's establishing Regulation and of the systems' instruments, to establish the necessary operational objectives and to ensure that the proposed activities are in line with the available resources.	The Agency will be able to execute its tasks related to its core functions as well as any necessary development projects in line with the applicable legal framework.	<p>MAIN ACTIONS OR TASKS: This activity includes annual revision of the implementation of the long-term strategy, and adoption of the PD 2019-2021 by the MB, as well as establishing the annual priorities. Training on the annual programming process will be provided. Furthermore, the scope of the actions for the next 3 years shall be defined, and the units and the AGs shall provide project proposals to be included in the PD 2020-2022. Based upon these proposals, the draft PD 2020-2022 shall be drawn up and consulted on with the AGs, MB and European Commission.</p> <p>VALUE ADDED: The Agency will fulfil its legal obligations and, at the same time, it will manage its work in a predictable and</p>

⁵⁴ Information regarding the indicators and targets related to these activities can be derived from the planning database of eu-LISA.

					structured way, and will perform in accordance with the needs of its stakeholders. MAIN CHALLENGES: Ensuring timely delivery of information of the desired quality and quantity.
GCU	Drafting progress and annual activity reports including reporting of corporate KPIs	Progress and annual reports adopted by the Management Board.	To provide information to the Management Board on the execution of the activities in the PD and on the achievement of the annual objectives; to provide objectively verifiable information on the Agency's performance in key areas; and to fulfil the requirements of the establishing Regulation.	eu-LISA provides its stakeholders with sufficient information on the execution of the tasks entrusted to the Agency and its performance, thus ensuring a high level of confidence.	MAIN ACTIONS OR TASKS: This activity includes the collection of information and KPI data and the drafting of the progress and annual activity reports. VALUE ADDED: eu-LISA stakeholders receive timely and sufficient information on the execution of the Agency's activities and the achievement of its objectives. The management and the stakeholders of eu-LISA will be able to take strategic and operational decisions based on objectively verifiable data. MAIN CHALLENGES: Providing timely input and information of the desired quality and quantity.
GCU	Implementation of corporate risk management process in 2018	Annual corporate risk response plan established, quarterly reports provided and a corporate risk register established.	To perform eu-LISA's risk management process as a continuous, proactive and systematic activity to identify, assess and manage risks in line with the accepted risk levels.	By performing corporate risk management process, eu-LISA is sufficiently managing its identified corporate risks.	MAIN ACTIONS OR TASKS: Performing corporate risk collection, corporate risk prioritisation, corporate risk management workshop and establishment of corporate risk response plan. VALUE ADDED: Identified, prioritised and managed risks ensure that eu-LISA manages the corporate risks sufficiently. MAIN CHALLENGES: Timely contributions from and commitment of the participants involved.
GCU	Facilitation of internal control standards management 2018	Internal control register of the Agency updated and implemented for 2018 in cooperation with managers and staff with ICS-related functions, including defined measures for ensuring good governance.	To facilitate the application of good governance in eu-LISA by implementing a framework of control standards and monitoring them in accordance with Management Board decision 059-2014.	The Agency's internal control standards' framework is applied in accordance with defined elements and requirements, which facilitates good governance, and periodical monitoring supports the implementation	MAIN ACTIONS OR TASKS: Annual update and establishment of the Agency's internal control register, quarterly monitoring exercises and reports based upon them. VALUE ADDED: Good governance implemented in eu-LISA's actions and process. MAIN CHALLENGES: Ensuring timely completion of agreed measures.

				of defined measures at the required scope, quality and time.	
GCU	Facilitation of implementation of quality measures as outcomes of quality management exercise completed in 2017	Facilitation and monitoring of implementation of quality measures as agreed during quality management exercise in 2017.	To help the Agency follow its agreed quality improvement plan arising from the 2017 quality management exercise based on the Common Assessment Framework methodology.	Quality progress reports are provided based upon quarterly progress review meetings.	<p>MAIN ACTIONS OR TASKS: Quarterly monitoring exercises and reports are based upon agreed quality improvement plan, with a proposal for updates if required.</p> <p>VALUE ADDED: Implemented quality measures will raise the quality within eu-LISA, e.g. within processes or procedures.</p> <p>MAIN CHALLENGES: Quality measures were decided in 2017, but needs for changes might appear because of, for example, changes in business.</p>
GCU	Timely administrative support for the Management Board	The administrative and logistic support to the Management Board is maintained at a high level.	Effective operation of the Management Board.	The Management Board performs its duties effectively.	<p>MAIN ACTIONS OR TASKS: Coordination, preparation and facilitation of the governance provided by the MB.</p> <p>VALUE ADDED: Supporting the execution of the requirements of the founding regulation (Article 12 and Article 15); maintaining a positive image of the Agency.</p> <p>MAIN CHALLENGES: Maintaining the high level of commitment required for efficient governance.</p>
GCU	Timely administrative support for the Advisory Groups	The administrative and logistic support to the Advisory Groups is maintained at a high level.	Effective operation of the Advisory Groups.	The Advisory Groups perform their duties effectively.	<p>MAIN ACTIONS OR TASKS: Coordination, preparation and facilitation of the AGs' work.</p> <p>VALUE ADDED: Supporting the execution of the requirements of the founding regulation (Article 19); maintaining a positive image of the Agency; maximising AGs' added value as advisors for the MB.</p> <p>MAIN CHALLENGES: Facilitating dialogue during the AG meetings in order to enable AGs to provide the required high-level expertise to the MB.</p>

GCU	Providing legal advice to eu-LISA	Legal advice and opinion to internal and representation of eu-LISA in EU or national courts if needed.	To ensure compliance by eu-LISA with applicable regulations.	eu-LISA complies with applicable regulations.	<p>MAIN ACTIONS OR TASKS: Provision of legal advice; assessment of complex legal matters; liaison with external law firm.</p> <p>VALUE ADDED: Mitigation of risks of criticism and court cases.</p> <p>MAIN CHALLENGES: Limited resources for providing legal advice according to needs and expected deadlines.</p>
GCU	Policy analysis and facilitation of policy implementation	Notes, briefings, backgrounds and analysis of EU policies in JHA areas.	To support and inform internal decision-making.	Decision-making at Agency level is informed.	<p>MAIN ACTIONS OR TASKS: This activity will include policy analyses and monitoring the relevant developments in the JHA areas, as well as the preparation of briefing notes and other background documents and analysis.</p> <p>VALUE ADDED: Supporting the informed decision-making of the senior management of the Agency as regards the implementation of various EU political developments.</p> <p>MAIN CHALLENGES: Timely delivery of input.</p>
GCU	Implementation of the External Communication Action Plan	<p>All mandatory publications and information materials are made publicly available in line with transparency requirements and quality standards.</p> <p>Regularly updated and factual information is available on the eu-LISA website and new audio-visual and multimedia formats are introduced.</p> <p>Awareness-raising events and visibility actions are implemented.</p>	<p>To provide updated information and increase awareness.</p> <p>To increase the visibility of the mission, vision and core business of the Agency and rapidly give objective, reliable and easily understandable information to the public and stakeholders.</p> <p>To facilitate a coherent and positive corporate image.</p>	<p>The stakeholders and public are more aware of, and know more about, the role and tasks of the Agency for the benefit of citizens.</p> <p>The stakeholders and public have easy access to relevant information allowing them to be better informed on the performance of the Agency.</p> <p>The Agency regularly liaises with key partners and provides effective two-way communication.</p>	<p>MAIN ACTIONS OR TASKS: Coordination of content production in line with approved editorial workflows and in line with the translation and publication plans; dissemination of the off-and online publications through defined channels and to the priority target groups.</p> <p>Regular updates to the website managed in a timely manner and new innovative formats introduced to increase the number of visitors/visits.</p> <p>Organisation of annual conference and awareness events with primary stakeholders and key partners.</p> <p>Participation at EU- and national-level visibility events.</p> <p>Proactively managing media outreach actions and relations.</p> <p>Disseminating information and knowledge to eu-LISA's visitors.</p> <p>Coordination with European Commission in accordance with Article 7 of the MoU.</p> <p>VALUE ADDED: The Agency maintains and fosters its positive</p>

					<p>image as a transparent EU institution/public body accountable to the public.</p> <p>MAIN CHALLENGES: The deadlines for internal and external content approval and linguistic quality management are not met and consequently the set timeframe as well as budget forecasts are not respected; possible limitations imposed on the Agency by contractors who host and/or develop the functionalities for the website; handling of crisis situations.</p>
GCU	Implementation of eu-LISA Internal Communication Action Plan	All the activities of the annual Internal Communication Action Plan are fully implemented.	To Improve intra-agency information and knowledge sharing and contribute to employee engagement	The staff in all the sites of the Agency are informed and engaged at the corporate level, allowing them to make informed decisions regarding their professional tasks, and have access to internal communication tools for information sharing and feedback.	<p>MAIN ACTIONS OR TASKS: This activity will include the following tasks:</p> <ul style="list-style-type: none"> - communicate organisational, operative, administrative and inspirational news and information via internal online outlets; - coordinate content production for intranet in defined areas and advise dedicated staff on content production questions; - coordinate event management for Executive Director/management internal briefings and staff assemblies and support the organisation of information sessions on clustered topics (HR, core operations, security, data protection, etc.); - coordinate the production of podcasts and photo-stories for motivational purposes; - compile and publish in-house press reviews on JHA topics to provide the staff with broader scope of contextual information; - manage employee engagement actions and maintain channels for feedback from the staff to the management; - perform the annual staff satisfaction survey on internal communication and the related analysis. <p>VALUE ADDED: Internal communication actions facilitate the strengthening of corporate culture of the Agency as a modern and well-functioning organisation.</p> <p>MAIN CHALLENGES: Lack of dedicated staff to provide stable resources in the business area; transition to the new venues of the</p>

					Agency and the complexity of communication about change; incident management during potential crisis requiring the implementation of crisis communication for internal purposes.
GCU	Partnerships with institutions, agencies and/or Member State authorities	The activities in the working arrangement, MoUs and Annual Cooperation Plans with EU agencies are implemented; the Agency cooperates with others on appropriate topics within its mandate.	Creating synergies with EU agencies and institutions, avoiding duplication of efforts and enhancing working relations.	Significant support by the Agency to the implementation of EU policies in the area of JHA.	<p>MAIN ACTIONS OR TASKS: Strengthen partnerships with EU agencies, in particular Justice and Home Affairs agencies, with EU institutions via eu-LISA Liaison Office in Brussels, and with Member States including JHA councillors and the diplomatic corps.</p> <p>VALUE ADDED: Synergies deriving from cooperation among partner agencies and other stakeholders in the implementation of EU policies in the area of Justice and Home Affairs.</p> <p>MAIN CHALLENGES: Availability of resources.</p>
GCU	Administration of the eu-LISA Library	A well-stocked and functional library services the needs of staff in self-learning and development.	To provide relevant books and periodicals for reading and study by staff and make the materials readily available for all colleagues.	Improved internal knowledge on topics of relevance and a boost to the culture of learning within the organisation.	<p>MAIN ACTIONS OR TASKS: Purchase of materials and maintenance of library lists to ensure tracking of products purchased and availability of materials to all.</p> <p>VALUE ADDED: Tools for knowledge acquisition are available to all, thereby improving the learning culture within the organisation and boosting in-house knowledge.</p> <p>MAIN CHALLENGES: Identification of all materials that may be of use across the organisation and encouraging all staff to make independent use of the resources provided.</p>
FPU	Execution of the Procurement and Acquisition Plan	The necessary tender procedures are started and the necessary contracts are awarded.	To support the Agency's core activities by providing procurement and acquisition in due time.	High-quality and timely services to the organisation in budgetary, procurement and financial services in support of the Agency are provided throughout the year. Processes are reengineered to improve efficiency and effectiveness, wherever	<p>MAIN ACTIONS OR TASKS: Coordination and monitoring of the implementation of the Procurement and Acquisition Plan. In particular, this includes the management of tendering and contracting.</p> <p>VALUE ADDED: Maintaining and facilitating the operations of the Agency by ensuring sound financial management.</p> <p>MAIN CHALLENGES: Compliance with the time schedule.</p>

				possible through dematerialisation.	
FPU	Timely delivery of services related to budgetary, procurement and financial management	High-quality internal budgetary, procurement and financial services are provided.	Sound financial management and capabilities for precise budget planning are ensured in the support of the Agency's operations.	High-quality and timely services to the organisation in budgetary, procurement and financial services in support of the Agency are provided throughout the year. Processes are reengineered to improve efficiency and effectiveness, wherever possible through dematerialisation.	<p>MAIN ACTIONS OR TASKS: Provision of high-quality and fit-for-purpose internal services in budgetary, procurement and financial management.</p> <p>VALUE ADDED: Supporting the smooth execution of the Agency's tasks.</p> <p>MAIN CHALLENGES: No main challenges expected at this point.</p>
AO	Maintaining the accounts of the Agency	Provisional and final individual and consolidated annual accounts.	Ensuring proper presentation of the Agency's financial position, safeguarding the Agency's assets and timely recovery of amounts due.	Presenting the annual accounts so that they represent fairly and transparently the financial position of the Agency, facilitating the discharge procedure.	<p>MAIN ACTIONS OR TASKS: This activity will include the following activities:</p> <ul style="list-style-type: none"> - maintain an accounting control system that allows fair presentation of input financial data received from the authorising officer in the accounts; - prepare the accounting consolidation package at year end; - present the annual accounts in accordance with the Financial Regulation and accounting rules applicable to them; - cooperate with the ECA and external auditors in their audit activities; - certify the annual accounts. <p>VALUE ADDED: The Agency's financial position is properly presented.</p>

					MAIN CHALLENGES: No main challenges.
HRTU	Consolidation of HR processes and services in the areas of recruitment, staff development, personnel administration and payroll	Decisions of the Appointing Authority are reflected in the payroll and/or personal file of the staff member. The service is performed in accordance with the relevant business process, relevant rules and instructions and reported in senior management administration report (SMART).	To fulfil the requirements of the Staff Regulations and Conditions of Employment of Other Servants of the European Union.	eu-LISA fulfils its obligations towards its staff in accordance with the regulatory framework.	<p>MAIN ACTIONS OR TASKS: This activity includes performing and where necessary reporting all the administrative steps related to business as usual in the domain of HR regarding recruitment of new staff, appraisal and reclassification as well as 360 evaluation of the staff members, daily administration of the entitlements, leave and time management administration, and payroll process, in accordance with the procedures and rules in place and in a timely manner.</p> <p>VALUE ADDED: eu-LISA will fulfil its legal and financial obligations towards staff and will comply with the stipulations of the Staff Regulations and Conditions of Employment of Other Servants of the European Union, the Implementing Rules and other rules governing human resources management at eu-LISA.</p> <p>MAIN CHALLENGES: Ensuring availability of staff in the HRTU with the relevant knowledge, and knowledge transfer in the event of HR staff turnover; ensuring that accuracy of records is preserved and the number of human errors is limited to a minimum; ensuring smooth and timely reporting in the relevant areas of HR work.</p>
HRTU	Learning and development	Learning and development activities are delivered based on coherent analysis and business needs.	To further develop skills and knowledge of staff members as well as to fulfil the requirements of the Staff Regulations and Conditions of Employment of Other Servants of the European Union.	eu-LISA develops its staff in order to create an efficient and agile organisation.	<p>MAIN ACTIONS OR TASKS: This activity includes the organisation and provision of training and other learning options to staff, and maintenance and further utilisation of the LMS in accordance with the procedures and rules in place and in a timely manner.</p> <p>VALUE ADDED: eu-LISA will contribute to the further development of skills required in order to excel operationally. Furthermore, the Agency will fulfil its legal and financial obligations towards staff and will comply with the stipulations of the Staff Regulations and Conditions of Employment of Other</p>

					<p>Servants of the European Union and other relevant internal documents in the field of learning and development, and directly contribute to the objectives of eu-LISA.</p> <p>MAIN CHALLENGES: Ensuring availability of resources.</p>
DPO	Drafting the Annual Work Report 2017	Annual Work Report 2017 is submitted for approval to the Management Board.	To report to the Management Board on the activities performed by the DPO and level of data protection compliance at the Agency.	MB is informed on the level of compliance as regards data protection.	<p>MAIN ACTIONS OR TASKS: Inform the eu-LISA MB and EDPS about the level of compliance on DP and request support for any action planned.</p> <p>VALUE ADDED: Information about DP is provided to the relevant stakeholders.</p> <p>MAIN CHALLENGES: Lack of resources.</p>
DPO	Data protection awareness	The staff gains increased understanding of data protection concepts.	To update the staff's knowledge of data protection.	Staff complies with data protection requirements.	<p>MAIN ACTIONS OR TASKS: Refreshment on data protection concepts is provided for the staff and newcomers, with complementary information provided by the newsletter.</p> <p>VALUE ADDED: Data protection knowledge is perceived to be at a high level.</p> <p>MAIN CHALLENGES: Lack of interest from the staff, demotivation or lack of compromise by middle managers and managers.</p>
DPO	Monitoring closely the notification of processing operations	All processing operations are monitored before and after entering into operations. This monitoring is done through a proper notification presented to the DPO. Recommendations on improvement are issued in order to guarantee the data protection principles.	To ensure transparency and provide information on the processing operations with personal data purpose to the eu-LISA staff and others; to guarantee the rights of the data subjects.	An efficient public notification procedure and privacy notices are established, with relevant information for the data subjects.	<p>MAIN ACTIONS OR TASKS: Monitor the processing operations with personal data.</p> <p>VALUE ADDED: Data protection compliance.</p> <p>MAIN CHALLENGES: Processing operations with personal data that are unknown to the DPO or are not communicated to the DPO.</p>

		If prior checking is required, it is forwarded to the EDPS.			
DPO	Support the Agency with the EDPS inspections	eu-LISA prepares and supports the EDPS inspectors, and manages the comments phase of the inspection reports of the EDPS on the large-scale systems that are under EDPS supervision.	To support the EDPS inspectors before, during and after their inspections of the large-scale systems under their supervision.	eu-LISA instructs the staff, supports the staff during the inspection, checking that the inspection activities do not go beyond the inspectors' mandate, and manages/coordinates the comments phase of the inspections.	<p>MAIN ACTIONS OR TASKS: Manage the support of the inspection activities of the EDPS. Support the preparation of the comments on the EDPS's reports on the audits to be adopted by the MB.</p> <p>VALUE ADDED: Good inspection outcomes without any critical finding.</p> <p>MAIN CHALLENGES: Lack of resources for the DPO and lack of proper monitoring of the systems by the DPO.</p>
SEC	Operate, plan and develop the business continuity/disaster recovery/emergency response parts of the Security and Continuity Management System	Business continuity plans for the systems and the Agency are adopted by the Management Board.	To comply with the legislation and the ISO 22301 standards.	The Agency acquires resilience in its operational management.	<p>MAIN ACTIONS OR TASKS: This activity includes the following items:</p> <ul style="list-style-type: none"> - carry out business impact analysis on all business areas (corporate and operational); - update BC plans – VIS, SIS II, Eurodac, Agency; - organise and carry out training and awareness-raising events for staff; - organise and carry out internal and external assessment (including the business continuity and security exercise for SIS II); - update Program Team files (deputising, facility and media communication); - consult on risks, e.g. for business cases; - integrate risks into the Service Catalogue and Corporate Risk Register.

					<p>VALUE ADDED: The Agency delivers added value to the stakeholders by taking an end-to-end security view of the systems under its management and by the resilience of its services to the stakeholders.</p> <p>MAIN CHALLENGES: Management commitment and commitment of external stakeholders.</p>
SEC	Maintaining and improving the security policy framework and deliver reports	Security policy framework is adopted by the Management Board.	Security policy framework and its outreach satisfy the Agency's needs.	The Agency has a governance framework and outreach capability that satisfy the internal users and the external stakeholders (including the European Commission and the Council of the European Union).	<p>MAIN ACTIONS OR TASKS: his activity includes:</p> <ul style="list-style-type: none"> - deliver reports to the ED or MB; - update the policy framework; - plan and carry out outreach activities; - carry out audits and internal and external assessments. <p>VALUE ADDED: The Agency delivers added value to the stakeholders by taking an end-to-end security view of the systems under its management and by the resilience of its services to the stakeholders.</p> <p>MAIN CHALLENGES: Management commitment and commitment of external stakeholders.</p>
SEC	Develop, plan and operate the protective elements of the Security and Continuity Management System	The Agency adopts and implements appropriate security measures based on the risk assessment, EU legislation and best practices.	To comply with the legislation and the ISO 27000 family of standards.	The Agency guarantees the safety and security of the people and assets in its premises.	<p>MAIN ACTIONS OR TASKS: This activity includes the following tasks:</p> <ul style="list-style-type: none"> - manage the guard force (Strasbourg/Tallinn); - deliver a site security plan (Strasbourg/Tallinn); - test site penetration (Strasbourg/Tallinn); - carry out protective security operations; - incorporate external specialised risk assessment for the two sites.

					<p>VALUE ADDED: The Agency delivers added value to the stakeholders by an end-to-end security view of the systems under its management and by the resilience of its services to the stakeholders.</p> <p>MAIN CHALLENGES: Management commitment and commitment of external stakeholders.</p>
SEC	Operate, plan and develop the information security elements of the Security and Continuity Management System	The Agency adopts appropriate security measures based on the risk assessment and best practices.	To comply with the requirements of the European Commission security framework, security provisions of the relevant legal instruments and security plans for the large-scale IT systems, best practices and the ISO 27000 family of standards.	The Agency ensures the security of the large-scale IT systems, the communication infrastructure and the corporate IT network.	<p>MAIN ACTIONS OR TASKS: This activity includes the following tasks:</p> <ul style="list-style-type: none"> - establish, implement, operate, monitor, review, maintain and improve an integrated Information Security and Continuity Management System; - implement and operate an information assurance and authorisation process to provide formal validation that the large-scale and corporate IT systems will protect the information they handle and will function as they need to, when they need to, under the control of legitimate users and in accordance with the respective security plans; - implement and operate a cyber security process to continuously manage security risks through five core functions: identify, protect, detect, respond and recover. <p>VALUE ADDED:</p> <ul style="list-style-type: none"> - improved assurance on the protection of information assets from security risks; - fulfilment of internal audit and compliance requirements; - a more comprehensive, integrated and systematic approach to managing system controls leading to optimisation in the use of resources; - a business-enabled approach to security risk management.

					<p>MAIN CHALLENGES:</p> <ul style="list-style-type: none"> - management support; - business ownership of security risks; - adequate balance between security risk management decisions and operational needs; - prioritisation of security resources.
<p>Audit</p>	<p>Implementation of the annual internal audit plan</p>	<p>Memos, audit reports and opinions, and action plans for improvement are produced.</p>	<p>To provide independent, objective auditing and consulting services to the Executive Director and the Management Board.</p>	<p>Effective and efficient risk management, control and governance processes and procedures are in place to enable eu-LISA achieve its objectives.</p>	<p>MAIN ACTIONS OR TASKS: This activity includes the following tasks:</p> <ul style="list-style-type: none"> - develop an annual audit plan using appropriate risk-based methodology; - coordinate work with the IAS and ECA; - implement the annual audit plan as adopted; - follow up on audit recommendations; - develop the IAC quality assurance and improvement programme. <p>VALUE ADDED:</p> <ul style="list-style-type: none"> - Coherent, independent and objective assurance and consulting services are provided to the Executive Director and the Management Board. - The Agency's reputation for effective and efficient business processes is enhanced. - Sound financial management is improved. <p>MAIN CHALLENGES: To ensure optimal audit coverage of eu-LISA processes given the scarce human resources allocated to the internal auditor.</p>

Strengthen security, cyber security and information management capabilities	Ensure common Agency security standards	Continued progress toward compliance with relevant Information Security Management System ⁵⁵ standards	The Agency has an integrated overview of the compliance with personal security requirements	Compliance with legislation, best practices and the ISO 27000 family of standards	The Agency guarantees the safety and security of the people and assets in its premises	Level of compliance of the internal processes of the personnel security clearance for eu-LISA personnel and security. Level of compliance of eu-LISA contractors with the specific rules and regulations	Full compliance of the internal processes of the personnel security clearance for eu-LISA personnel and security. Compliance of eu-LISA contractors with the specific rules and regulations is 100%	Regular security activity reports	SEC
---	---	---	---	---	--	--	---	-----------------------------------	-----

2.2.1.2. Physical security improvement in Tallinn

MAIN ACTIONS OR TASKS: The activity includes:

- security risk assessment of the site following the new building handover process;
- preparation of a risk assessment report including a plan with controls to be implemented in order to mitigate the identified risks;
- procurement of the services and assets needed to implement the plan;
- implementation of the controls.

VALUE ADDED: An adequate level of physical security assurance.

MAIN CHALLENGES:

⁵⁵ Information Security Management System is a systematic approach to managing sensitive company information so that it remains secure. It includes people, processes and IT systems by applying a risk management process. One of the most popular Information Security Management System standards is the ISO 27000 family of standards.

- Physical security insufficiently addressed in the current building project;
- Potential for the security risk level in 2018 to grow higher and the planned budget and timeline for the project to be superseded;
- Delays in the construction project of the Estonian Government, directly influencing the duration of the present project;
- Inability to implement all the security controls currently proposed by eu-LISA due to the technical aspects of the design or the way the premises are built.

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
Strengthen security, cyber security and information management capabilities	Ensure common Agency security standards	Continued progress toward compliance with relevant Information Security Management System standards	The HQ in Tallinn complies with the risk assessment and the relevant standards for physical security	Compliance with legislation, best practices and the ISO 27000 family of standards	The Agency guarantees the safety and security of the people and assets in its premises.	Compliance of the physical security measures with legislation, the risk assessment outcomes and the ISO standards	Compliance of the physical security measures with legislation, the risk assessment outcomes and the ISO standards is 100%	Security risk assessment reports	SEC

2.2.1.3. Physical security improvement in Strasbourg

MAIN ACTIONS OR TASKS: The activity covers:

- security risk assessment of the site following the end of the new building construction and data centre refurbishing project;
- preparation of a risk assessment report including a plan with controls to be implemented in order to mitigate the identified risks;
- procurement of the services and assets needed to implement the plan;
- implementation of the controls.

VALUE ADDED: An adequate level of physical security assurance.

MAIN CHALLENGES:

- Reaching all planned milestones in terms of the implementation of its physical security requirements;
- Potential for the security risk level in 2018 to grow higher and the planned budget and timeline for this project to be superseded;

- Inability to implement some security controls due to the technical aspects of the design and/or the construction of the new building/refurbishing of the data centre.

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
Strengthen security, cyber security and information management capabilities	Ensure common Agency security standards	Continued progress toward compliance with relevant Information Security Management System standards	The site in Strasbourg complies with the risk assessment and the relevant standards for physical security	Compliance with legislation, best practices and the ISO 27000 family of standards	The Agency guarantees the safety and security of the people and assets in its premises	Compliance of the physical security measures with legislation, the risk assessment outcomes and the ISO standards	Compliance of the physical security measures with legislation, the risk assessment outcomes and the ISO standards is 100%	Security risk assessment reports	SEC

Data protection

2.2.1.4. Annual Data Protection Survey

MAIN ACTIONS OR TASKS: Audit performed on a specific unit of eu-LISA’s organisation, addressing the data protection practices of the unit, and how information is handled and managed.

VALUE ADDED: Improved data protection compliance and possible risky practices on data protection issues identified.

MAIN CHALLENGES: Follow-up actions and the audit can be perceived as an inspection, with all the negative connotations arising from that.

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
-------------------------------	--	---	-------------------------	---------------------------	----------------------------------	-----------------------	--------	-------------------------	------

Strengthen data protection capabilities	Continued full compliance with all relevant DP legislation and the specific data protection, and security requirements of the legislative instruments for the systems and the Agency, and best practice	Personal data in the systems under management processed in accordance with accepted DP principles; that data is secure at all times and safe from unauthorised access, alteration, use or loss	Report with outcomes/findings and recommendations to be presented to the Executive Director of eu-LISA	Audit of data protection compliance in a specific unit of eu-LISA	Recommendations on data protection compliance to be implemented in order to increase data protection compliance of the Agency	Time of carrying out a survey	The survey carried out in a timely manner, taking no more than 4 months	The report presented to the Executive Director	DPO
---	---	--	--	---	---	-------------------------------	---	--	-----

2.2.1.5. Provide privacy-by-design guidance

MAIN ACTIONS OR TASKS: Provide PIA report on the projects of eu-LISA.

VALUE ADDED: Being data protection compliant.

MAIN CHALLENGES: Lack of available resources for the DPO can jeopardise the timeline for the projects or the main work of the DPO.

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
Strengthen data protection capabilities	Continued full compliance with all relevant DP legislation and the specific data protection, and security	Evolve robust and appropriate data protection (DP) mechanisms for corporate and operational	Personal data privacy impact assessment on the projects led by eu-LISA. It will allow risks to be identified in terms	Mitigation of privacy risks at an early stage of eu-LISA's projects	Recommendations on data protection compliance to be implemented in order to increase data protection	Number of projects with a	Every new project of eu-LISA involving processing of personal data should have a PIA and	Project documentation	DPO

	requirements of the legislative instruments for the systems and the Agency, and best practice	aspects of the business Personal data in the systems under management processed in accordance with accepted DP principles; that data is secure at all times and safe from unauthorised access, alteration, use or loss	of data protection principles of the projects, core business systems and ICT. Mitigation of the risks associated with the projects in terms of privacy by adopting privacy by design in the projects of eu-LISA, core business systems or ICT		compliance of the Agency	PIA and privacy-by-design report ⁵⁶	recommendations on how to mitigate the risks (privacy by design)		
--	---	---	--	--	--------------------------	--	--	--	--

2.2.2. *Activities within the scope of Strategic Goal 2*

Not applicable. No horizontal projects for Strategic Goal 2 are foreseen in 2018

⁵⁶ A privacy-by-design report is the identification of controls designed in the solution/project in order to be compliant with the data protection regulatory framework, implementing the principles of personal data protection, or to mitigate the risks identified in the PIA.

2.2.3. *Activities within the scope of Strategic Goal 3*

Partnerships with other agencies and other relevant bodies

2.2.3.1. *Share services on data protection with other relevant agencies*

MAIN ACTIONS OR TASKS: Provide data protection awareness and support to other agencies.

VALUE ADDED: Be recognised as a partner of excellence by other EU agencies.

MAIN CHALLENGES: Lack of resources for the DPO, mainly time, and dependent on the agencies' requirements.

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
Lead collection and sharing of best practices in the area of ICT	Sharing expertise, 'lessons learned' and best practice in relevant subject areas or large-scale projects exchanged on a regular basis with relevant internal and external parties	Seek relevant synergies with other private and public sector ICT actors and develop appropriate learning programmes and opportunities for	Provide relevant guidance on DP compliance to other relevant agencies that request this service from eu-LISA or cooperate with eu-LISA on DP issues.	eu-LISA to grow as a relevant partner in the DP field and a partner recognised by the EU agencies as capable of providing excellent services in the DP field	Provision of support to other agencies when requested in the data protection area, by sharing good practices, awareness sessions and relevant documentation	Number of collaborative events	Depending on the number of agencies participating but at least two events per relevant EU agency	Annual work report of the DPO	DPO

57 This task is within the powers of the DPO approved by eu-LISA MB Decision 93/2013, Article 6(1)(d).

		information exchange	Share relevant best practices		such as the DP newsletter				
--	--	----------------------	-------------------------------	--	---------------------------	--	--	--	--

2.2.4. Activities within the scope of Strategic Goal 4

Evolving the Agency’s governance framework

2.2.4.1. Translation of outcomes of Governance Model Review into refinement proposals

MAIN ACTIONS OR TASKS: Desk review to maintain the Agency’s governance model and, if needed, a limited number of interviews/workshops with relevant key eu-LISA stakeholders involved in corporate governance.

VALUE ADDED: Improve the overall performance of the Agency’s corporate governance model.

MAIN CHALLENGES: No main challenges expected at this point.

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
Continuously improve management and efficiency of resource allocation through the introduction of industry best practices and standards	Governance framework, processes and procedures in line with statutory requirements and relevant business needs	Identify key business areas and processes that need improvement, diagnose and analyse the reasons behind poor performance, plan and implement changes	Following the activity to review the Agency’s corporate governance model and translate the initial findings into a dedicated report	To maintain an appropriate corporate governance model for the Agency	Corporate governance model, consisting of elements such as risk management, internal control management, quality management and other capabilities, implemented and	Dedicated report with outcomes based on agreed findings of the 2017 exercise to review the corporate governance model of eu-LISA	Report delivered no later than end of 2018	Dedicated report	GCU

		necessary to improve performance in a quantifiable or measurable way			operated by the Agency in accordance with its definitions and requirements				
--	--	--	--	--	--	--	--	--	--

Strategic and operational planning

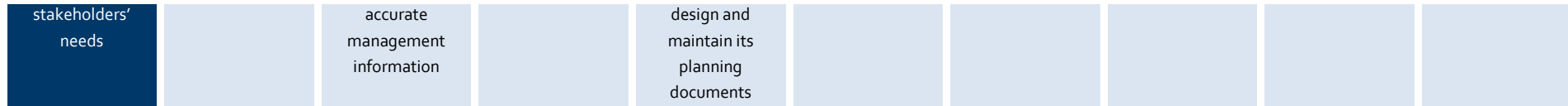
2.2.4.2. Increasing the Agency’s planning capabilities

MAIN ACTIONS OR TASKS: This small but important project aims to close a gap that was identified in the Agency’s planning capabilities, as the Agency tries to improve and perfect its planning capacity and capabilities. The Agency has proven that it possesses the necessary technical knowledge to plan and execute complex projects, but project and resource justification is a field where improvements can be made. In this respect, the Agency envisages providing specific training and guidance through external support to the staff involved in the planning process. In addition, the planning manuals of the Agency will have to be updated.

VALUE ADDED: The Agency will improve the quality of planning.

MAIN CHALLENGES: Given the present work overload, it will be difficult to ensure that all staff involved in planning will participate in the training activities.

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
Continuously align operational and strategic planning as well as capabilities of the organisation to best serve	Implementation of the Agency’s strategic goals as described within its 6-year strategy document	Implement and manage the Agency’s long-term strategy and evidence this through the production of relevant and	Increased capacity for planning including especially in the field of project and resource justification	To ensure that the Agency possesses an up-to-date planning framework and capabilities in order to be able to sufficiently	eu-LISA is capable of ensuring a high quality of planning	Number of concerned staff trained. Guide updated	A minimum of 20 staff concerned have been trained. One manual updated	The Agency’s interim and annual reports	GCU



Financial management and procurement

2.2.4.3. Introduction of activity-based budgeting

MAIN ACTIONS OR TASKS: Defining and analysing the relationship among activities and linking these activities to strategic goals. Preparing the upcoming budget with the costs of activities needed to fulfil organisational objectives and strategies. This project is planned to be carried out within a period of 2 years, starting with Phase 1 in 2018, in order to guarantee full implementation by 2020.

VALUE ADDED: Achieving a more accurate budget forecast and transparency of the budget process.

MAIN CHALLENGES: Setting up the necessary environment (e.g. IT preparations).

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
Continuously improve management and efficiency of resource allocation through the introduction of industry best	Full implementation of activity-based budgeting (ABB)	Develop and further strengthen the Agency's finance and procurement procedures in line with relevant EU norms, guidance and best practice,	Better capabilities to align activities with objectives, streamline costs and improve business practices in order to have greater transparency in	To ensure more precise budget planning and financial reporting related to the costs incurred by the systems	High-quality and timely services to the organisation in budgetary, procurement and financial services in support of the Agency are provided throughout the	Budget execution (commitment and payment appropriations – C1 credits)	10% reduction in number of budgetary transfers compared with 2016 Administrative Budget (Titles 1 and 2): 95%	Periodic budget implementation reports	FPU

practices and standards		including from the private sector	the budget process		year. Processes are reengineered to improve efficiency and effectiveness, wherever possible through dematerialisation		Operational Budget (Title 3): 95%		
-------------------------	--	-----------------------------------	--------------------	--	---	--	-----------------------------------	--	--

Facilities management

2.2.4.4. Establishment of corporate and other services in the new HQ

MAIN ACTIONS OR TASKS: Efficient and effective planning and establishment of corporate and other services in the new Tallinn building (refurbishment, catering, meeting, cleaning, waste disposal, supplies, post, logistics). Carrying out the necessary high-value, multiannual procurement processes to support services and utilities.

VALUE ADDED: Longer sustainable wellbeing of staff with adequate working conditions in accordance with occupational health and safety standards.

MAIN CHALLENGES: Dependency on external process owner and contractors.

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
Continuously improve management and efficiency of resource allocation through the	Improved provision of office accommodation at eu-LISA's Strasbourg site and continued progress towards	Improvement of productivity through enhanced working conditions of all staff	New Tallinn building ready to be used by eu-LISA	To ensure staff have the necessary and appropriate working conditions	Improved working conditions for staff	Conformity to applicable standards	The office space is in accordance with applicable standards	Handover protocol	CSS

introduction of industry best practices and standards	the establishment of a permanent HQ in Tallinn								
---	--	--	--	--	--	--	--	--	--

2.2.4.5. Logistical and organisational operations for final occupation of the newly constructed or refurbished buildings in Strasbourg

MAIN ACTIONS OR TASKS: Organisational tasks in relation to the old and new buildings in Strasbourg. Move of the assets (laptops, desktops, etc.) related to the core business systems (e.g. items related to the functions of system administrators, network administrator and test team).

VALUE ADDED: Smooth transition of the core business system services.

MAIN CHALLENGES: Dependency on external contractor. Having sufficient time allocated for the relocation.

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
Continuously improve management and efficiency of resource allocation through the introduction of industry best practices and standards	Improved provision of office accommodation at eu-LISA's Strasbourg site and continued progress toward the establishment of a permanent HQ in Tallinn	Improvement of productivity through enhanced working conditions of all staff	All necessary tasks to relocate from the old to the new building carried out	To provide services in the field of building management, facility management and logistics in Strasbourg	Improved working conditions for staff and contractors to allow more efficient workflows	Removal and takeover on schedule and in scope	The removal and takeover are carried out in time and scope	Final project report	OD

2.2.4.6. Logistical and organisational operations for final occupation of the newly constructed headquarters

building in Tallinn

MAIN ACTIONS OR TASKS: Organisational tasks in relation to the old and new buildings in Tallinn: relocation, handover of old premises in Tallinn and takeover of new premises in Tallinn, including establishment, training and operation of new online facilities’ system for the new building.

VALUE ADDED: Smooth transition of the IT and non-IT business services.

MAIN CHALLENGES: Dependency on external contractor. Having sufficient time allocated for the relocation.

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
Continuously improve management and efficiency of resource allocation through the introduction of industry best practices and standards	Improved provision of office accommodation at eu-LISA’s Strasbourg site and continued progress toward the establishment of a permanent HQ in Tallinn	Improvement of productivity through enhanced working conditions of all staff	All necessary tasks to relocate from the old to the new building are carried out	To provide services in the field of building management, facility management and logistics in Tallinn	Improved working conditions for staff and ability to use the new HQ effectively	Removal and takeover on schedule and in scope	The removal and takeover are carried out in time and scope	Final project report	CSS

2.2.4.7. Establishment of corporate and other services in new Strasbourg building

MAIN ACTIONS OR TASKS: Efficient and effective planning and establishment of corporate and other services in the new Strasbourg building (refurbishment, catering, meeting, cleaning, waste disposal, supplies, post, logistics, etc.). Carrying out the necessary high-value, multiannual procurement processes to support services and utilities.

VALUE ADDED: Longer sustainable wellbeing of staff with adequate working conditions in accordance with occupational health and safety standards.

MAIN CHALLENGES: Dependency on external process owner and contractors.

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
Continuously improve management and efficiency of resource allocation through the introduction of industry best practices and standards	Improved provision of office accommodation at eu-LISA's Strasbourg site and continued progress toward the establishment of a permanent HQ in Tallinn	Improvement of productivity through enhanced working conditions of all staff	The new Strasbourg building is ready to be used by eu-LISA	To ensure staff have the necessary and appropriate working conditions	Improved working conditions for staff and contractors to allow more efficient and improved workflows	Adherence of corporate and other services to the plans and specifications ⁵⁸	Corporate and other services are established as per plans and specifications	Contract documentation	OD

2.2.4.8. Maintenance and development of corporate network architecture

MAIN ACTIONS OR TASKS: Geographical redundancy, additional configuration work on existing corporate network platforms and better platform integration. This activity involves the technical supervision of the specifications and the offers submitted by the contractor, the planning and implementation of the activities in scope, the supervision of the outsourced initiatives and the verification of the delivered results. Among the network activities envisaged, eu-LISA plans Domain Name System service delivery provision, global load balancing for various network applications between our two main sites, and further strengthening of our corporate firewalls.

VALUE ADDED: Improvements in network communications.

MAIN CHALLENGES: Potential lack of human resources available to perform the activity (to preserve the in-house knowledge with only one dedicated staff member in CSS).

⁵⁸ Including those listed in the Main Actions and Tasks section.

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
Continuously improve management and efficiency of resource allocation through the introduction of industry best practices and standards	Improved provision of office accommodation at eu-LISA's Strasbourg site and continued progress toward the establishment of a permanent HQ in Tallinn	Improvement of productivity through enhanced working conditions of all staff	Corporate network architecture improvements are implemented	To enhance network architecture of the Agency for corporate use to provide flexibility, better availability and reliability as well as platform integration	Services in the field of corporate IT management Improved working conditions for staff Enhanced communication abilities	Adherence to the required project scope, budget and time	Project delivered in the agreed scope, budget and timeframe	Project interim and final/closure reports	CSS

2.2.4.9. Maintenance and development of system and storage architecture

MAIN ACTIONS OR TASKS: Geographical redundancy, additional configuration work on existing corporate system platforms including email, and better platform integration. This activity involves the technical supervision of the specifications and the offers on behalf of the contractor, the planning and implementation of the activities in scope, the supervision of the outsourced initiatives and the verification of the delivered results. Among the system engineering activities envisaged, we plan the improvement of identity and directory services; automation of the all-in-one system service delivery, with automated monitoring, configuration and management of system delivery requirements; the rollout of the next versions of end user computing platforms such as operating systems and office tools; and the modernisation of our collaboration and web communication platforms.

VALUE ADDED: Improvements in communications. Increased safety and resiliency in backup processes.

MAIN CHALLENGES: Potential lack of human resources available to perform the activity (to preserve the in-house knowledge with only one dedicated staff member in CSS).

Strategic objective 2015-2020	Projected outcome(s) at	Elements of strategic	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
-------------------------------	-------------------------	-----------------------	-------------------------	---------------------------	----------------------------------	-----------------------	--------	-------------------------	------

	conclusion in 2020	objective 2018-2020							
Continuously improve management and efficiency of resource allocation through the introduction of industry best practices and standards	Improved provision of office accommodation at eu-LISA's Strasbourg site and continued progress toward the establishment of a permanent HQ in Tallinn	Improvement of productivity through enhanced working conditions of all staff	Corporate system architecture improvements are implemented	To enhance system architecture of the Agency for corporate use to provide flexibility, better availability and reliability as well as platform integration	Services in the field of corporate IT management Improved working conditions for staff Enhanced communication abilities	Adherence to the required project scope, budget and time	Project delivered in the agreed scope, budget and timeframe	Project interim and final/closure reports	CSS

2.2.4.10. *Development of corporate IT Infrastructure in the new headquarters*

MAIN ACTIONS OR TASKS: Implementation of a data centre⁵⁹ for corporate IT in the new HQ in Tallinn as per ISKE standard based on preparatory work carried out in 2017. This activity involves the technical supervision of the specifications and the offers submitted by the contractor, the planning and implementation of the activities in scope, the supervision of the outsourced initiatives and the verification of the delivered results. Implementation of necessary IT services for corporate system storage and network use.

VALUE ADDED: Corporate IT functional in the new HQ.

MAIN CHALLENGES: Potential lack of human resources available to perform the activity (only one staff member in CSS and also lack of ISKE expert knowledge).

⁵⁹ A data centre is a facility used to house computer systems and associated components, such as telecommunications and storage systems. It generally includes redundant or backup power supplies, redundant data communications connections, environmental controls (e.g. air conditioning, fire suppression) and various security devices. The one in question is only for corporate needs and is not related to the CBS entrusted to eu-LISA.

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
Continuously improve management and efficiency of resource allocation through the introduction of industry best practices and standards	Improved provision of office accommodation at eu-LISA's Strasbourg site and continued progress toward the establishment of a permanent HQ in Tallinn	Improvement of productivity through enhanced working conditions of all staff	IT Infrastructure is in place in the new HQ in Tallinn	To procure hardware and implementation services for the IT needs of the data centre of the new HQ in Tallinn To inspect outsourced initiatives in relation to the new building and status reporting	IT Infrastructure in place in the new HQ in Tallinn	Adherence to the required project scope, budget and time	Project delivered in the agreed scope, budget and timeframe	Project interim and final/closure reports	CSS

2.2.4.11. Corporate applications enhancement

MAIN ACTIONS OR TASKS: This activity will target a number of core corporate applications such as Microsoft SharePoint and Project Server, Document and HR management tools as well as Microsoft Windows and Office Enterprise Licence Agreements. It will involve the technical supervision of the specifications and the offers on behalf of the contractor, the planning and implementation of the activities in scope, the supervision of the outsourced initiatives and the verification of the delivered results.

VALUE ADDED: Improve design and functionality and allow better platform integration.

MAIN CHALLENGES: Potential lack of human resources available to perform the activity (to preserve the in-house knowledge with only one staff member in CSS).

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
-------------------------------	--	---	-------------------------	---------------------------	----------------------------------	-----------------------	--------	-------------------------	------

Continuously improve management and efficiency of resource allocation through the introduction of industry best practices and standards	Improved provision of office accommodation at eu-LISA's Strasbourg site and continued progress toward the establishment of a permanent HQ in Tallinn	Improvement of productivity through enhanced working conditions of all staff	Intranet/extranet design is enhanced and workflow improves Document Management System improved HR tools improve	To enhance the capabilities of the Agency's corporate applications and improve collaboration capabilities and workflows	Enhanced capabilities of the Agency's SharePoint platform Enhanced capabilities of the Agency's DMS platform Enhanced capabilities of the Agency's HR platform	Adherence to the required project scope, budget and time	Project delivered in the agreed scope, budget and timeframe	Project interim and final/closure reports	CSS
---	--	--	---	---	--	--	---	---	-----

2.2.4.12. Further development of enterprise architecture⁶⁰

MAIN ACTIONS OR TASKS: This activity aims to further develop for eu-LISA a set of principles and practices to guide the Agency through business, information, process and technology changes necessary to execute its strategies.

VALUE ADDED: To produce an enterprise architecture framework for the Agency.

MAIN CHALLENGES: Lack of available internal FTEs.

⁶⁰ Regarding ICT governance aspects, eu-LISA is required to use the IT governance standards and, whenever appropriate, the reusable building blocks made available by the Commission under the Telecommunication Guidelines of the Connecting Europe Facility. In that context, synergies in IT governance and a regular dialogue between eu-LISA and the Commission will be beneficial; when developing its enterprise architecture model, eu-LISA will take into account the revised European Interoperability Framework – Implementation Strategy COM (2017)134 from 23/03/2017 and the work done under the ISA programme by the Commission and the Member States' representatives on EIRA (European Interoperability Reference Architecture) on delivering interoperable digital public services across borders and sectors.

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
Continuously improve management and efficiency of resource allocation through the introduction of industry best practices and standards	Improved provision of office accommodation at eu-LISA's Strasbourg site and continued progress toward the establishment of a permanent HQ in Tallinn	Improvement of productivity through enhanced working conditions of all staff	An enterprise architecture framework for the Agency is established	To establish an enterprise architecture framework for the Agency and put it into practice	A holistic view of IT and business interrelationship	Adherence to the required project scope, budget and time	Project delivered in the agreed scope, budget and timeframe	Project interim and final/closure reports	CSS

Human resources management

2.2.4.13. Monitoring implementation of HR Strategy and Staff Retention Policy

MAIN ACTIONS OR TASKS: This activity includes revision of the roadmaps for the implementation of the HR Strategy and Staff Retention Policy (SRP), recording the achievements in the development and implementation of the activities listed therein, identifying areas or elements of the Human Resources Strategy and SRP that require further development, and preparing reports on each of the above, as well as evaluation of the SRP by the end of 2018. This activity includes planning and implementation of relevant tasks and monitoring of the resources utilisation linked to those tasks. This activity may require consultations with the Staff and Management Committees of the Agency and provides information to staff on the progress and development or implementation of the particular activities.

VALUE ADDED: The staff members and stakeholders become aware of the progress made in achieving the objectives set in the HR strategic internal documents.

MAIN CHALLENGES: Ensuring that all the activities listed in the roadmaps are carried out in time and reported on time.

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
Retain and continuously develop staff of the Agency through robust knowledge and skills management, in parallel with job a personalised employee development path	Individual and team commitment to the Agency consistently aligned through the provision of knowledge sharing, development and training opportunities	Create appropriate knowledge management strategy and framework for the Agency	Revised both HR Strategy document and the Staff Retention Policy and report on the implementation of the Human Resources Strategy and SRP included in the Annual Activity Report	To plan the activities and resources in the area of human resources management in order to meet the strategic goals and objectives of the Agency	eu-LISA's obligations towards its staff fulfilled in a structured way and with sound planning	Percentage of actions listed in the Human Resources Strategy and SRP roadmaps for 2018	90% of the actions planned for 2017 are implemented	SMART report, ED decision on the subject, minutes of the Management Committee meeting, Annual Activity Report	HRTU

2.2.4.14. *Implementation of Health and Safety Policy*

MAIN ACTIONS OR TASKS: This activity includes participation in internal consultations with the appointed actors responsible for the development and implementation of the Health and Safety (H&S) Policy in both of eu-LISA's sites and use of external expertise in conducting risk assessment of health and safety at the Agency, which would require allocation of human, material and financial resources. The internal resources will be used for monitoring and reporting on the actions listed in the roadmap for the implementation of the H&S Policy that will be developed by the end of 2017. The external resources will be used to conduct the risk assessment in accordance with EU and national regulations.

VALUE ADDED: eu-LISA as an employer will comply with the EU and national regulations in the area of H&S. It will also respond to the expectations of the staff members raised in this regard.

MAIN CHALLENGES: As the work requires horizontal and interdisciplinary cooperation between the services of the Agency, there is a risk that the project will be treated with a lower priority than expected for the timely execution of related tasks.

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
Retain and continuously develop staff of the Agency through robust knowledge and skills management, in parallel with job a personalised employee development path	Individual and team commitment to the Agency consistently aligned through the provision of knowledge sharing, development and training opportunities	Create appropriate knowledge management strategy and framework for the Agency	A report on implementation is submitted to the Management Committee of eu-LISA before the end of November 2018 or included in the Annual Activity Report for 2018	To fulfil the requirements of the Staff Regulations and Conditions of Employment of Other Servants of the European Union	As an employer, eu-LISA meets its obligations in the area of occupational health and safety	Activities performed in accordance with the plan or adopted roadmap	80% of planned activities are performed as planned	SMART report and Annual Activity Report	HRTU

2.2.4.15. *Contracting eu-LISA medical service*

MAIN ACTIONS OR TASKS: This activity includes preparation of the tender specifications to procure a medical service (preferably one per site and including an occupational health and medical advisor) to perform annual medical check-ups and verification of leave on medical grounds, and monitoring the cooperation with the contractor as well as the payment circle for the contracted service.

VALUE ADDED: Increased staff satisfaction with the services provided by eu-LISA as employer, reduced administrative burden and shorter time for the staff members to be reimbursed for the expenses related to the medical check-up.

MAIN CHALLENGES: Ensuring that this activity is performed as planned, as tasks in the HRTU may be reprioritised because of staff turnover in the unit or other unexpected needs of higher priority.

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
Retain and continuously develop staff of the Agency through robust knowledge and skills management, in parallel with job a personalised employee development path	Individual and team commitment to the Agency consistently aligned through the provision of knowledge sharing, development and training opportunities	Identify, attract, develop and retain talented employees and ensure they are developed through appropriate career advancement opportunities	A medical service is contracted	To fulfil the requirements of the Staff Regulations and Conditions of Employment of Other Servants of the European Union and limit the administrative workload	eu-LISA ensures sound implementation of the regulatory framework (Article 59 of the Staff Regulations)	Technical specifications for the tender submitted to the FPU	Final tender specifications ready by June 2018	Document proving submission of the tender specifications to the FPU, publication of the tender or call	HRTU

2.2.4.16. HR IT tools developed and implemented in production (Allegro, Sysper II and/or dedicated application for time management)

MAIN ACTIONS OR TASKS: This activity includes the transfer of staff members' personal data and document from Allegro to Sysper II if Sysper II is available to eu-LISA. It may also include the development of a dedicated application for time and leave management.

VALUE ADDED: eu-LISA will improve the management of business processes in the HRTU, which require manual or semi-manual operations on the staff data and documentation. The expected efficiency gains in the HRTU for preparation of the reports may be observed and reported in the next year(s).

MAIN CHALLENGES: The main challenge may be delay in the implementation of the project due to internal or external circumstances and the need for additional human and financial resources during the development, customisation and/or testing phase.

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
Retain and continuously develop staff of the Agency through robust knowledge and skills management, in parallel with job a personalised employee development path	Individual and team commitment to the Agency consistently aligned through the provision of knowledge sharing, development and training opportunities	Identify, attract, develop and retain talented employees and ensure they are developed through appropriate career advancement opportunities	Personal data of staff are transferred to Sysper II (this depends on external actors: DG DIGIT and DG HR) or Allegro system is fully in use	To develop the reporting capacity and strive to achieve the efficiency gains in performing administrative tasks with the use of available technology	The activity will support efficiency gains in terms of HR management.	Transfer of personal data to Sysper II finalised. Rollout of the tool to all staff members or trainings for the staff members initiated	Transfer of personal data to Sysper II before December 2018. Rollout of the tool to all staff members before the end of 2018	Project status report, SMART report	HRTU

2.3. Operational business-as-usual activities

This section covers all activities of the Agency's core operational business that are performed on a daily basis.

2.3.1. Activities within the scope of Strategic Goal 1

Operational management of the systems

2.3.1.1. VIS maintenance

MAIN ACTIONS OR TASKS:

- Corrective maintenance: incident management, problem management, change management;

- Adaptive maintenance: follow and anticipate the obsolescence of system’s components so that VIS constantly remains compliant with state-of-the-art technologies and availability of support for component manufacturers or editors;
- Perfective maintenance: improve, based on technical expertise and identified upturns, VIS components so that they perform at their best;
- Preventive maintenance: make changes to VIS based on operational observations to prevent identified potential sources of issues from giving rise to incidents.

VALUE ADDED: The Agency will provide Member States with VIS working in accordance with the VIS legislative framework and agreed SLA.

MAIN CHALLENGES: To ensure that VIS changes required by maintenance activities are properly integrated into the global VIS/BMS roadmap and deployed on time so that the system performs in accordance with the VIS legislative framework and agreed SLA.

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
Provide reliable and cost-effective solutions to Member States as per mandate	Continuous full service availability to the MS	Ensure timely, effective and efficient management of all systems	Maintenance of VIS is managed so that the system performs as per service level agreement	To ensure that VIS performs as per requirements in terms of availability and performance, and that events leading to unexpected behaviour of the system are managed in accordance with ITSM standards and SLA with the end users. In addition, through adaptive maintenance, it	VIS behaves as per requirements. Events preventing the system from behaving appropriately are managed in a timely manner so that performance remains within the service level agreement with the end users	Adherence to the VIS service level agreement (please refer to Annex XI)	VIS maintenance activities leading to the system performing in accordance with the service level agreement, expected improvements and prevented incidents	Periodical operational and maintenance reports	AMMU

				must be ensured that VIS is at all times supported by the manufacturers or editors of the assets used by the system					
--	--	--	--	---	--	--	--	--	--

2.3.1.2. Ensure uninterrupted and high-quality operation of the core business systems

MAIN ACTIONS OR TASKS: Monitoring of the core business systems 24/7; level 1 incident management and interactions with MS and facilitation of project execution.

VALUE ADDED: Fulfilment of the requirements of the founding regulation (Article 1(4)) to keep the large-scale IT systems functioning in accordance with the specific provisions applicable to them.

MAIN CHALLENGES: To ensure uninterrupted services with limited resources available compared with the demand of providing the services in a 24/7 shift model. To address this, the Agency will continue to design, implement and improve appropriate systems to monitor business transactions, application performance, systems and network status.

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
Provide reliable and cost-effective solutions to Member States as per mandate	Continuous full service availability to the MS	Ensure timely, effective and efficient management of all systems	Level 1 operations/management of core business systems are uninterrupted and of high quality 24/7	To ensure uninterrupted and high-quality 24/7 level 1 operations/management of core business systems	MS receive a reliable service from the core business systems	Conformity to the SLA	Performance of the Service Desk meets requirements of related SLA	Reports on the performance of the system and SLA	OIU

2.3.1.3. Operate, manage and maintain the backup data centre and backup operational site in Sankt Johann im

Pongau, Austria

MAIN ACTIONS OR TASKS: Daily operations of IT Infrastructure of core business systems 24/7, covering operational management, release and change management, incident and problem management and resolution, maintenance activities and facilitation of project execution, to ensure uninterrupted functioning of core business systems and limit the potential loss of data in the event of an incident on the CU.

VALUE ADDED: Fulfilment of the requirements of eu-LISA's establishing Regulation (Article 1(4)) to keep the large-scale IT systems functioning in accordance with the specific provisions of the systems' instruments applicable to each of them.

MAIN CHALLENGES: No main challenges expected at this point.

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
Provide reliable and cost-effective solutions to Member States as per mandate	Continuous full service availability to the MS	Ensure timely, effective and efficient management of all systems	Operations/management of core business systems are uninterrupted and of high quality 24/7	To ensure uninterrupted and high-quality 24/7 level 1 operations/management of core business systems and underlying infrastructure	MS receive a reliable service from the core business systems	Number of issues of eu-LISA's BCU infrastructure that interrupt the services of the core business systems to MS	Potential issues with eu-LISA's BCU infrastructure do not interrupt the services of core business systems to MS	Reports on the performance of the system	OIU

2.3.1.4. BMS maintenance

MAIN ACTIONS OR TASKS:

- Corrective maintenance: incident management, problem management, change management;
- Adaptive maintenance: follow and anticipate the obsolescence of system's components so that BMS constantly remains compliant with state-of-the-art technologies and availability of support for component manufacturers or editors;

- Perfective maintenance: improve, based on technical expertise and identified upturns, BMS components so that they perform at their best;
- Preventive maintenance: make changes to BMS based on operational observations to prevent identified potential sources of issues from giving rise to incidents.

VALUE ADDED: The Agency will fulfil its legal obligations and will provide Member States with BMS as a VIS subservice working in accordance with their business needs.

MAIN CHALLENGES: To ensure that BMS changes required by maintenance activities are properly integrated into the global VIS/BMS roadmap and deployed on time so that the system performs in accordance with the business needs.

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
Provide reliable and cost-effective solutions to Member States as per mandate	Continuous full service availability to the MS	Ensure timely, effective and efficient management of all systems	Maintenance of BMS is managed so that the BMS performs as per service level agreement	To ensure that BMS performs as per requirements in terms of availability and performance and that events leading to unexpected behaviour of the system are managed in accordance with ITSM standards and SLA with the end users	BMS behaves as per requirements, and events preventing the system from behaving appropriately are managed in a timely manner so that performance remains within the service level agreement with the end users	Adherence to the BMS service level agreement (please refer to Annex XI)	BMS maintenance activities lead to the system performing in accordance with the service level agreement, expected improvements and prevented incidents	Periodical operational and maintenance reports	AMMU

2.3.1.5. SIS II Maintenance

MAIN ACTIONS OR TASKS:

- Corrective maintenance: incident management, problem management, change management;

- Adaptive maintenance: follow and anticipate the obsolescence of system’s components so that SIS II constantly remains compliant with state-of-the-art technologies and availability of support for component manufacturers or editors;
- Perfective maintenance: improve, based on technical expertise and identified upturns, SIS II components so that they perform at their best;
- Preventive maintenance: make changes to SIS II based on operational observations to prevent identified potential sources of issues from giving rise to incidents.

VALUE ADDED: The Agency will provide Member States with SIS II working in accordance with the SIS II legislative framework and agreed SLA.

MAIN CHALLENGES: To ensure that SIS II changes required by maintenances activities are properly integrated into the global SIS II roadmap and deployed on time so that the system performs in accordance with the business needs.

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
Provide reliable and cost-effective solutions to Member States as per mandate	Continuous full service availability to the MS	Ensure timely, effective and efficient management of all systems	Maintenance of SIS II is managed so that the system performs as per service level agreement	To ensure that SIS II performs as per requirements in terms of availability and performance and that events leading to unexpected behaviour of the system are managed in accordance with ITSM standards and SLA with the end users. In addition, to ensure that SIS II is at all times	SIS II behaves as per requirements, and events preventing the system from behaving appropriately are managed in a timely manner so that performance remains within the service level agreement with the end users	Adherence to the SIS II legislative framework and service level agreement (please refer to Annex XI)	SIS II maintenance activities lead to the system performing in accordance with legislative requirements and the service level agreement, expected improvements and prevented incidents	Periodical operational and maintenance reports	AMMU

				supported by the manufacturers or editors of the assets used by the system					
--	--	--	--	--	--	--	--	--	--

2.3.1.6. Operational management of SIS II (transition for the new SIS II MWO contract, continuation from 2017)

MAIN ACTIONS OR TASKS: Transition and setup activities required for the new SIS II MWO contract to ensure continuous provision of 24/7 application management services, supervision of maintenance including patching, release management and change management.

VALUE ADDED: Provision of SIS II services to Member States at the right quality and without interruptions.

MAIN CHALLENGES: To overcome the transition barriers between the two suppliers.

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
Provide reliable and cost-effective solutions to Member States as per mandate	Continuous full service availability to the MS	Ensure timely, effective and efficient management of SIS II system	SIS II operates as required by the new MWO	To maintain SIS II in optimal working order	Knowledge is transferred to the new contractor, and setup is effected	Conformity to the SIS II SLA after the transition	Standard and specific SIS II SLAs 100% met after the transition	Reports on the performance of the system and SLA. Additional deliverables related to the transition	AMMU

2.3.1.7. Support for Member States (SIS II)

MAIN ACTIONS OR TASKS: The activity includes:

- qualifying new message-oriented middlewares (MOMs);
- support to new national systems;
- compliance tests.

VALUE ADDED: Ensuring compliance with the central system.

MAIN CHALLENGES: Dependency on the information and requests coming from Member States.

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
Provide reliable and cost-effective solutions to Member States as per mandate	Additional services (e.g. statistics, reporting) available to stakeholders	Ensure timely, effective and efficient management of all systems	All test services are provided as required by the MSs	To support MS in testing of their national systems in relation to the Core System	MS are provided with sufficient support for their use of SIS II	Percentage of test case scenarios passed 100% at the end of the test phase	100% of test case scenarios successfully passed	Compliance test services for MS reports	AMMU

2.3.1.8. Eurodac maintenance

MAIN ACTIONS OR TASKS:

- Corrective maintenance: incident management, problem management, change management;
- Adaptive maintenance: follow and anticipate the obsolescence of system's components so that the system constantly remains compliant with state-of-the-art technologies and availability of support for component manufacturers or editors.

VALUE ADDED: The Agency will fulfil its legal obligations and will provide Member States with Eurodac working in accordance with the legislative framework and SLA.

MAIN CHALLENGES: To ensure that Eurodac changes required by maintenances activities are properly integrated into the global Eurodac roadmap and deployed on time so that the system performs in accordance with the legislative framework and SLA.

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
-------------------------------	--	---	-------------------------	---------------------------	----------------------------------	-----------------------	--------	-------------------------	------

<p>Provide reliable and cost-effective solutions to Member States as per mandate</p>	<p>Continuous full service availability to the MS</p>	<p>Ensure timely, effective and efficient management of all systems</p>	<p>Maintenance of Eurodac is managed so that the system performs as per service level agreement</p>	<p>To ensure that Eurodac performs as per requirements in terms of availability and performance and that events leading to unexpected behaviour of the system are managed in accordance with ITSM standards and SLAs with the end users. In addition, through adaptive maintenance, it must be ensured that Eurodac is at all times supported by the manufacturers or third party suppliers of the assets used by the system</p>	<p>Eurodac behaves as per requirements. Events preventing the system from behaving appropriately are managed in a timely manner so that performance remains within the service level agreement with end users</p>	<p>Adherence to the Eurodac service level agreement indicators (please refer to Annex XI)</p>	<p>Eurodac maintenance activities lead to the system performing in accordance with the service level agreement, expected improvements and prevented incidents</p>	<p>Periodical operational and maintenance reports</p>	<p>AMMU</p>
--	---	---	---	--	---	---	---	---	-------------

2.3.1.9. VIS Mail maintenance

MAIN ACTIONS OR TASKS: Daily follow-up of VIS Mail related activities.

VALUE ADDED: Full support is made available to Member States.

MAIN CHALLENGES: No main challenges.

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
Provide reliable and cost-effective solutions to Member States as per mandate	Continuous full service availability to the MS	Ensure timely, effective and efficient management of all systems	Activities related to VIS Mail are flawlessly handled and required support is made available to Member States	To ensure that VIS Mail is performing to the requirements	eu-LISA fulfils its legal obligation with regard to the activities related to VIS Mail by providing the expected support to Member States	Adherence to the VIS service level agreement (please refer to Annex XI)	VIS maintenance activities lead to the system performing in accordance with the service level agreement, expected improvements and prevented incidents	Periodical operational and maintenance reports	AMMU

Communication infrastructure

2.3.1.10. Level 2 management of the IT infrastructure of the core business systems

MAIN ACTIONS OR TASKS: Daily operations of IT Infrastructure of core business systems, covering operational management, release and change management, incident and problem management and resolution, maintenance activities, and contribution to the preparation, design and implementation of projects managed in other units.

VALUE ADDED: Fulfilment of the requirements of eu-LISA's establishing Regulation (Article 1(4)) to keep the large-scale IT systems functioning in accordance with the specific provisions of the systems' legislative instruments applicable to them.

MAIN CHALLENGES: No main challenges expected at this point.

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
Provide reliable and cost-effective solutions to Member States as per mandate	Continuous full service availability to the MS	Ensure timely, effective and efficient management of all systems	IT Infrastructure ensures proper and uninterrupted functioning of core business systems throughout the year. Network development environment design and ongoing implementation	To ensure uninterrupted high-quality operation of the infrastructure of core business systems	The MS receive reliable service from the core business systems	Conformity to the SLA. Please see Annexes XI and XII	Standard and specific SLA 100% met	Reports on the performance of the systems	OIU

2.3.1.11.Regular operational management of the communication infrastructure contracts (budget execution, acquisition, renewal, contract management)⁶¹

MAIN ACTIONS OR TASKS: The activity will start once the handover from DG Home has been completed and continue after it. It will cover:

- extending or renewing support on the Sirenemail and VIS Mail components;
- acquisition of the VIS second encryption layer components;

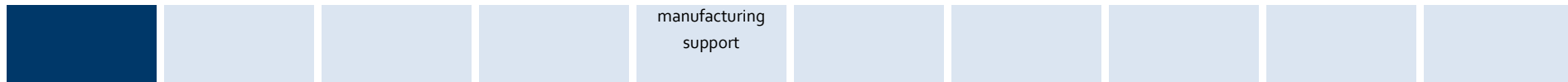
⁶¹ The implementation of this activity depends on the adoption of the relevant legislation.

- renewal of the SIS II second encryption layer components;
- contractual management of the SIS II and VIS TESTA-ng contract;
- contractual management of the VIS and SIS II Mail systems support contracts;
- contractual management of the VIS and SIS II second encryption layer contracts;
- providing specifications for the extension of the specific contracts.

VALUE ADDED: The agency will fulfil its legal obligation and provide Member States with a communication infrastructure for SIS and VIS in accordance with the legislative framework and SLA.

MAIN CHALLENGES: No main challenges identified.

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
Provide reliable and cost-effective solutions to Member States as per mandate	Continuous full service availability of the communication infrastructure	Ensure timely, effective and efficient management of all systems	Maintenance of the communication infrastructure is managed so that the system performs as per service level agreements and support is provided to Member States	To ensure that the communication infrastructure performs as per requirements in terms of availability and performance. For Sirenemail and VIS Mail in particular, it must be ensured that all components are covered by third party and	Communication infrastructure behaves as per requirements. Events preventing the system from behaving properly are managed in a timely manner so that performance remains within the service level agreements	Adherence to communication service level agreements	Communication infrastructure performing in accordance with the SLA, expected improvements and prevented incidents	Monthly SLA reports	OIU



Development and operational management of new systems

2.3.1.12. DubliNet operational management⁶²

MAIN ACTIONS OR TASKS: Operational management of DubliNet and alignment with the operational model of eu-LISA, upon entry into force of the legislative instruments. Apart from the daily operational support, this includes alignment with ITSM standards and contractual support for covering possible adaptations and technical developments (e.g. switch to web/XML content) in agreement with the Member States.

VALUE ADDED: Full support is made available to Member States.

MAIN CHALLENGES: No main challenges expected at this point.

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
Increase the added value of the data and technology to Member States	Other new/additional systems to be implemented if required by	Development and implementation of new/additional systems, if so provided by	eu-LISA is legally entrusted with full operational responsibility for DubliNet by the	To align the operational model of DubliNet with that of the other systems and to	eu-LISA assumes full operational responsibility for DubliNet – support model	Setup of and adherence to the DubliNet operational service level	DubliNet operations and maintenance activities leading to the system	Periodical operational and maintenance reports	AMMU

⁶² Subject to the adoption of Eurodac recast.

	relevant legislative instruments	relevant legislative instruments Provide new and improve existing services and solutions to meet stakeholder requirements	recast Eurodac Regulation (when adopted). The Agency is already operating DubliNet under an MoU since 2014 (on a best effort basis, with no contractual support and with the possibility of technical upgrades)	ensure the needed support model for MS (public key infrastructure (PKI) services, operational and contractual support, possible upgrades, etc.)	aligned with the other systems	agreement indicators upon adoption of the legislation and the creation of the relevant SLA	performing in accordance with the service level agreement targets		
--	----------------------------------	--	---	---	--------------------------------	--	---	--	--

Statutory reporting

2.3.1.13. Drafting technical reports, aggregating statistics and publishing updated list of authorities

MAIN ACTIONS OR TASKS: This activity includes the collection of information within eu-LISA as well as from Member States, and the drafting of the document to be submitted to the MB and submitted by the MB to the European Parliament and the Council.

VALUE ADDED: The Agency will fulfil its legal obligations and at the same time keep the recipient informed.

MAIN CHALLENGES: To ensure timely delivery of the needed input.

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
Achieve and maintain	Agency will continue to successfully meet	Full and timely compliance with all statutory	Technical reports, annual statistics and list of	To provide information on the technical	All reporting obligations are fulfilled as	Submission to the EU institutions of:	Submission to the EU institutions of:	Letters of submission of the relevant	GCU

operational excellence	all statutory reporting obligations as stipulated in the relevant legal bases	reporting obligations	authorities are submitted to the EU institutions or published in the OJ of the EU as required by the establishing Regulation of the Agency and legal base of each system that the Agency operates	functioning of the systems and their use To fulfil the requirements of the systems' instruments and of the establishing Regulation	outlined in the establishing Regulation and legal bases for systems under management	<ul style="list-style-type: none"> - the 2017 SIS II annual statistics - the report on the technical functioning of VIS - the annual report including the technical functioning of Eurodac. Publication of: - update of the list of authorities/N.SIS/SIRENE for SIS II in the OJ - update of the list of authorities (asylum) for Eurodac on the website 	<ul style="list-style-type: none"> - the 2017 SIS II annual stats by end of Q1 2018 - the report on the technical functioning of VIS by end of Q1 2018 - the annual report including the technical functioning of Eurodac by mid Q2 2018 Publication of: - update of the list of authorities/N.SIS/SIRENE for SIS II in the OJ by end of Q2 2018 - update of the list of authorities (asylum) for Eurodac on the website by end of Q2 2018 	report/statistics to the stakeholders; publication in the OJ of the EU or on the Agency's website	
------------------------	---	-----------------------	---	---	--	---	--	---	--

Provision of training on the technical use of the systems to Member States

2.3.1.14. Providing training on the technical use of the systems to the Member States

MAIN ACTIONS OR TASKS: Organising and delivery of training as set out in Annual Training Plan.

VALUE ADDED: Technical knowledge of the Member States on the systems is increased, resulting in better performance at national level. Member States will receive tailored training on technical use of the systems.

MAIN CHALLENGES: Sufficient availability of eu-LISA staff to coordinate and provide the training, as well as contractors to prepare and deliver specific training courses.

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
Increase the added value of data and technology to Member States	A responsive and tailored systems training programme in place that meets in full the needs of stakeholders	Deliver appropriate systems training for Member States	Training is delivered to the MSs as per the Annual Training Plan	To fulfil the core task of the Agency as per establishing Regulation and to provide technical training on the functioning and use of the systems to the MS	The knowledge of the MS on the technical functioning and use of the systems is enhanced and applied	Satisfaction rate (scale 1-6, 1 lowest, 6 highest)	Average not less than 4 (scale 1-6)	Evaluation forms	GCU

2.3.2. Activities within the scope of Strategic Goal 2

Monitoring and applying developments in research to system evolution

2.3.2.1. Implementation of Research and Technology Monitoring Roadmap

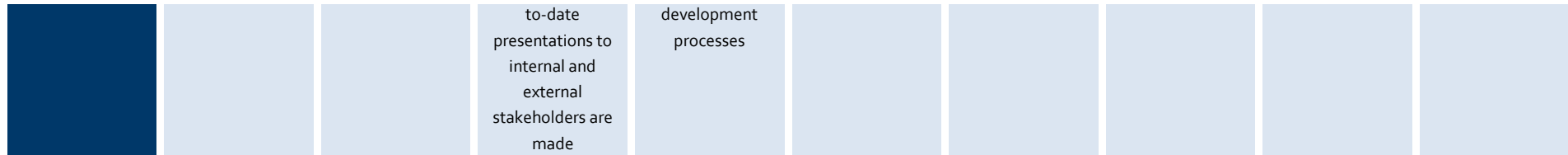
MAIN ACTIONS OR TASKS: Submit regular reports to the Council, the EP and the European Commission as per Article 8 of the Agency Regulation and biannual reports to the European Commission as per Article 15 MoU; compile information from diverse sources about topics identified as priorities for the year and deliver a coherent and structured public report explaining the relevance of the information to stakeholders; devise agendas for the conference and industry events, interact with speakers and other experts to

attend and provide their insight, and identify partners and stakeholders to invite to the events; make presentations based on desk-based monitoring of research, including open source literature, academic journals and relevant published materials.

VALUE ADDED: Internal and external stakeholders are more aware of new and relevant technologies and can better make informed decisions about system development and evolution.

MAIN CHALLENGES: Competing activities due to ongoing projects, or similar activities, interfering with the monitoring and/or drafting process.

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
Monitor new technologies and implement new solutions to facilitate optimisation of business processes	Regular monitoring reports and recommendations to management regarding applicable new technologies and solutions	Further develop research-monitoring and engagement tools to enable rapid integration of relevant aspects of research into Agency business processes; develop structured technology-monitoring and assessment process	Biannual research and technology reports are prepared and published on the eu-LISA website and submitted to the Council, the EP and the European Commission, and the EDPS where data protection issue are concerned. Industry roundtables and annual conference are organised. Detailed and up-	To make information obtained through technology monitoring available to all relevant stakeholders. The Agency's annual conference and industry roundtables are organised to improve knowledge exchange and capacity building and guide the industry in its future	Stakeholders are more aware of developments in technologies of relevance to systems development and evolution and therefore better able to make informed decisions	Activities of the Research and Technology Monitoring Roadmap delivered in a timely manner. High level of satisfaction from attendees subsequent to their participation in the events; repeat attendance at the annual events	Activities delivered in accordance with the deadlines set out in the annual Research and Technology Monitoring Roadmap. Satisfaction expressed by more than 70% of attendees in the post-event surveys; repeat attendance of at least 40% of attendees participating in the conference in successive years	Reports produced following the implementation of the R&D Monitoring Roadmap. Post-event satisfaction surveys; attendee lists	GCU



2.3.3. Activities within the scope of Strategic Goal 3

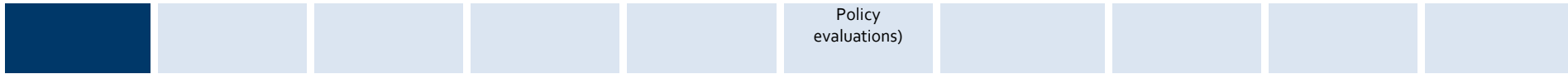
2.3.3.1. Planning, coordination and participation of the Agency as an observer in the Schengen Evaluation missions

MAIN ACTIONS OR TASKS: Facilitation of participation in the Schengen Evaluation missions: SIS/SIRENE and Common Visa Policy evaluations.

VALUE ADDED: The Agency fulfil its obligations as a Schengen Evaluation observer in a precise and reliable manner.

MAIN CHALLENGES: The number of requested Schengen Evaluation missions exceeds the capacity of the Agency to respond.

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
Become a trusted advisor to the EU institutions on ICT matters within the mandate of the Agency	Consistently high stakeholder confidence in the Agency's ability to deliver the tasks mandated to it, quantified through targeted stakeholder surveys	Provide effective advice to stakeholders about matters relating to the mandate and activities of the Agency	eu-LISA participates in Schengen Evaluation missions as an observer (SIS/SIRENE and Common Visa Policy evaluations)	To ensure the participation of the Agency's experts in the Schengen Evaluation missions (SIS/SIRENE and Common Visa Policy missions)	Member States are provided with continuous support for the Schengen Evaluation process (SIS/SIRENE and Common Visa	Participation of eu-LISA staff in Schengen Evaluation missions (SIS/SIRENE and Common Visa Policy) as requested	Adequate participation as per plan put forward by the Commission	Annual Activity Reports	GCU, OPD, SEC



2.3.4. Activities within the scope of Strategic Goal 4

Human resources management

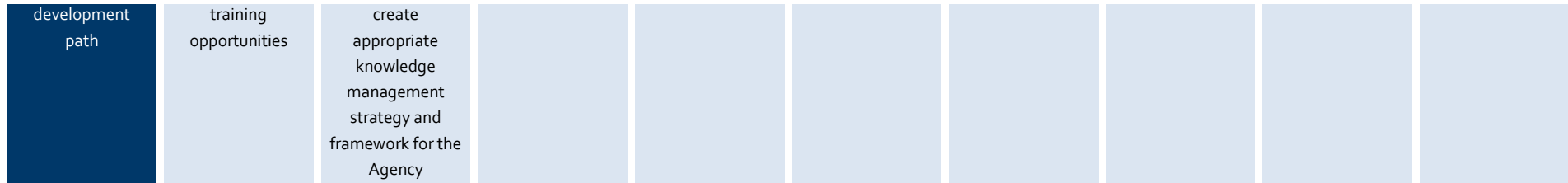
2.3.4.1. Training to eu-LISA staff related to operations

MAIN ACTIONS OR TASKS: The activity will include provision of training on the systems, processes, project management, security etc.

VALUE ADDED: eu-LISA's staff able to better perform their duties.

MAIN CHALLENGES: Availability of staff to attend training, securing facilities for the courses.

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
Retain and continuously develop staff of the Agency through robust knowledge and skills management, in parallel with job a personalised employee	Individual and team commitment to the Agency consistently aligned through the provision of knowledge-sharing, development and	Identify, attract, develop and retain talented employees and ensure they are developed through appropriate career advancement opportunities;	Courses related to operations and systems will be provided to eu-LISA's staff	To ensure that eu-LISA provides high-level service and innovation to its internal stakeholders	eu-LISA's staff will be able to perform better and will be acquainted with the best practices in the field of technology	Number of training days per year General satisfaction level	400 person-days of training per year Satisfaction level not less than 80%	SMART report	HRTU



2.4. Operational project activities

This section covers all activities of the Agency’s core operational business that are performed as projects.

2.4.1. Activities within the scope of Strategic Goal 1

Operational management of the systems

2.4.1.1. Develop reference Technical Tender Specifications for Call for Tenders of Large Scale IT Systems

MAIN ACTIONS OR TASKS: Drafting reference technical tender specifications for every different contract within the Agency’s scope (known at project’s start date).

VALUE ADDED: Having such a reference, documented technical tender specifications will improve the overall efficiency of all calls for tenders and will significantly reduce the time spent internally by the Agency staff on drafting requirements and specifications.

MAIN CHALLENGES: No challenges foreseen at this point.

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
-------------------------------	--	---	-------------------------	---------------------------	----------------------------------	-----------------------	--------	-------------------------	------

<p>Achieve and maintain operational excellence</p>	<p>Continuous improvement of performance in all operational areas, and increased levels of automation where appropriate and possible</p>	<p>Embed a continuous improvement culture throughout operations through the adoption and application of relevant industry best practice standards and/or certifications; Continuously improving key contract management processes, tools, reporting and capabilities within the Agency; Improving the efficiency of the Agency's operations and continuously monitoring and optimising total cost of ownership</p>	<p>Reference Technical Tender Specifications for Call for Tenders of Large Scale IT Systems will be written</p>	<p>Since there is no formal template of guidelines for the drafting of the Technical Tender Specifications, to have reference Technical Tender Specifications for Call for Tenders drafted for different specific contracts of the Agency</p>	<p>This activity will result in having clear guidelines (Technical Tender Specifications) whenever there is a need to draft a Call for Tenders</p>	<p>Delivery and acceptance of set of documents</p>	<p>All documents delivered on time and accepted by eu-LISA</p>	<p>Project Acceptance Report</p>	<p>OIU</p>
--	--	--	---	---	--	--	--	----------------------------------	------------

2.4.1.2. Core business systems integrated monitoring

MAIN ACTIONS OR TASKS: It is necessary to move towards standardisation (reduce the variety of different monitoring mechanisms per business system, reduce training on

different tools and ease the technical administration, management and supervision of systems). The main and key objective is to mitigate the existing risks arising from the operational challenges for the eu-LISA Service Desk, namely multiplatform monitoring tools in a multivendor context on a 24/7 basis for centrally monitored, business-critical applications. For example, currently eu-LISA Service Desk Operators need to operate a minimum of 8 different PCs simultaneously, and to use and monitor more than 10 different monitoring platforms (proposed by different vendors) at the Central site and the Backup site.

The project will have two phases: (a) study (analysis) and (b) validation and implementation.

VALUE ADDED: The possibility will be created of monitoring and supervising all existing and future business solutions by an integrated single monitoring solution, taking on board the constraints coming from the multiplatform and multivendor aspects of each system, using a technically simple, flexible and customisable standardised approach.

MAIN CHALLENGES: The mandatory prerequisite: eu-LISA ITSM event management process⁶³ defined and in place.

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
Achieve and maintain operational excellence	Identified potential synergies between systems, infrastructure and services identified (where technology and business and legal requirements allow)	Improve the efficiency of the Agency's operations and continuously monitor and optimise total cost of ownership	An integrated single monitoring solution will be created for the core business systems under eu-LISA's responsibility – current and future	To consider, analyse, define and implement an efficient and effective integrated single monitoring solution for the Service Desk in order to significantly	An integrated solution for all existing core business systems monitoring tools, based on the relevant event management process, will be implemented in order to	Analysis report delivery and agreement	Analysis report delivered and agreed in due time	Project interim and final/closure reports	OIU

⁶³ This process defines how the events displayed in the monitoring tools are managed.

				<p>facilitate the everyday monitoring, reducing the risk; to significantly improve the efficiency of everyday work and increase the level of reasonable control</p>	<p>significantly facilitate and improve everyday supervision and control, and realise economy of scale.</p> <p>This will contribute to an overall reduction in the technical management and operational workload (workload savings) and a reduction in the contractual management workload and scope for core business systems contracts (combination of workload and financial savings – no more individual monitoring tool implementation)</p>				
--	--	--	--	---	--	--	--	--	--

2.4.1.3. *Performing of Service Desk benchmarking*

MAIN ACTIONS OR TASKS: This activity aims to further implement capabilities for benchmarking within eu-LISA: benchmarking is recommended by the ITSM Best Practice

Framework as a technique to measure and improve performance. It is used to compare processes' performance between similar functions within a single organisation or in different organisations. The Service Desk in eu-LISA is the Single Point of Contact for internal and external users of the core systems as well as for operational support services. The scope of the benchmarking extends to the activities carried out inside the Service Desk as well as the activities triggered by the Service Desk on the eu-LISA-related ITSM processes. Benchmarking with a similar organisation will cover the measurement of similar metrics with the aim of benefiting from best performance.

VALUE ADDED: Proven performance of eu-LISA Service Desk.

MAIN CHALLENGES: Finding partners for the benchmarking.

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
Achieve and maintain operational excellence	Continuous improvement of performance in all operational areas, and increased levels of automation where appropriate and possible	Improve the efficiency of the Agency's operations and continuously monitor and optimise total cost of ownership	The eu-LISA Service Desk will be benchmarked with a similar organisation and similar functions, seeking possible options to improve efficiency and effectiveness	To achieve efficiency by comparing the way of providing IT services and the contribution that these services make to the customers with what is achieved in other organisations – this helps the organisation to identify areas for possible improvements	Service Desk performance will be proven and possible improvements suggested, part of the Continual Service Improvement register	Adherence to the required project scope, budget and time	Project delivered in the agreed scope, budget and timeframe	Project interim and final reports	OIU

2.4.1.4. Conducting a study on virtual desktops for administrators

MAIN ACTIONS OR TASKS: A study will be carried out with the following objectives: assess the appetite for desktop virtualisation in the organisation, and set expectations; confirm expected benefits; find out degree of acceptance of virtualisation culture; establish user requirements and technical readiness; determine spectrum of user devices to enable as client (corporate PC, iMac, iPad, BYOD (Bring Your Own Device), etc.); ascertain impact of virtual desktops on security and data protection policy; define technical specifications and migration roadmap; run a test phase (optional), provided that the study concludes favourably, in particular in the security and data protection areas.

VALUE ADDED: It can be easily estimated that moving from the current administration physical workstations to virtual infrastructure can allow reduction of the power consumption by up to 66%; reduction of office footprint by 30%; better office ergonomics and flex-desk policy; increase in LAN plugs capacity per office; reduction of local system and network administration costs by up to 80%; quicker PC provisioning; improved data security; simplified application management/migration; simpler operating system upgrades; compliance with security and data protection policies; increased mobility (i.e. flex-time, telecommuting or other growth initiatives).

MAIN CHALLENGES: Virtual Desktop Infrastructure has an inherent advantage when it comes to security management; nevertheless the specific security and data protection requirement of eu-LISA can neutralise some of the benefits.

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
Achieve and maintain operational excellence	Identified potential synergies between systems, infrastructure and services identified (where technology and business and legal requirements allow)	Improve the efficiency of the Agency's operations and continuously monitor and optimise total cost of ownership	A study report, with an impact assessment on security and data protection policy, will be written, as will technical specifications and a migration roadmap	To assess the possibilities and propose a solution for reducing the number of end user work stations, reducing power consumption and other costs, improving the office ergonomics, etc., by using virtual desktops	Cost/efficiency of the target solution in compliance with legal basis will be confirmed	Adherence to the required project scope, budget and time	The project is delivered within the agreed tolerance of scope, budget and timeframe	Weekly project dashboard and end of project closure	OIU

2.4.1.5. Implementation of the second phase of shared services (continuation from 2017)

MAIN ACTIONS OR TASKS: The common shared services study project, completed in November 2015, identified a number of common shared technical management services (e.g. technical monitoring, hardware and database management), which should be provided on top of a common shared infrastructure, in order to rationalise, from a financial and a technical resource point of view, eu-LISA's data centre infrastructure management. In this context, the shared services implementation roadmap follows a phased approach:

1. Putting in place, in early 2017, a framework contract for a common shared infrastructure so that eu-LISA first obtains the common shared infrastructure (hardware/software commercial off-the-shelf (COTS) installation, configuration and maintenance) with virtualisation foundations. On top of the common shared infrastructure, the common shared services will be implemented over 2017 to 2019, as described below.
2. Implementation of the first set of common shared technical services in 2017, which will include:
 - a. purchase of ground infrastructure (including the basis for Oracle virtualised database servers and the basis for storage);
 - b. software licences integration/implementation (COTS software and operating systems, etc.);
 - c. shared services implementation (first set);
 - d. maintenance activities on a 24/7 basis.
3. Implementation of the second set of common shared technical services in 2018, which is the purpose of the activity described here, which will include:
 - a. delivery of complementary shared infrastructure for this set of shared services;
 - b. increased shared storage capacity, which will allow central management of the storage space, while the physical storage will remain dedicated to each core business system (within a unique common infrastructure);
 - c. shared services implementation (second set);
 - d. maintenance activities for the common shared infrastructure that was already put in place in 2017, on a 24/7 basis.
4. Implementation of the last set of shared services in 2019, because of budget limitations.

VALUE ADDED: Rationalisation, from a financial and a technical resource point of view, of eu-LISA's data centre infrastructure management, by significantly reducing the amount of different types of technical implementations as well as the isolated ('silo') approach in all core business systems. In this context, by the end of 2018, eu-LISA will have in place a 'ready-to-use' common shared infrastructure, with virtualisation foundations, consisted of shared technical services, virtualised Oracle database servers and shared storage.

MAIN CHALLENGES: Activities planned for 2017, as described in points 1 and 2 above, already in place.

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
Achieve and maintain operational excellence	Continuous improvement of performance in all operational areas, and increased levels of automation where appropriate and possible	Improve the efficiency of the Agency's operations and continuously monitor and optimise total cost of ownership	The scope of this project, split over 3 years, is to prepare the infrastructure for full virtualisation as set out in eu-LISA's long-term technological strategy. This project (first step towards full virtualisation) covers the implementation of common shared services in accordance with the common shared services study's outcome	To harmonise eu-LISA's data centre infrastructure management	Shared services will be in place	Number of shared services implemented	60%	Project interim and final/closure reports	OIU

2.4.1.6. Centralise Oracle licensing

MAIN ACTIONS OR TASKS: The activity will compile a proper inventory of existing Oracle licences as well as a licence forecast for the next 3 years.

VALUE ADDED: Currently Oracle licences are spread over the different business systems, making management complex. Moreover, there is a lack of economy of scale, from a pricing point of view. This activity will provide a unique licence model allowing eu-LISA to benefit from a better pricing model.

MAIN CHALLENGES: Licensing costs to be transferred from the current MWO contracts to a future unique contract.

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
Achieve and maintain operational excellence	Continuous improvement of performance in all operational areas, and increased levels of automation where appropriate and possible	Continuously improve key contract management processes, tools, reporting and capabilities within the Agency	eu-LISA will have a single contract with Oracle regarding licence and maintenance instead of one licence management per core business systems contract	To transfer the licence management to eu-LISA using a new licensing model in order to achieve financial savings and better follow-up. In preparation for Oracle virtualisation and licensing of Oracle virtual servers as licence owner, for eu-LISA to have all the necessary supports from Oracle and also access to Oracle Knowledge base	A new licensing model will be in place and the core business systems contract updated (the existing maintenance costs removed from existing core business systems MWO contract)	Adherence to the required project scope, budget and time	Project delivered in the agreed scope, budget and timeframe	Project interim and final/closure reports	OIU

Evolution of the systems

2.4.1.7. Conducting an automated data quality control study followed by a test⁶⁴

MAIN ACTIONS OR TASKS: The project, subject to the outcome of the HLEG, includes the following actions: draw up the plan and organise the study (milestones, delivery, resources, budget); conduct meetings (with minutes); gather documentation; identify the users and their needs/collect the requirements; identify three COTS solutions that exist on the market for managing data quality checks with instream capability (mapping the needs/requirements); identify the possible choice of architecture (compliant with eu-LISA common shared services/infrastructure) and assess the feasibility (pros/cons) of each identified COTS option; assess potential impacts of the implementation; consider the options for implementation; consider the budget drivers and estimate costs; identify the constraints in our environment for the deployment of such data quality check tools – legal, technical and organisational; assess the gains and improvements; provide a high-level roadmap for implementation; write a study based on the information about inputs and conduct the review cycle (all in compliance with eu-LISA norms and standards in the area of project management and quality); design the test phase; coordinate the test phase activities with the participating Member States; execute the tests in the test phase; compile the information on the execution and analyse the test phase results; produce the test phase execution reports; generate the refined approach based on the study and factoring the test results in.

VALUE ADDED:

Immediate:

- to have a plan for addressing the data quality of all systems managed by eu-LISA.

Resulting from the implementation:

All the systems managed by eu-LISA having a higher quality of data, so directly or indirectly contributing to:

- improvement of the data protection aspects, compliance with the legal framework;
- improvement of the reliability of the information at the disposal of the Member States;
- less post-processing effort and workload, for both Member States and eu-LISA;
- standardisation of the data quality checks, avoiding the need for custom project development on data quality checks;
- uniformity and homogeneous management of data quality, i.e. application agnostic;

⁶⁴ The implementation of this activity depends on the amendment of the legal base or on a request from the European Commission under Article 9 of the establishing Regulation.

- more sustainable approach to data quality.

MAIN CHALLENGES: To identify the tools available on the market for the study.

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
Provide reliable and cost-effective solutions to Member States as per mandate	Increased added value of systems to the MS through their evolution	Timely, effective and efficient evolution of systems under management; Continuous improvement of service offering and capabilities to Member States	A study on standard tools for managing data quality control in large-scale systems will be written	To provide the implementation roadmap for the automated data quality control tools	The study will help in defining a project that will aim to implement a standard data quality control add-on for the systems managed by eu-LISA	<ul style="list-style-type: none"> - Activities performed in accordance with the terms of reference (which will be drawn up at the start of the study), i.e. all the output of the activity delivered - Study report and report on the execution of the test phase project delivered and satisfying the agreed level of quality - Document supporting the activities delivered in accordance with the level of quality defined in the 	<ul style="list-style-type: none"> 100% of the agreed activities performed Study report delivered with less than 10% deviation on terms of reference specifications. Quality level in compliance with eu-LISA norms and standards At least 90% of the test phase activities performed 100% of the results analysed 100% of the report delivered 	<ul style="list-style-type: none"> Project documentation Report on project progress status Report on quality Factual checking Study and test phase documentation 	AMMU

						terms of reference			
--	--	--	--	--	--	--------------------	--	--	--

2.4.1.8. BMS database increase (continuation from 2017)

MAIN ACTIONS OR TASKS: This project aims to increase BMS data storage capacity from 60 million to 100 million (to be determined based on the preliminary study) records to avoid any shortage; this increased need comes out of the capacity analysis and projection that shows that March 2018 is the point in time when available capacity to host 60 million records will be consumed. In addition, this project includes the replacement of the existing storage infrastructure in its scope and furthermore covers the operational management.

VALUE ADDED: The implementation of this project will ensure that the capacity required by the business needs will be available in the BMS system. The estimates are based on the official statistics made by the Council and published by the European Commission.

MAIN CHALLENGES: The enhanced end-to-end VIS-BMS testing tools must be implemented and, in order to ensure the accuracy and representativeness of the testing, the configuration of the system being tested and the test conditions must be as close as possible to the targeted production environment.

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
Provide reliable and cost-effective services and solutions to Member States as per the Agency's core mandate	Increased added value of systems to the MS through their evolution	Timely, effective and efficient evolution of systems under management; continuous improvement of service offering and capabilities to Member States	Storage capacity of BMS2 database will increase	For database capacity of BMS to respond to business needs (to be achieved in 2018)	VIS and BMS are improved and upgraded to adapt to business needs and legislative changes	Adherence to the required quality, budget, time and scope	Project delivered in the agreed scope, budget and timeframe	Project interim and final reports	AMMU

2.4.1.9. BMS 1.0 decommissioning

MAIN ACTIONS OR TASKS: Following the entry into operation of BMS 2.1, the completion of the fall-back window defined in the scope of the BMS Evolutions project and the

resolution of BMS 1.0 Crystal Reports issues, the BMS 1.0 production, pre-production and test systems were shut down progressively in Q1 and Q2 2016. The scope of this project includes the following:

- identification of the complete list of material to be decommissioned;
- decommissioning of the old BMS 1.0 network and system infrastructure;
- sanitisation of the outstanding disks;
- removal of the old licences;
- move of racks and servers from the eu-LISA sites to the destruction site;
- physical demolition of the removed material.

VALUE ADDED: By the removal of the BMS 1.0 production and non-production equipment, both CU and BCU data centre space will be released, which is necessary for the deployment of new material in the context of further upgrades. This activity is particularly important in the case of the BCU, which has very limited unoccupied space, so the possibility of deploying new material is restricted.

MAIN CHALLENGES: Should the project not be endorsed, this would lead to CU and BCU data centre space issues, having a direct and significant negative impact on the development of eu-LISA's systems.

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
Provide reliable and cost-effective solutions to Member States as per mandate	Increased added value of systems to the MS through their evolution	Continuous improvement of service offering and capabilities to Member States	CU and BCU data centre space will be released for future developments	To maintain the capability of eu-LISA to sufficiently host further upgrades of the existing and new applications	eu-LISA will be able to maintain further upgrades of the existing and new applications	Amount of BMS 1.0 hardware equipment (including cabling) left after the execution of the activity	No BMS 1.0 hardware equipment (including cabling) left after the execution of the activity	Physical inspection	AMMU

2.4.1.10. *Implementation of VIS/BMS end-to-end testing platform (continuation from 2017)*

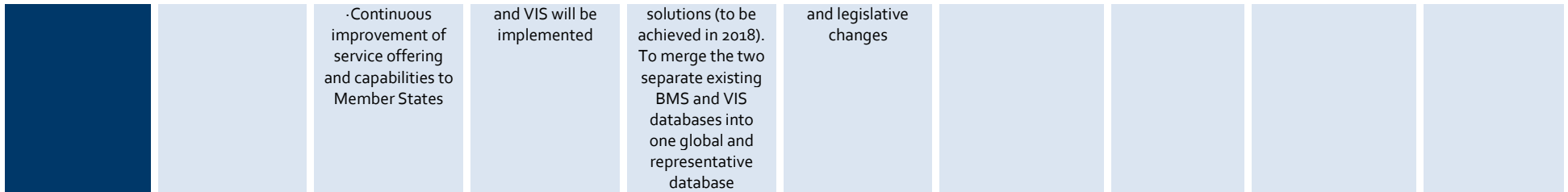
MAIN ACTIONS OR TASKS: This activity aims to define and implement a flexible end-to-end VIS/BMS testing solution based on COTS and industry standards, covering functional and non-functional aspects. In addition, the project includes the definition and implementation of a global and representative VIS/BMS test database, unlike the current situation in which two VIS and BMS databases coexist.

VALUE ADDED: Implementing a standardised and flexible test tool with automation will bring the following benefits:

- It will not be dependent on a deprecated and proprietary solution (which is expensive and inefficient in terms of development, maintenance and support).
- Development capacity and performance will improve significantly, allowing the reuse of the same set of automated tests.
- Manual testing can be mundane and error-prone and therefore become exasperating. Test automation allows test execution with very limited user interaction while guaranteeing repeatability and accuracy. eu-LISA staff will have more capacity to continuously improve the qualification process instead of concentrating a lot of effort on re-executing the existing test scenarios.
- With automated test cases, eu-LISA would be able to run thorough test campaigns for smaller changes (such as corrective/adaptive maintenance), thus ensuring continuous and better quality assurance of the system.
- Documentation and reporting will be automatically generated.
- External manpower availability is increased when standardised test tools are used.

MAIN CHALLENGES: The implementation and qualification of the project’s products will require joint availability of VIS and BMS test environments that may conflict with other work streams.

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
Provide reliable and cost-effective solutions to Member States as per mandate	Increased added value of systems to the MS through their evolution	Timely, effective and efficient evolution of systems under management;	A flexible end-to-end testing solution and one database for BMS	To implement VIS and BMS test tools based on industry standard and COTS	VIS and BMS are improved and evolved to adapt to business needs	Adherence to the required quality, budget, time and scope	Project delivered in the agreed scope, budget and timeframe	Project interim and final reports	AMMU



2.4.1.11. Tuning of VIS transactional throughput (continuation from 2017)

MAIN ACTIONS OR TASKS: This activity is focused on improving VIS front-end configuration in order to align VIS transactional distribution with actual use of the VIS central system and therefore optimise the use of technical resources.

VALUE ADDED: This activity is focused on improving VIS front-end configuration in order to align VIS transactional distribution with actual use of Member States’ National Systems and therefore optimise the use of technical resources. This activity is interrelated with the tuning of BMS transactional throughput and includes:

- an assessment of the system utilisation after the completion of the VIS global rollout and recommendations for the required transactional tuning (VIS part);
- additional hardware, maintenance and COTS licence costs (for all production and non-production BMS environments);
- service costs for the implementation (for all production and non-production BMS environments) and update of the entire documentation;
- service costs for the qualification of the changes on all the environments (including end-to-end VIS-BMS performance tests).

Development consolidation carried out by this activity will add value to the system for the MS by aligning and optimising VIS and BMS capacity end to end.

MAIN CHALLENGES: Dependency on the Member States’ use of the system after the VIS worldwide rollout and following the intensive monitoring period in 2016, and the availability of actual figures for transaction distribution required for determining the appropriate VIS configuration. Since the current capacity of VIS was mostly calculated on the basis of forecasts, after the end of the VIS global rollout an assessment has to be conducted to check whether or not VIS computational resources are honed to meet Member States’ needs. Without such a development, computational resources will stay over- or underscaled compared with the real needs.

Strategic objective 2015-2020	Projected outcome(s) at	Elements of strategic	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
-------------------------------	-------------------------	-----------------------	-------------------------	---------------------------	----------------------------------	-----------------------	--------	-------------------------	------

	conclusion in 2020	objective 2018-2020							
Provide reliable and cost-effective solutions to Member States as per mandate	Increased added value of systems to the MS through their evolution	Timely, effective and efficient evolution of systems under management; continuous improvement of service offering and capabilities to Member States	The VIS transactional distribution is aligned with the use of the VIS central system	To optimise the technical resources of VIS in accordance with the actual use by Member States	VIS and BMS are improved and upgraded to adapt to business needs and legislative changes	Adherence to the required quality, budget, time and scope	Project delivered in the agreed scope, budget and timeframe	Project interim and final reports	AMMU

2.4.1.12. Tuning of BMS transactional throughput (continuation from 2017)

MAIN ACTIONS OR TASKS: This activity is focused on improving BMS front-end configuration in order to align VIS transactional distribution with actual use of the VIS central system and therefore optimise the use of technical resources (more details to be found in Annex 1).

VALUE ADDED: BMS transactional configuration is adapted to actual use of the system by end users and technical resources are used the optimal way.

MAIN CHALLENGES: Dependency on the Member States' use of the system after the VIS worldwide rollout and following the intensive monitoring period in 2016, and the availability of actual figures of transaction distribution required for determining the appropriate VIS configuration.

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
Provide reliable and cost-effective solutions to Member States as per mandate	Increased added value of systems to the MS through their evolution	Timely, effective and efficient evolution of systems under management; continuous improvement of service offering	The BMS transactional distribution is aligned with the use of the VIS central system.	To optimise the technical resources of the BMS in accordance with the actual use by Member States	VIS and BMS are improved and upgraded to adapt to business needs and legislative changes	Adherence to the required quality, budget, time and scope	Project delivered in the agreed scope, budget and timeframe	Project interim and final reports	AMMU

and capabilities to Member States

2.4.1.13. USK renewal

MAIN ACTIONS OR TASKS: As a continuation of the studies and agreements made in 2016 and 2017, the project aims to provide Member States with a standardised fingerprint acquisition toolkit, including also the setup of a future central support and maintenance service provided by eu-LISA.

In response to the needs raised by Member States, eu-LISA conducted two studies in 2016 with the aim of finding a common fingerprint acquisition toolkit suitable to the wide variety of Member States' needs. As an outcome of the studies and related follow-up discussions/agreements, the project includes the provision of a customised Safran product called MorphoKit to Member States, related qualification, release and training activities, the required number of workstation licences and the setup of a centralised maintenance and support service through the eu-LISA Service Desk. Since some Member States have already invested in open source solutions such as NIST NFIQ2, they can continue maintaining their solutions by providing compliance with the quality standards defined by eu-LISA.

VALUE ADDED: The main aspect that has to be considered for the expected benefits is the standardisation of the fingerprint acquisition toolkit, which is a big step forwards to the insertion of high-quality biometric data into the central system. Member States are currently using a great variety of tools, each of them having its own biometric algorithms, and there is no common standard with which they can all comply. In addition to this, Member States using the old Morpho USK toolkit have a growing number of problems because their tool has become obsolete, it does not support the latest version of operating systems and there is no vendor support and/or maintenance available. As a conclusion, and also because of staff shortage, the required data quality for the smooth and well-performing business operations of VIS-BMS is hard or impossible to guarantee. Bad and/or non-standardised biometric data quality requirements might not only result in decreased central system performance but also influence the business efficiency of the VIS defined in related regulation.

MAIN CHALLENGES: The smooth progressive and timely release of MorphoKit to all entities and ESPs will have to be coordinated by the national authorities, although it will mean a considerable amount of work and challenging stakeholder management.

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
Provide reliable and cost-effective	Increased added value of systems	Continuous improvement of	A standardised fingerprint	To standardise the computation of	This activity will result in:	Adherence to the required project	Project delivered in the	Project interim and final reports	AMMU

<p>solutions to Member States as per mandate</p>	<p>to the MS through their evolution</p>	<p>service offering and capabilities to Member States</p>	<p>acquisition toolkit is provided</p>	<p>fingerprint quality by Member States by providing them with an appropriate toolkit and related support and maintenance services</p>	<ul style="list-style-type: none"> the delivery of a fingerprint quality standard document with which all Member States using custom acquisition tools will have to comply; the delivery of a customised MorphoKit with the required central support for its national release 	<p>scope, budget and time</p>	<p>agreed scope, budget and timeframe</p>		
--	--	---	--	--	---	-------------------------------	---	--	--

2.4.1.14. VIS database increase from 60 million to 100 million records (continuation)

MAIN ACTIONS OR TASKS: eu-LISA will continue the project aiming to increase the capacity of the VIS in order to comply with the business needs of Member States in the context of regular use of the system. The increase in the VIS database’s capacity from 60 million to 100 million visa applications covers:

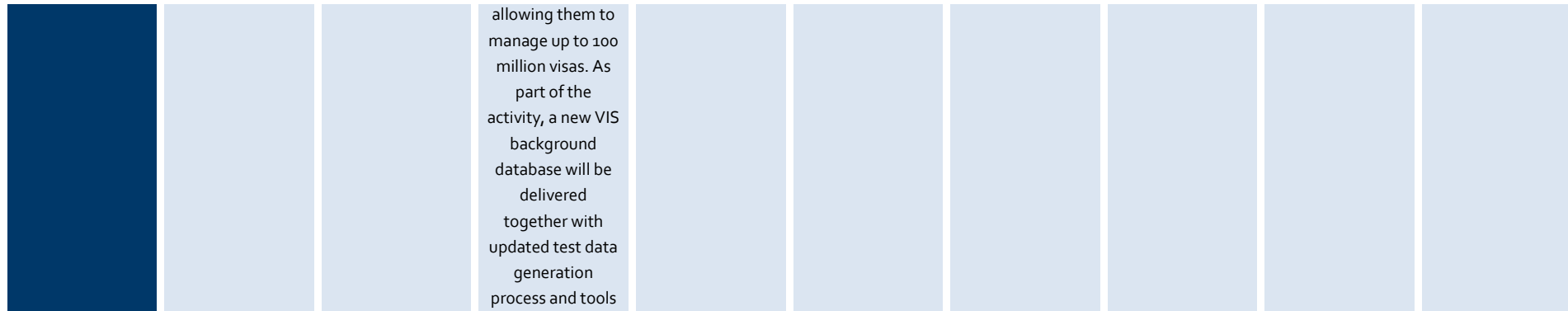
- the allocation of the necessary storage capacity to the database servers so that the target capacity is made available to the system;
- the update of the test tools, including but not limited to:
 - the update of the test data generation process;

- the update of the VIS background database to include 100 million visa applications;
- the upgrade of the database servers’ memory and processing power;
- the upgrade of the search engine servers’ memory and processing power;
- the end-to-end qualification of the solution;
- the rollout preparation and rehearsal.

VALUE ADDED: Based on the projections of VIS capacity usage over time, this activity is meant to prevent VIS from running out of capacity to store and manage the regularly increasing number of visas introduced by Member States at any time. The previous VIS database increase (from 40 million to 60 million visa applications), successfully managed in 2016, already provides strong experience, and limits the project’s internal risks.

MAIN CHALLENGES: The main challenges do not reside at the level of the project itself but are rather expected from the interdependency with other projects, whether solely VIS and BMS or coming from ancillary activities such as system interoperability or other system development with an impact on VIS and/or BMS. It requires thorough and very accurate schedule to avoid one having an impact on another.

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
Provide reliable and cost-effective solutions to Member States as per mandate	Increased added value of systems to the MS through their evolution	Continuous improvement of service offering and capabilities to Member States	This activity will result in an upgrade of several critical components and environments of VIS so that hardware capacity, processing power of databases and search engine servers can be brought to a level	To increase the capacity of the VIS (all components affected) in order to align with business needs	VIS capacity is compliant with the needs of Member States	Adherence to the required project scope, budget and time	Project delivered in the agreed scope, budget and timeframe	Project interim and final reports	AMMU



2.4.1.15. Reinforcement of the VIS/BMS testing infrastructure (continuation)

MAIN ACTIONS OR TASKS: eu-LISA will continue upscaling the VIS and BMS testing infrastructure to the size of production infrastructure, including the necessary provision of hardware, software and professional services. This upscale is planned to be performed in parallel to the capacity upscale of production in order to have the testing platform ready for the qualification of the production changes on time.

The reinforcement of the VIS/BMS testing environments is primarily focused on:

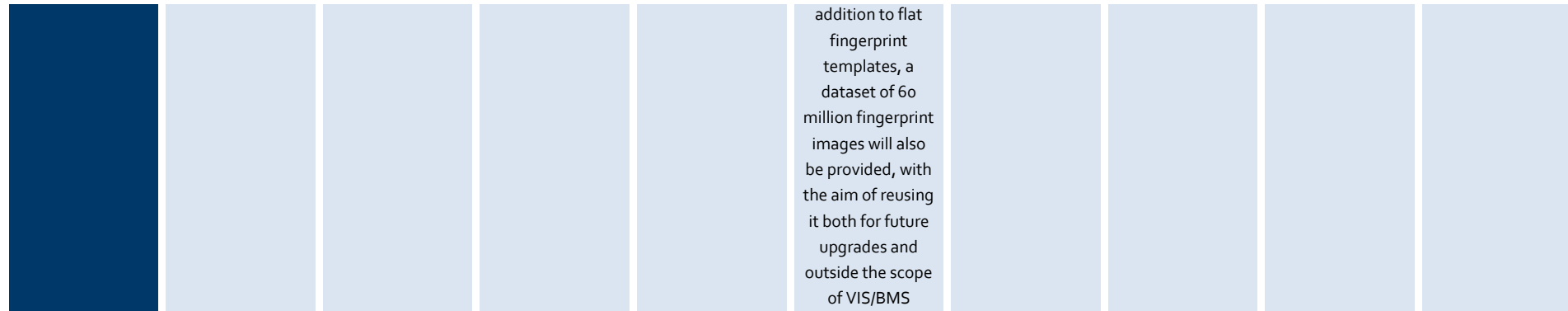
- the upscale of the BMS testing infrastructure to 60 million records and the transaction throughput capacity of BMS production in 2016; this upscale shall also include the provision of a new noise database tailored to the new capacity of the BMS test database; contrary to previous acquisitions, the new noise database shall include not only flat fingerprint templates but also their sources (semi-synthetic fingerprint images), which can be reused later even outside the scope of BMS Evolutions if needed;
- the upscale of the VIS testing infrastructure to 100 million records; this upscale shall also include the provisioning of a new background database tailored to the new capacity of the VIS test database.

VALUE ADDED: The main aspect that has to be considered for the expected benefits is the ability to qualify business-critical evolutions of the VIS and BMS. The reinforcement of the VIS and BMS testing infrastructure is an important prerequisite without which the success of any production capacity evolution (database or throughput) cannot be satisfactorily guaranteed. This is particularly true for BMS, where it has been proven that extrapolating conclusions from smaller-scale performance test results or with infrastructure of different hardware specifications should be handled with much precaution. Therefore, for business-critical systems such as VIS (and the related BMS), it is of

utmost importance to make the qualification of capacity evolutions under production-like conditions, on test environments similar to production in terms of size and hardware. The provision of related background or noise databases is also included in the scope to ensure that the qualification campaigns are done under full database utilisation, which can negatively influence the performance of any systems.

MAIN CHALLENGES: There are some technical challenges primarily related to the upscale of the BMS testing infrastructure. Since some hardware components used in production are not available on the market any more, the infrastructure requirement to utilise the same hardware infrastructure on both production and non-production can be guaranteed only if some existing production servers are exchanged with new ones, and the ones removed from production are added to the testing infrastructure. This makes the project qualification campaign long and more complex. In addition to this, considering the expected size of the new BMS noise database, a new method has to be identified for the generation of the 60 million-record noise dataset, which is expected to incorporate statistical specificities of the existing production data.

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
Provide reliable and cost-effective solutions to Member States as per mandate	Increased added value of systems to the MS through their evolution	Continuous improvement of service offering and capabilities to Member States	VIS and BMS testing infrastructure is upgraded to the size of production	To increase the capacity of the VIS and BMS testing infrastructure to the size of production	This activity will result in an improved testing infrastructure on which eu-LISA can satisfactorily perform the qualification of production capacity upgrades. As part of the activity, a new (upgraded) VIS background database and a new BMS noise database will be delivered. In	Adherence to the required project scope, budget and time	Project delivered in the agreed scope, budget and timeframe	Project interim and final reports	AMMU



2.4.1.16. *Conducting a study on implementing service-oriented architecture*

MAIN ACTIONS OR TASKS: A study shall be prepared by skilled architects and designers with deep knowledge in the field of service-oriented architecture, assessing the suitability of implementing service-oriented architecture within eu-LISA and proposing a suitable solution that could be implemented in a subsequent project. This study shall include the definition of the services to encapsulate in an independent manner reusable and flexible business functions, their interfaces, and possible integration and orchestration technologies.

The suitability of supporting this service-oriented architecture approach with an enterprise service bus, and defining the functionality that this element should contain, shall also be explored. A test could be useful to demonstrate the benefits of the target solution.

VALUE ADDED: Following a service-oriented architecture approach is known to bring numerous benefits:

- increasing the speed at which new functions or business processes can be implemented or changed;
- reducing implementation and ownership costs;
- simplifying and speeding integration, adding flexibility;
- better IT utilisation;
- reusability;
- independence of the services, allowing one of them to be changed without affecting the rest;
- mature technology.

MAIN CHALLENGES: The proper preparation of the study requires deep knowledge and comprehensive understanding of the IT systems within eu-LISA to provide a relevant outcome. Therefore, collaboration and contributions from all teams are needed. The study is to be drawn up by expert designers and solution architects. The project should be executed in close coordination with the EES, which will be in its development phase.

Other identified risks are:

- lack of experience of the contractor; this risk is to be mitigated in the procurement phase;
- lack of cooperation by people in key roles within eu-LISA to support the work of the contractor;
- misalignment with other vertical and horizontal initiatives;
- lack of endorsement from stakeholders (European Commission, Member States, Europol, Eurojust).

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
Provide reliable and cost-effective solutions to Member States as per mandate	Improved interoperability of systems (subject to the changes relevant legal instruments)	Timely, effective and efficient evolution of systems under management; continuous improvement of service offering and capabilities to Member States	A study report provides information on the suitability of using service-oriented architecture and its implementation to core business systems	To assess the feasibility and benefits of implementing service-oriented architecture including the use of an enterprise service bus	The goal of service-oriented architecture is to bring the benefits of loose coupling and encapsulation to integration at enterprise level; it will also facilitate the reuse of existing functionality for future developments, saving effort, time and budget	Completeness of study	100% of the study completed	Project management log	AMMU

2.4.1.17. Evolution of common test tools

MAIN ACTIONS OR TASKS: Migrate the existing test items into the new test tool.

VALUE ADDED: Reduced time, increased efficiency, reduced costs and less involvement of the contractor for the qualification of further evolutions. Testing industrialisation and automation as well as improved test reporting.

MAIN CHALLENGES: The setup of the test tools, which will start in 2017 and should be finalised before the start of this activity; to ensure the required project scope, budget and time.

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
Provide reliable and cost-effective solutions to Member States as per mandate	Increased added value of systems to the MS through their evolution	Continuous improvement of service offering and capabilities to Member States	Test items are migrated into the enterprise-wide test tool, providing interoperability among the systems	To implement a homogeneous test tool solution across all the systems	The testing can be done with the new test tool. Full coverage analysis. A higher level of independence from vendor-specific tools is gained	Adherence to the required project scope, budget and time	Project delivered in the agreed scope, budget and timeframe	Project interim and final reports	AMMU

2.4.1.18. Implementation of a virtualisation test phase

MAIN ACTIONS OR TASKS: In order to have a test platform able to host test phase or development environments for new concepts (test of virtualised application), the virtualised infrastructure foundations put in place in 2017, as part of the common shared services, will be extended. An additional extension to the one already included in the budget may be still necessary in 2018 if new systems (e.g. the EES) need to be set up.

VALUE ADDED: Reaching eu-LISA's technology strategy objective towards virtualisation.

MAIN CHALLENGES: Most suitable application to be selected, virtualisation infrastructure in place.

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
Provide reliable and cost-effective solutions to Member States as per mandate	Increased added value of systems to the MS through their evolution	Timely, effective and efficient evolution of systems under management	The behaviour of a test virtualised application (SIS II, VIS, BMS and Eurodac) in a common shared infrastructure (CSI) environment will be validated	To verify that the result of the Virtualisation Active/Active Study project (completed in 2016) related to the choice of infrastructure technologies, regarding virtualisation; allow business system to meet their requirements	Virtualised infrastructure put in place as part of common shared services implementation is extended to host a test phase. (To be defined between SIS II, VIS, BMS or Eurodac.) Selected application is virtualised and its behaviour validated	Adherence to the required project scope, budget and time	Project delivered in the agreed scope, budget and timeframe	Project interim and final/closure reports	OIU

2.4.1.19. *SIS II AFIS consolidation and preparation of implementation for Phase 2*

MAIN ACTIONS OR TASKS: This activity includes the maintenance of AFIS, the identification of additional requirements, the project design and initiation activities, and financial and vendor management. It covers necessary adaptations (Oracle, WebLogic), technical support and training activities associated with the rollout of large-scale IT projects.

VALUE ADDED: The AFIS initiative will be consolidated and the next phase properly prepared.

MAIN CHALLENGES: Implementing decisions in due time, budget and resources. Ensuring participation of all Member States.

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
Provide reliable and cost-effective solutions to Member States as per mandate	Increased added value of systems to the MS through their evolution	Timely, effective and efficient evolution of systems under management; continuous improvement of service offering and capabilities to Member States	The stability of the system will be confirmed through appropriate maintenance and adjustments during rollout (e.g. Oracle alignment). Preparation of requirements, initiation and design of the second phase	To stabilise AFIS project including all MS and prepare for the second phase	AFIS runs smoothly for all Member States. Necessary adjustments are made. Readiness for implementation of the second phase	AFIS properly maintained and adapted (e.g. Oracle) immediately after rollout. Phase 2 project initiation documents delivered in time, budget and scope	Schedule deviation less than 10%. 100% of project deliverables accepted. Stable SIS II AFIS system	Project interim and closure reports AFIS maintenance reports	AMMU

2.4.1.20. SIS II evolutions

MAIN ACTIONS OR TASKS: This activity includes project activities, design and implementation, finalisation of the project to increase the capacity/performance of SIS II and fine-tune functionalities initially envisaged for 2017, testing, and financial and vendor management.

VALUE ADDED: Enhanced system.

MAIN CHALLENGES: Implementing decisions in due time, budget, availability of resources, and possibility of phasing the project.

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
-------------------------------	--	---	-------------------------	---------------------------	----------------------------------	-----------------------	--------	-------------------------	------

Provide reliable and cost-effective solutions to Member States as per mandate	Increased added value of systems to the MS through their evolution	Timely, effective and efficient evolution of systems under management; continuous improvement of service offering and capabilities to Member States	SIS II will be enhanced with new functionalities	To enable the system to respond to legal and business needs	SIS II enhanced system will be aligned with the revised SIS II legislation	Projects delivered in time, budget and scope	Schedule deviation less than 10%. 100% of project deliverables accepted	Project interim and closure reports	AMMU
---	--	---	--	---	--	--	---	-------------------------------------	------

2.4.1.21. SIS II recast

MAIN ACTIONS OR TASKS: This activity includes project activities, design and implementation tests, as well as financial and vendor management.

VALUE ADDED: The requirements stemming from the new legal base will be taken into account.

MAIN CHALLENGES: Implementing SIS II recast decision in due time, budget and resources.

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
Provide reliable and cost-effective solutions to Member States as per mandate	Increased added value of systems to the MS through their evolution	Timely, effective and efficient evolution of systems under management; continuous improvement of service offering and capabilities to Member States	The new requirements are implemented (e.g. new category of alerts, latent fingerprints, facial recognition)	To implement the additional business – including biometrics – functionalities available for Member States in accordance with the requirements	Additional functionalities are available for Member States	Project delivered in time, budget and scope	Schedule deviation less than 10%. 100% of project deliverables accepted	Project interim and closure reports	AMMU

2.4.1.22. *SIS II Return Decision*

MAIN ACTIONS OR TASKS: This activity includes project activities, design and implementation tests, as well as financial and vendor management.

VALUE ADDED: New requirements, stemming from the Member States or the new legal base, will be taken into account

MAIN CHALLENGES: Implementing SIS II Return Decision in due time, budget and resources, and possibility of phasing the project.

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
Provide reliable and cost-effective solutions to Member States as per mandate	Increased added value of systems to the MS through their evolution	Timely, effective and efficient evolution of systems under management; continuous improvement of service offering and capabilities to Member States	The new functionalities are implemented, allowing the introduction of return decision alerts into SIS II (e.g. new category of alert)	To implement new functionalities allowing return decisions to be introduced into SIS II	It will be possible to introduce return decisions into SIS II	Project delivered in time, budget and scope	Schedule deviation less than 10%. 100% of project deliverables accepted	Project interim and closure reports	AMMU

2.4.1.23. *Eurodac integration with shared service architecture standards*

MAIN ACTIONS OR TASKS: Eurodac has to ensure alignment with the shared services project outcomes: improving access management (from Lightweight Directory Access Protocol to Active Directory), improving security, compliance verification, creation of log centre, etc. To achieve this, interfaces between the Eurodac maintenance contract and the shared services contract have to be planned in order to allow Eurodac to integrate with the shared infrastructure and services. This may include not only the use of different low-level components (hardware/software) but also the technical redesign of the interfaces of these components with other Eurodac parts.

VALUE ADDED: Having available an integrated way to provide services.

MAIN CHALLENGES: There is a need to align the provisions of different contracts not initiated in the same periods, and to coordinate the work of different contractors (MWO/shared services contractors).

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
Provide reliable and cost-effective solutions to Member States as per mandate	Increased added value of systems to the MS through their evolution	Timely, effective and efficient evolution of systems under management; continuous improvement of service offering and capabilities to Member States	Access management will improve by moving from Lightweight Directory Access Protocol to Active Directory, and security will improve thanks to compliance verification, compliance with Log Centre requirements, etc.	To align Eurodac with the outcomes of shared service architecture standards	Eurodac will converge with the shared service standards applicable throughout the organisation	Number of Eurodac services aligned	Not fewer than 4 services aligned	Project documentation	AMMU

2.4.1.24. Eurodac reform: functional changes and capacity upgrade⁶⁵

MAIN ACTIONS OR TASKS: Project activities, design, implementation, tests, and financial and vendor management. In addition, a study will be conducted to explore the possibility of adding face recognition to Eurodac.

⁶⁵ Subject to legislative amendments.

VALUE ADDED: System up to date and in line with the new regulation. System properly sized to cope with the new business needs and increased scope.

MAIN CHALLENGES: Implementing in due time, budget and resources, tight dependencies on the Member States' planning and volumetrics forecast.

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
Provide reliable and cost-effective solutions to Member States as per mandate	Increased added value of systems to the MS through their evolution	Timely, effective and efficient evolution of systems under management; continuous improvement of service offering and capabilities to Member States	Eurodac Release 4.0 includes new functionalities coming from recast of Eurodac Regulation (extension of scope to cover illegal migration follow-up purposes). Eurodac Release 4.0 is sized properly to cope with the new business needs following the reform. This includes a study that will confirm traffic and sizing needs (current sizing estimate is for up to around to 15 million records) as well as	To align Eurodac with the requirements set in the new Eurodac Regulation. To properly size Eurodac in order to cope with the new business needs and usage stemming from Eurodac reform	Eurodac is in line with the new legal provisions. Eurodac is sized properly to cope with the new legal provisions	Adherence to the required project scope, budget and time	100% of acceptance test case scenarios passed successfully. Project within budget limits. Project within the agreed implementation time	Test reports. Project files and reports	AMMU

			implementation of the upgrade. Another study covers face recognition in Eurodac						
--	--	--	---	--	--	--	--	--	--

2.4.1.25. Study/Impact Assessment for splitting the underlying biometric matching services from the front-end/business layers in Eurodac

MAIN ACTIONS OR TASKS: Today there is no clear split between the core biometric matching mechanism of Eurodac and its business layer and functionalities making use of the biometric services. This activity refers to the implementation of a 2-Phase study for assessing the feasibility, effort and architectural impact of splitting the underlying Eurodac biometric matching services from the front-end/business layers which make use of these biometric services and provide the business context and the interface to the users’ community.

VALUE ADDED: This will enable to take actions towards standardization and harmonization of the modalities of the biometric matching mechanism of Eurodac with those of the other systems managed by eu-LISA, ensuring compliance with the EU interoperability roadmap..

MAIN CHALLENGES: To identify on time the architectural options and impact, which will drive the decision making for future interoperability compliance due to the particular Eurodac architecture. Based on the study outcomes, to further determine the best return on investment given all the parallel developments around Eurodac and the non-aligned timelines of the different legal initiatives.

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
Provide reliable and cost-effective solutions to Member States as per mandate	Increased added value of systems to the MS through their evolution	Timely, effective and efficient evolution of systems under management;	(1) Phase 1 outputs: Initial Assessment of feasibility and identification and	To ensure readiness for timely decision making concerning the	Push standardization and interoperability	Adherence to the required project scope, budget and time	Deliverables according to specs and accepted by eu-LISA	Project files and reports	AMMU

		continuous improvement of service offering and capabilities to Member States	assessment of high level architectural options; (2) Phase 2 outputs: Detailed assessment of preferred split option(s)/architectural designs (main building blocks)	Eurodac Interoperability compliance roadmap	compliance across EU systems				
--	--	--	---	---	------------------------------	--	--	--	--

Network and communication infrastructure

2.4.1.26. Conducting a unified network test phase⁶⁶

MAIN ACTIONS OR TASKS: This multiannual project envisages two stages:

- The study (2017) should analyse the current design and propose improvements to the current design.
- The test phase (2017-2018) should be used to validate the proposed solution in a laboratory/pre-production environment.

VALUE ADDED: Better fulfilment of eu-LISA legal obligations. Providing information for the possible change of core business system regulations. Delivery of the vision/strategy for the communication infrastructure, which may support eu-LISA’s position as an Agency providing high added value to the Communities.

MAIN CHALLENGES: The project depends on a stable and secure communication infrastructure environment and therefore should be started only after the end of rollout of

⁶⁶ The implementation of this activity depends on the outcomes of the impact assessment to be carried out in 2017 and might be subject to legal amendments.

the second encryption layer in VIS.

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
Provide reliable and cost-effective solutions to Member States as per mandate	Optimum network solution in place for the Agency to ensure that system data is processed as efficiently, securely and cost-effectively as possible	Effective supervision, security and coordination of relations between Member States and third party network service providers for systems' communication infrastructure	The test phase is conducted in accordance with the proposal from the study carried out in 2017	To have a clear vision of the necessary upgrade of the communication infrastructure (to be achieved by the end of 2018)	The management of the Agency understands the possible improvements and possible changes in regulation	Adherence to the required project scope, budget and time	Project delivered in the agreed scope, budget and timeframe	Project interim and final reports	OIU

2.4.1.27.Preparation for TESTA-ng second generation

MAIN ACTIONS OR TASKS: The activity consists of two stages: (a) collection of requirements and (b) technical specifications and preparation of requirement list.

VALUE ADDED: Project implementation should provide the following benefits:

- readiness for TESTA-ng second generation contract arrangement process;
- smoother transition from TESTA-ng to TESTA-ng second generation due to better integration of eu-LISA's requirements in the contract.

MAIN CHALLENGES: Complexity of the task caused by the number of technical and security requirements (more than 1 000) and the need to align with many different stakeholders, including Member States.

Strategic objective 2015-2020	Projected outcome(s) at	Elements of strategic	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
-------------------------------	-------------------------	-----------------------	-------------------------	---------------------------	----------------------------------	-----------------------	--------	-------------------------	------

	conclusion in 2020	objective 2018-2020							
Provide reliable and cost-effective solutions to Member States as per mandate	Optimum network solution in place for the Agency to ensure that system data is processed as efficiently, securely and cost-effectively as possible	Effective supervision, security and coordination of relations between Member States and third party network service providers for systems' communication infrastructure	Technical specifications and requirements for the procurement of TESTA-ng second generation services are listed	To make sure that the requirements and specifics of eu-LISA core business systems are well covered in the technical specifications for the TESTA-ng second generation contract	The procurement for TESTA-ng second generation covers eu-LISA core business systems' needs	Delivery date and coverage of eu-LISA core business systems specifics	Project delivered in the agreed scope, budget and timeframe	Project interim and final reports	OIU

2.4.1.28. *Operational management of the systems' communication infrastructure and related communication systems*

MAIN ACTIONS OR TASKS: The activity consists of:

- core business system LAN operational management;
- end user workstation LAN operational management;
- SIS II second encryption layer operational management;
- VIS Mail system operational management;
- SIS II Mail system operational management;
- TESTA-ng activities:
 - supervision, which includes analysis and review of operational reports, the organisation of regular meetings related to the operations, following up actions with the provider, requests for change and technical parts of service orders;
 - coordination of relations between Member States and the provider: the maintenance of the contact lists in Member States and the coordination of all network activities having an impact on a Member State;

- o proposing technical specifications as requested by the Commission.

VALUE ADDED: The communication infrastructure and related communication systems provides the necessary service to core business systems and to Member States.

MAIN CHALLENGES: To ensure that the services are provided in accordance with the business expectations and technical specifications.

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
Provide reliable and cost-effective solutions to Member States as per mandate	Optimum network solution in place for the Agency to ensure that system data is processed as efficiently, securely and cost-effectively as possible	Effective supervision, security and coordination of relations between Member States and third party network service providers for systems' communication infrastructure	Secure and reliable communication infrastructure and related communication systems operate as required	To maintain and monitor networks under eu-LISA management to ensure security and reliability of communications infrastructure	Core business systems and Member States receive a reliable service from the communication infrastructure and related communication systems	Conformity with the communication infrastructure SLAs	Communication infrastructure and communication infrastructure systems available in accordance with system-specific SLA outlined in valid version of eu-LISA Service Catalogue	Reports on the performance of the systems and SLAs	OIU

2.4.1.29. Handover of the activities related to implementation of the budget, acquisition, renewal and contractual matters of the VIS and SIS II communication infrastructure⁶⁷

⁶⁷ Implementation depending on the adoption of the relevant legal base.

MAIN ACTIONS OR TASKS: Handover of Commission activities/responsibilities related to the budget, acquisition, renewal and contractual matters of the communication infrastructure, more particularly:

- VIS WAN and related services;
- SIS II WAN and related services;
- VIS Mail;
- Sirenemail;
- VIS Single Point of Contact mail;
- SIS II Single Point of Contact mail;
- VIS second encryption layer;
- SIS II second encryption layer.

Establishment of the necessary processes and procedures on eu-LISA’s side for the execution of the activities handed over.

VALUE ADDED: It is no longer justified for the Commission to retain certain tasks related to the communication infrastructure or the systems, so these tasks should be transferred to the Agency in order to improve the coherence of their management.

MAIN CHALLENGES: The project is facing the following challenges:

- limited timeline for the VIS handover – according to the EES regulation proposal, the handover is to be done in a fixed period of 6 months;
- unknown start date – the start of the VIS handover depends on the entry into force of the EES Regulation, while the start of the SIS handover depends on the adoption of the revised eu-LISA establishing Regulation.

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
-------------------------------	--	---	-------------------------	---------------------------	----------------------------------	-----------------------	--------	-------------------------	------

Provide reliable and cost-effective solutions to Member States as per mandate	Optimum network solution in place for the Agency to ensure that system data is processed as efficiently, securely and cost-effectively as possible, complying with the legal framework	Effective supervision, security and coordination of relations between Member States and third party network service providers for systems' communication infrastructure	Organisational structure, roles and responsibilities are in place to perform the contract management of communication infrastructure. DG Home provides the required handover information	To ensure that the Agency possesses the ability to perform contract management of the communications infrastructure	DG Home produces handover report. Roles and responsibilities are described, and an organigram illustrates contractual management of communication infrastructure	Adherence to the required project scope, budget and time	Project delivered in the agreed scope, budget and timeframe	Project interim and final reports	OIU
---	--	---	---	---	---	--	---	-----------------------------------	-----

Development and operational management of new systems

2.4.1.30.Data warehouse implementation to improve automated reporting and statistics generation Phase 2 (continuation from 2017)⁶⁸

MAIN ACTIONS OR TASKS:

⁶⁸ Subject to the outcome of the HLEG and possible legislative amendments.

- A repository where all technical reports that the Agency produces to monitor the proper functioning of the systems and reports that the applications (SIS II, Eurodac and VIS) produce and statistics will be managed, along with the appropriate means to gain access to the relevant information needed by the stakeholders. The central repository of reports and statistics stores large amounts of historical data so that it is possible to analyse different time periods and trends in order to make predictions.
- A set of tools to make changes easily (i.e. without resources or with as few as possible) and adapt when new stakeholder needs arise in relation to the information managed by eu-LISA and in particular in relation to the application management with which eu-LISA is entrusted. It will be possible to make those tools directly available for the use of the end users by means of a simple graphical interface.
- Improvement of reporting as a service to fulfil the legal obligations of the Agency.

VALUE ADDED: Improved automated reporting and statistics generation that is aligned with stakeholders’ needs in the area of the applications managed by eu-LISA (SIS II, VIS/BMS, Eurodac), supported by the legal basis, the needs of Member States, the Commission, eu-LISA, entitled authorities such as the EDPS and relevant JHA agencies, according to respective legal basis. In addition, since the stakeholders can quickly access critical data from a number of sources in one single place, they can rapidly make informed decisions on key initiatives. Furthermore, since data from each of the various systems is standardised, stakeholders can have more confidence in the accuracy of the data.

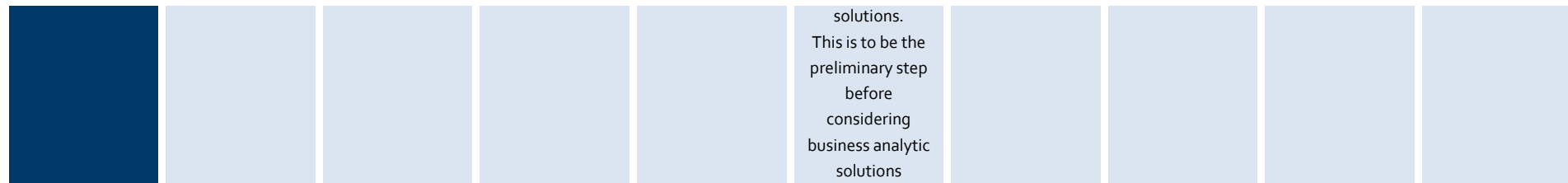
MAIN CHALLENGES:

- Because of legal restrictions on access to the application data, a significant response time is currently necessary for the design and production of new reports. Ad hoc response has also to be considered should those reports have to be produced on a regular basis.
- There are security constraints.

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
Increase the added value of the data and technology to Member States	Data warehouse implementation subject to an impact assessment	Development and implementation of new/additional systems, if so provided by relevant legislative	A new transversal system and infrastructure for operating it exist. Reports and Statistics Central Repository are in operation.	To implement the chosen option for the Reports and Statistics Central Repository once it has been validated in the	Visibility and analytic business understanding of the applications managed by eu-LISA that foster the decision	Adherence to the required project scope, budget and time. Number of existing reports transposed in this	Project delivered in the agreed scope, budget and timeframe. 100% of the existing reports transposed by the	Project documentation – reports on progress status. Logs of the Reports and	AMMU

		<p>instruments; provide new and improve existing services and solutions to meet stakeholder requirements; increase visibility of the Agency's corporate and systems performance to all stakeholders through the production and publication of appropriate technical performance data</p>	<p>eu-LISA core application reports are generated automatically. Remote reporting solution⁶⁹ serves the MS through the secured network. There is a central repository for the management of all the reports produced centrally or remotely from systems/applications operated by eu-LISA</p>	<p>test phase. To put the solution in operation with the necessary transition support activities (training, coaching). To have all the reports generated using this unified solution To provide reporting as a service</p>	<p>process. Reports and statistics are managed centrally in a standard and application-agnostic way. Member States, the Commission, relevant JHA agencies, and eu-LISA's management and teams have more information on the use and functioning of the application (SIS II, VIS/BMS, Eurodac, etc.) through an easy interface. There is an efficient solution for quickly developing new reporting</p>	<p>solution. Number of reports produced. Time to implement new reports. Use of the remote capability to produce reports</p>	<p>time of entry into operation. A minimum of 5% increase in the number of reports produced with the tools. Response time of between 1 day and 2 months to implement a new report depending on the complexity of the report. At least 60% of stakeholders (MS, European Commission, eu-LISA) using the remote function facilities to produce reports</p>	<p>Statistics Central Repository</p>	
--	--	--	---	--	---	---	--	--------------------------------------	--

69 Provided centrally using a web browser application in the usual client-server mode



2.4.1.31. Entry/Exit System implementation⁷⁰

MAIN ACTIONS OR TASKS: On 6 April 2016, the European Commission submitted a revised proposal for a Smart Borders package. It included a proposal for a Regulation establishing an Entry/Exit System as well as a proposal for revising the Schengen Borders Code. According to European Commission document MEMO/16/1495, the adoption of the proposals by the co-legislators should be finalised by the end of 2016 in order for the Entry/Exit System to be operational by early 2020, after the required 3 years for the implementation of the system. eu-LISA will start the procurement activities for the implementation of the new system as soon as the legal basis is approved. The implementation of the new system will include the setup of an EES central system, a Biometric Information System, a National Uniform Interface, a Secure Communication Channel between the EES central system and the VIS central system, and a communication infrastructure between the central system and the National Uniform Interfaces. In addition, a web service for travellers and carriers and a central data repository for reporting and statistics will also need to be set up. In order to establish interoperability between the EES and the VIS, the Secure Communication Channel between the EES central system and the VIS central system referred to above will be implemented, as well as the necessary adaptations in order to share some hardware and software components of the EES communication infrastructure with the communication infrastructure of the VIS.

VALUE ADDED: The establishment of a European Entry/Exit System is considered necessary to address the following challenges:

- improving quality and efficiency of border checks for third country nationals and helping Member States to deal with increasing traveller flows, without necessarily increasing the number of border guards;
- ensuring systematic and reliable identification of 'overstayers';
- reinforcing internal security and the fight against terrorism and serious crime.

⁷⁰ Subject to adoption of the legal base.

MAIN CHALLENGES: The deadline represents a risk, associated with a possible delay in the legal proposal approval process and implementing decision. Parallelism between procurement and recruitment processes is difficult to manage with existing resources. Providing these services via a secure internet channel will bring new challenges to eu-LISA in terms of operations, security and user support.

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
Increase the added value of the data and technology to Member States	Entry/Exit System delivered on schedule provided the relevant legislative instrument is adopted	Development and implementation of new/additional systems, if so provided by relevant legislative instruments	EES central system enters into operation by the target date	To design and implement the central system, the communication infrastructure, the national uniform interface, the Secure Communication Channel between the EES central system and the VIS central system, the web service and the central data repository	The Member States are supported in achieving smarter and more efficient border management	Adherence to the required project scope, budget and time	Project delivered within the planned scope, budget and timeframe	Weekly project dashboards, intermediate project reports and end of project report	AMMU

2.4.1.32. Development of ETIAS

MAIN ACTIONS OR TASKS: For 2018, the main tasks are to initiate the project for implementation of ETIAS, to start the tender procedure(s) and to recruit staff for the needs of the ETIAS project.

VALUE ADDED: Ensuring the proper implementation of the project.

MAIN CHALLENGES: Availability of sufficient resources for the task.

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
Increase the added value of the data and technology to Member States	Other new/additional systems to be implemented if required by relevant legislative instruments	Development and implementation of new/additional systems, if so provided by relevant legislative instruments	ETIAS central system enters into operation by legal deadline at the end of the project. For 2018, the specific outputs are: - project for implementation of ETIAS initiated - tender procedure(s) initiated - additional recruitment for the needs of the ETIAS project accomplished	To design and implement the central system, communication infrastructure, national uniform infrastructure and interoperability with other central systems	The Member States are supported in achieving more secure border management.	Start of the project. Compliance with agreed schedule	Start less than a month after adoption of the legal proposal. Less than 15% deviation between plan and outcome	Project documentation	AMMU

2.4.1.33. Development of new system for the Dublin Allocation Mechanism follow-up⁷¹

MAIN ACTIONS OR TASKS: Requirements analysis, project activities, design, implementation tests, financial and vendor management.

VALUE ADDED: New system in operations as per new legal framework (Dublin reform).

MAIN CHALLENGES: Implementing in due time, budget and resources, avoiding duplication of data.

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
Increase the added value of the data and technology to Member States	Other new/additional systems to be implemented if required by relevant legislative instruments	Development and implementation of new/additional systems, if so provided by relevant legislative instruments Provide new and improve existing services and solutions to meet stakeholder requirements	New system is used for the follow-up of the Dublin allocation mechanism (users: MS, European Commission, EASO)	To respond to the legal requirements for developing and operating a new system for the automated follow-up of the Dublin allocation mechanism (see Dublin reform)	New system is in operation	Adherence to the required project scope, budget and time	100% of acceptance test case scenarios passed successfully. Project within budget limits. Project within the agreed implementation time	Test reports. Project files and reports	AMMU

⁷¹ Subject to legislative amendments.

2.4.1.34. *ECRIS-TCN implementation*⁷²

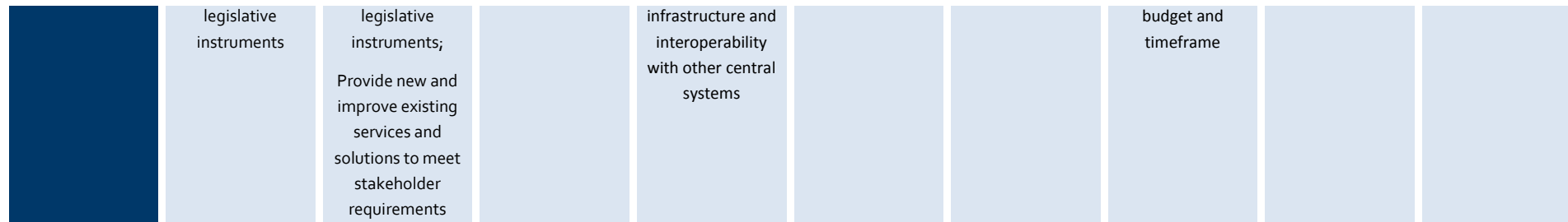
MAIN ACTIONS OR TASKS: On 29 June 2016, European Commission submitted a proposal for an ECRIS-TCN regulation. It includes a proposal for a Regulation establishing an ECRIS-TCN central system to be operational by 2020. Subject to the adoption of the legal base by the co-legislators, the Agency will have to initiate in 2018 the steps required for the procurement and development start-up phases.

VALUE ADDED: This centralised system will allow Member States' authorities to identify which other Member States hold criminal records on a given TCN, so that they can then use the existing ECRIS system to address requests for conviction information only to these Member States.

MAIN CHALLENGES: The implementation of the project strongly depends on the timely adoption of the legislation and the provision of the necessary resources. Assuming that the legal base will enter into force within 2017, in 2018 the project stage will be between the end of the procurement phase and the development start-up phase. During 2019, an external contractor will be responsible for the development of the central system, which will be carried out in synchronisation with National System implementation, under eu-LISA coordination. A critical success factor for the qualitatively and timely delivery will be establishment of a project management forum with national project managers chaired by eu-LISA, in order to anticipate and mitigate risks, to manage common issues promptly and to foster communication between projects.

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
Increase the added value of the data and technology to Member States	Other new/additional systems to be implemented if required by relevant	Develop and implement new/additional systems, if required by relevant	ECRIS-TCN central system enters into operation by the legal deadline	To design and implement the central system, communication infrastructure, national uniform	The MS achieve smarter and more secure border management	Adherence to the required project scope, budget and time	Project is delivered within the agreed tolerance of planned scope,	Weekly project dashboards and end of project report	AMMU

⁷² Subject to adoption of the legal base.



Security

2.4.1.35. Common shared infrastructure security implementation second phase⁷³

MAIN ACTIONS OR TASKS: The project envisages implementation of a common shared security infrastructure with four elements: (a) security event and information management, (b) technical vulnerability management, (c) privileged information management services and (d) the unified threat management service. This project (first step towards full virtualisation) covers the implementation of common shared security services in accordance with the common shared services study outcome. This project is a part of the common shared infrastructure (CSI). The FwC for CSI has been initiated and will be ready in early 2017.

VALUE ADDED: The activity harmonises central security controls at the core business systems level (for each system, in line with their respective establishing regulations); improves baseline protection against emerging security threats (in line with Article 29 of the establishing Regulation of the Agency, applying Commission Decision No 444/2015 for ensuring the security of classified information and the Commission security principles relating to the processing of non-classified sensitive information); enhances visibility of the Agency's security status with real-time information, quicker detection of and response to security incidents; and increases automation of security tasks, leading to more optimal use of resources.

⁷³ Phase 1 of this project will be delivered as a part of the common shared services project in 2017.

MAIN CHALLENGES: Prioritisation of resources to support the implementation.

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
Strengthen security, cyber security and information management capabilities	Ensure common Agency security standards	Strengthen and evolve the Agency's cyber security framework for its systems and communication networks; Continue progress towards compliance with relevant Information Security Management System standards; Maintain and evolve the Agency's security strategy	The scope of this project, split over 3 years, is to enhance and harmonise the security infrastructure of the core business systems as set out in eu-LISA's long-term technology strategy	To enhance and harmonise eu-LISA's security management infrastructure	Shared security services are implemented	Percentage of planned common shared security services implemented	60%	Accepted project deliverables	SEC

2.4.1.36. Implementation of an EU-Restricted information exchange system (continuation from 2017)

MAIN ACTIONS OR TASKS: To develop and implement a system for creating and exchanging EU-Restricted files that is capable of handling restricted information. It will be developed for the internal use of eu-LISA to exchange information with other agencies and the European Commission. The system will use the European Commission's system for exchange of secure information as guidance in order to ensure interoperability.

VALUE ADDED: The Agency will be able to exchange secure EU-R information in accordance with legal requirements.

MAIN CHALLENGES: Dependency on external implementation and readiness of the internal processes to meet the requirements of the system.

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
Strengthen security, cyber security and information management capabilities	Ensure common Agency security standards	Continue progress towards compliance with relevant Information Security Management System standards	EU-R information exchange system is implemented and security accredited	To enable the secure electronic handling and transmission of EU-R documents in the Agency	Agency personnel, property and information are protected by creating a safe, secure working environment	Conformity with the time schedule	Test of the system implemented by Q3. System accredited by Q4	Interim and annual activity reports	SEC

2.4.1.37. Implementing a secure, isolated web-browsing infrastructure on the corporate IT

MAIN ACTIONS OR TASKS: Design and implement a secure web-browsing infrastructure on the corporate IT.

VALUE ADDED: Reduction in the risk to the corporate IT endpoints and infrastructure from malware and drive-by attacks from websites visited by staff.

MAIN CHALLENGES: The activity depends on having sufficient resources available in the eu-LISA entities concerned.

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
Strengthen security, cyber security and information management capabilities	Ensure common Agency security standards	Strengthen and evolve the Agency's cyber security framework for its systems and	A secure web-browsing infrastructure is implemented on the corporate IT, which is isolated	To Implement a secure isolated web-browsing infrastructure on the corporate IT to minimise the	The risk to the corporate IT endpoints and infrastructure from malware and drive-by attacks	Project deliverables implemented	100%	Acceptance reports	SEC

	communication networks; Continued progress towards compliance with relevant Information Security Management System standards; Maintain and evolve the Agency's security strategy	from the underlying operating system layer on the corporate IT desktops and laptops	attack surface and the opportunities for attackers to manipulate human behaviour through their interaction with web browsers	from websites visited by staff is reduced					
--	--	---	--	---	--	--	--	--	--

2.4.2. Activities within the scope of Strategic Goal 2

Evolving as a centre of excellence

2.4.2.1. Introduction of advanced network statistics (continuation from 2017)

MAIN ACTIONS OR TASKS: The general objective of the activity is to increase eu-LISA's capabilities to supervise communication infrastructure and to coordinate network activities by selecting and implementing a commercial off-the-shelf solution measuring the real performance of the communication infrastructure up to the level of Internet Protocol flows. The solution will also allow proactive identification and elimination of the bottlenecks and faster issue and problem troubleshooting in communication infrastructure. The project envisages three stages:

- The study should analyse eu-LISA's needs in detail and should propose how to address these needs (done in 2017).
- The test phase should be used to validate the proposed solution on a limited scale on one part of the communication infrastructure. It starts in 2017 and is planned to

- be concluded in 2018.
- The implementation stage should cover the rollout of the validated solution throughout the communication infrastructure. This stage should start after the test phase in 2018 and should be concluded in 2019.

VALUE ADDED: Better fulfilment of eu-LISA’s legal obligations in the form of efficient supervision of the communication infrastructure. Smoother operation of the communication infrastructure and core business systems depending on it. More effective setup of the communication infrastructure and better alignment of the provided communication infrastructure services with the needs of the large-scale IT systems.

MAIN CHALLENGES: The project depends on a stable communication infrastructure environment, so the implementation part should be started only after the end of migration to TESTA-ng. The collection of the statistics shall be done in line with applicable policies, particularly in the area of data protection.

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
Develop and maintain an efficient and cost-effective governance and service model	Regular benchmarking exercises of organisation’s activities in place	Base Agency’s governance framework on industry standards for corporate governance of ICT and fully integrate performance reporting in Agency’s management structures	Communication infrastructure is supervised through the data collected independently on the Communication Infrastructure provider. Advanced network statistics tool is in place	To ensure implementation of the advanced network statistics system (first part) to allow eu-LISA to measure and evaluate real performance of the communication infrastructure used by all core business systems (to be achieved in 2019)	Efficiency of the communication infrastructure supervision increases. The information needed to make decisions based on the performance of the communication infrastructure is available	Delivery date of the test phase. Start date of the implementation	Test phase completed in due time and validating the recommended solution. Implementation started according to planned schedule	Project interim and final reports	OIU

2.4.2.2. Implementing of Advance Reporting mechanism for ITSM processes KPIs and SLAs/OLAs

MAIN ACTIONS OR TASKS: It will have two phases:

- study (analysis) to analyse the possible solutions and choose the most appropriate one;
- validation and implementation of the solution.

VALUE ADDED: More effective and efficient reporting solution for eu-LISA and the Member States (based on the standard SLA).

MAIN CHALLENGES: eu-LISA metrics to be defined, agreed and followed.

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
Develop and maintain an efficient and cost-effective governance and service model	SLAs agreed with MS monitored and reported	Develop the Agency's operational model towards compliance with industry standards for ITSM/ITIL	Advanced reporting solution is in place	In order to fully comply with industry standards for ITSM/ITIL, to enhance and upgrade the Agency's operational model and put in place the corresponding measurement. Hence, after defining the SLAs/OLAs (which specify mechanisms for performance monitoring and reporting to ensure that the	Based on already established clear definition of eu-LISA services' metrics and tree (Continuous Service Improvement outcome, planned for 2017), advanced reporting on process's KPIs and SLAs/OLAs will be implemented that will enable full measurement and evaluation (integrated and in real time) of all processes and	Percentage of the agreed KPIs that are measured by the solution. Increased customer satisfaction	Minimum of 80% of KPIs measure. Customer satisfaction increased by 10% or more	eu-LISA ITSM framework. Customer satisfaction surveys	OIU

				<p>service levels are met and maintained over the contract terms) and the processes' KPIs (which measure and control the efficiency and effectiveness of given processes), to implement an advanced reporting tool that will properly enable the measurement and evaluation of the Agency's processes and systems</p>	<p>system- /application-related activities</p>				
--	--	--	--	---	--	--	--	--	--

2.4.2.3. *Implementation of Maturity Model assessment*

MAIN ACTIONS OR TASKS: The project will mainly focus on the definition on the assessment as a method, with clear inputs and outputs, as well as on the assessment realisation model, establishing it as a regular annual task. The proper use of existing frameworks and/or standards will be considered, as well. The project will have two phases:

- study (analysis);
- validation and implementation.

VALUE ADDED: eu-LISA will be prepared for ISO 20 000 certification as an IT service provider, and the maturity level will be proven.

MAIN CHALLENGES: To have all the ITSM processes adopted by eu-LISA's management in place and effectively run.

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
Develop and maintain an efficient and cost-effective governance and service model	Annual assessment of the Agency's ITSM processes and service mode	Evolve the Agency's operational model towards compliance with industry standards for ITSM/ITIL	The Agency's operational model will be enhanced and evolved, with regular checks on its maturity and possible ways to improve further	Once all the internally agreed ITSM processes (in the scope of eu-LISA's ITSM project) are successfully implemented and have been running in live mode for a certain time, to assess and determine the degree of maturity of its implementation, putting this assessment in place as an annual check with a view to attaining best practices for ITSM, aiming for the Agency's strategic goal of becoming a centre of excellence	Preparation for ISO 20 000 certification as an IT service provider and eu-LISA's maturity level will be increased	Adherence to the required project scope, budget and time	Project delivered in the agreed scope, budget and timeframe	Project interim and final reports	OIU

2.4.2.4. Implementation of additional systems development life cycle⁷⁴

MAIN ACTIONS OR TASKS: Implement and roll out additional systems development life cycle suite modules.

VALUE ADDED: Reaching a service automation level sufficient to enable the Continuous Integration delivery model, which means improvement in:

- time: this will allow faster delivery of the most important improvements and fixes;
- quality: continuous delivery gives extra capacity that can be used to improve either speed or quality; the automation can ensure that the process is executed in the expected way, reducing risk of wrong planning or execution;
- cost: with automation of the release and control procedures, time and cost can be saved;
- control: one centralised software repository managed by eu-LISA will ensure tracking and process compliance.

MAIN CHALLENGES:

- The final scope will be influenced by the outcome of the study released at the end of 2016 and the progress of the Phase 1 implementation, which will be carried out in 2017.
- The MWO contract should be amended to take into consideration the new processes and centralised tools.
- A dedicated team should be set up and made responsible for tool maintenance and user application support.

Strategic objective 2015-2020	Projected outcome(s) at conclusion in 2020	Elements of strategic objective 2018-2020	Outputs of the activity	Objective of the activity	Outcome from activity/activities	Performance indicator	Target	Sources of verification	Unit
Develop and maintain an efficient and cost-	Annual assessment of the Agency's ITSM	Evolve the Agency's operational model	Additional systems development life	To reduce risk from the lack of resources and	The final solution should guarantee the cross-tool	Adherence to the required project	Project delivered within the planned scope,	Weekly project dashboards and	AMMU

⁷⁴ The systems development life cycle is a term used in systems engineering, information systems and software engineering to describe a process for planning, creating, testing and deploying an information system. The systems development life cycle concept applies to a range of hardware and software configurations, as a system can be composed of hardware only, software only or a combination of both.

effective governance and service model	processes and service model	towards compliance with industry standards for ITSM/ITIL; further develop the Agency's PMO	cycle modules are rolled out	tools for efficient and effective end-to-end systems life cycle management	visibility to ensure end-to-end compatibility, traceability and configuration control for each new requirement or change. The ultimate aim is to centralise the tools, and external contractors will have to use eu-LISA's repository and comply with the systems development life cycle process	scope, budget and time	budget and timeframe	end of project report	
--	-----------------------------	--	------------------------------	--	--	------------------------	----------------------	-----------------------	--

2.4.3. Activities within the scope of Strategic Goal 3

Not applicable. No operational projects for Strategic Goal 3 are planned in 2018

2.4.4. Activities within the scope of Strategic Goal 4

Not applicable. No operational projects for Strategic Goal 4 are planned in 2018

Annexes

Annex I: Resource allocation per activity 2018-2020

For the activities planned in 2018 for the execution of the tasks, 185.4 direct FTEs have been identified, while the staffing of the Agency on 31.12.2016 was 147 staff members (TAs, CAs and SNEs). In addition, indirect FTEs are also required to fulfil all tasks. Day-to day tasks that are not considered separate activities and are not listed below also consume human resources. The Agency uses external support under its framework contract, to cover the lack of internal resources.

For 2019 and 2020, the estimated numbers of FTEs necessary to carry out the activities of the Agency are respectively 261.5 and 274. To ensure that these FTEs will be available, the Agency has requested the Management Board to approve 45 additional CAs for insourcing of some of the external services provided at present. They cover increases of staff allocation in areas that were identified as understaffed by the evaluation of the Agency, where business continuity does not exist or where operational needs require additional staff allocation.

Note: The budgets below represents commitment appropriations only under Title 3.

Type of activity	Activities	FTEs 2018 ⁷⁵	Type of FTEs 2018	Budget justification	Reference	End of project	2018 budget	2019 budget	2020 budget
Administration and support expenditure	Providing legal advice to eu-LISA	1	Legal Officer	N/A	2.1	N/A			
Administration and support expenditure	Timely administrative support for the Management Board	0.8	Management Board Officer	N/A	2.1	N/A			

⁷⁵ This column indicates the FTEs existing at the time of drafting the PD 2018 and the additional staff included in the LFS for Eurodac, the EES (adopted establishment plan + 4 CA posts), ETIAS, the SIS II return and SIS borders. It does not include additional staff requested in Tables 6 and 7 in point 3.2.2, as they are subject to the approval of this document and 2018 budget.

Type of activity	Activities	FTEs 2018 <small>75</small>	Type of FTEs 2018	Budget justification	Reference	End of project	2018 budget	2019 budget	2020 budget
			Management Board Assistant						
Administration and support expenditure	Administration of the eu- LISA Library	0.05	Research and Development Officer	N/A	2.1	N/A			
Administration and support expenditure	Introduction of activity- based budgeting	0.3	Budget Officer	N/A	2.2.4.3	N/A			
Administration and support expenditure	Logistical and organisational operations for final occupation of the newly constructed headquarters building in Tallinn	1.9	Facilities Officer Logistics and Supplies Officer Missions Officer Administrative Support	N/A	2.2.4.6	N/A			
Administration and support expenditure	Logistical and organisational operations for final occupation of the newly constructed or refurbished buildings in Strasbourg	0.3	Logistics and Supplies Officer Administrative Support	N/A	2.2.4.5	N/A			
Administration and support expenditure	Establishment of corporate and other services in new Strasbourg building	1	Building and Infrastructure Officer	N/A	2.2.4.7	N/A			
Administration and support expenditure	Corporate applications enhancement	1	System Engineer Enterprise Architect	N/A	2.2.4.11	N/A			
Administration and support expenditure	Maintenance and development of corporate network architecture	0.5	Enterprise Architect	N/A	2.2.4.8	N/A			
Administration and support expenditure	Maintenance and development of system and storage architecture	1	System Engineer	N/A	2.2.4.9	N/A			
Administration and support expenditure	Development of corporate IT Infrastructure in the new HQ	1	IT Assistant	N/A	2.2.4.10	N/A			

Type of activity	Activities	FTEs 2018 <small>75</small>	Type of FTEs 2018	Budget justification	Reference	End of project	2018 budget	2019 budget	2020 budget
Administration and support expenditure	Further development of enterprise architecture	0.3	Enterprise Architect	N/A	2.2.4.12	N/A			
Administration and support expenditure	Partnerships with institutions, agencies and/or Member State authorities	1	Policy Officer	N/A	2.1	N/A			
Administration and support expenditure	Establishment of corporate and other services in the new HQ	1	Facility Officer Logistics and Supplies Officer Missions Officer	N/A	2.2.4.7	N/A			
Administration and support expenditure	Monitoring closely the notification of processing operations	0.2	Data Protection Officer	N/A	2.1	N/A			
Administration and support expenditure	Planning, drafting and adoption of PD	0.7	Strategy Planning Officer	N/A	2.1	N/A			
Administration and support expenditure	Drafting progress and annual activity reports including reporting of corporate KPIs	0.18	Strategy Planning Officer	N/A	2.1	N/A			
Administration and support expenditure	Implementation of corporate risk management process in 2018	0.26	Corporate Governance and Risk Management Officer	N/A	2.1	N/A			
Administration and support expenditure	Facilitation of internal control standards management 2018	0.26	Corporate Governance and Risk Management Officer	N/A	2.1	N/A			
Administration and support expenditure	Facilitation of Implementation of quality measures as outcomes of quality management exercise completed in 2017	0.26	Corporate Governance and Risk Management Officer	N/A	2.1	N/A			

Type of activity	Activities	FTEs 2018 <small>75</small>	Type of FTEs 2018	Budget justification	Reference	End of project	2018 budget	2019 budget	2020 budget
Administration and support expenditure	Increasing the Agency's planning capabilities	0.12	Strategy Planning Officer	N/A	2.2.4.2	N/A			
Administration and support expenditure	Policy analysis and facilitation of policy implementation	2.5	Policy Officer Liaison Officer SIRENE Policy Expert	N/A	2.1	N/A			
Administration and support expenditure	Drafting technical reports and aggregating statistics	1	Reporting and Statistics Officer	N/A	2.3.1.13	N/A			
Administration and support expenditure	Implementation of eu-LISA Internal Communication Action Plan	1.3	Internal Communication Assistant Communication and Information Officer	N/A	2.1	N/A			
Administration and support expenditure	Monitoring implementation of HR Strategy and Staff Retention Policy	0.4	HR Officer	N/A	2.2.4.13	N/A			
Administration and support expenditure	Consolidation of HR processes and services in the areas of recruitment, staff development, personnel administration and payroll	3.5	HR Officer HR Assistant in Strasbourg HR Assistant in Tallinn Staff Development and payroll Officer	N/A	2.1	N/A			
Administration and support expenditure	Implementation of Health and Safety Policy	0.4	HR Officer HR Assistant	N/A	2.2.4.14	N/A			
Administration and support expenditure	Contracting eu-LISA medical service	0.3	HR Officer HR Assistant	N/A	2.2.4.15	N/A			
Administration and support expenditure	Drafting the Annual Work Report 2017	0.1	Data Protection Officer	N/A	2.1	N/A			
Administration and support expenditure	Data protection awareness	0.1	Data Protection Officer	N/A	2.1	N/A			
Administration and support expenditure	Implementation of the annual internal audit plan	1	Internal Auditor	N/A	2.1	N/A			

Type of activity	Activities	FTEs 2018 <small>75</small>	Type of FTEs 2018	Budget justification	Reference	End of project	2018 budget	2019 budget	2020 budget
Administration and support expenditure	Annual Data Protection Survey	0.2	Data Protection Officer	N/A	2.2.1.4	N/A			
Administration and support expenditure	Sharing services on data protection with other relevant agencies	0.1	Data Protection Officer	N/A	2.2.3.1	N/A			
Administration and support expenditure	Execution of the Procurement and Acquisition Plan	4	Procurement Officer	N/A	2.1	N/A			
Administration and support expenditure	Timely delivery of services related to budgetary, procurement and financial management	7.7	Procurement Officer Budget Officer Finance Officer Financial Assistants Asset Management Assistant	N/A	2.1	N/A			
Administration and support expenditure	Maintaining the accounts of the Agency	1	Accounting Officer	N/A	2.1	N/A			
Administration and support expenditure	Implementation of the External Communication Action Plan	1.7	Communication Assistant Communication and Information Officer	N/A	2.1	N/A			
Administration and support expenditure	Learning and development	0.6	Learning and Development Officer	N/A	2.1	N/A			
Administration and support expenditure	HR IT tools developed and implemented in production (Allegro, Sysper II and/or dedicated application for time management)	0.4	HR Assistant	N/A	2.2.4.16	N/A			

Type of activity	Activities	FTEs 2018 75	Type of FTEs 2018	Budget justification	Reference	End of project	2018 budget	2019 budget	2020 budget
Administration and support expenditure	Translation of outcomes of Governance Model Review into refinement proposals	0.22	Corporate Governance and Risk Management Officer	N/A	2.2.4.1	N/A			
Administration and support expenditure	Planning, coordination and participation of the Agency as an observer in the Schengen Evaluation missions	1.1	Security Officer Service Manager Helpdesk Operator Test Engineer Project Managers Customer Relationship Officer Policy Officers	N/A	2.3.3.1	N/A			
Entry/Exit System	Entry/Exit System implementation	18	Programme Manager Project Manager Project and Technical Quality Assurance Test Manager Application Administrator Application Architect Database Engineer/Service-Oriented Architecture-Middleware Specialist Business Analyst/Solution Architect System Administrator Information Security Officer Finance Officer	The budget is intended for development and project management, software and hardware supply, administration, network development, meetings and training	2.4.1.31	2020	57,513,000	144,326,000	21,606,000

Type of activity	Activities	FTEs 2018 75	Type of FTEs 2018	Budget justification	Reference	End of project	2018 budget	2019 budget	2020 budget
			Procurement Officer Finance/Budget Officer/Assistant Test Engineers						
ETIAS	Development of ETIAS	17	Programme/Project Manager Quality Assurance Contract Manager Technical Experts Test Engineer Helpdesk Support	The budget is intended for development and project management, software and hardware supply, administration, network development, meetings and training	2.4.1.32	2020	23,467,000	11,023,000	55,800,000
ECTIS-TCN	ECRIS-TCN implementation	pm	pm	pm	2.4.1.34	2020	pm	pm	pm
Eurodac maintenance	Eurodac maintenance	3.5	Operators Application Administrators Service Manager Process Manager Project Manager	The budget is required for corrective and adaptive maintenance	2.3.1.8	N/A	1,500,000	1,500,000	1,500,000
Eurodac evolutions	Eurodac integration with shared service architecture standards	0.5	System Administrator Application Administrator Security Officer	The budget covers expenditure on services and hardware	2.4.1.23	2019	500,000		
Eurodac evolutions	Study/Impact Assessment for splitting the underlying biometric matching services from	0.6	Project Manager Application Administrator	The budget covers the execution of a study,	2.4.1.25	2019	250,000		

Type of activity	Activities	FTEs 2018 <small>75</small>	Type of FTEs 2018	Budget justification	Reference	End of project	2018 budget	2019 budget	2020 budget
	the front-end/business layers in Eurodac								
Eurodac evolutions	Others 2019-2020	TBD				N/A		1,325,000	1,325,000
General security activities	Maintaining and improving the security policy framework and delivering reports	2.2	Security Officer	N/A	2.1	N/A			
General security activities	Develop, plan and operate the protective elements of security and continuity management	1.5	Security Officer Business Continuity Officer	N/A	2.1	N/A			
General security activities	Implementation of an enterprise IT solution for managing eu-LISA personnel's personnel security clearance processes and the fulfilment of security requirements for the contractors	0.05	Security Officer	N/A	2.2.1.1	N/A			
General security activities	Physical security improvement in Tallinn	0.15	Security Officer	N/A	2.2.1.2	N/A			
General security activities	Physical security improvement in Strasbourg	0.1	Security Officer	N/A	2.2.1.3	N/A			
Meetings and missions directly related to core systems	Timely administrative support for the Advisory Groups	1.2	Management Board Officer Management Board Assistant	The resources are needed for organising 4 statutory meetings per AG (travel expenses, meals) and other expenses related to the activity of AG members covered in accordance with the eu-LISA Rules of Procedure and MB decisions. In addition, 12 meetings of AG EES are to be organised per year	2.1	N/A	340,000	340,000	340,000

Type of activity	Activities	FTEs 2018 <small>75</small>	Type of FTEs 2018	Budget justification	Reference	End of project	2018 budget	2019 budget	2020 budget
Other activities related to core business systems or network	Performing of Service Desk benchmarking	2	Project Manager Service Desk Operator	To supply benchmarking database information, software and consultancy	2.4.1.3	2018	45,000		
Other activities related to core business systems or network	Operate, manage and maintain the backup data centre and backup operational site in Sankt Johann im Pongau, Austria	0.4	BCU Data Centre Manager	To ensure uninterrupted and high-quality 24/7 level 1 operations/management of core business systems and the underlying infrastructure in case needed, this activity is required to enable the backup data centre to provide the possibility of covering 24/7 daily operations of IT Infrastructure of core business systems, including operational management, release and change management, incident and problem management and resolution, maintenance activities and facilitation of project execution	2.3.1.3	N/A	825,000	825,000	825,000
Other activities related to core business systems or network	Conducting a unified network test phase	1.1	Project Manager Network Administrator	The cost of the activity consists of: - hardware/software cost of the test phase environment; - implementation services; - validation of the proposed solution in a laboratory/pre-production environment	2.4.1.26	2019	490,000		
Other activities related to core business systems or network	Implementation of a virtualisation test phase	0.5	Project Manager	The budget will cover: - extension of the infrastructure; - migration of the application; - validation of the solution	2.4.1.18	2018	489,000		
Other activities related to core business systems or network	Core business systems integrated monitoring	7	Project Manager Service Desk Operators Network administrator	The budget will cover the purchase of: - hardware; - software; - licences; - maintenance and support; - consultancy; - visits, training	2.4.1.2	2019	1,000,000		

Type of activity	Activities	FTEs 2018 <small>75</small>	Type of FTEs 2018	Budget justification	Reference	End of project	2018 budget	2019 budget	2020 budget
Other activities related to core business systems or network	Conducting an automated data quality control study followed by a test	1.6	Project Manager Application Administrator Project Application Support	N/A	2.4.1.4	2018			
Other activities related to core business systems or network	Implementation of Maturity Model assessment	4	Project Manager Project Support Process Manager Process Owners OIU	The budget will be spent on additional consultancy about the maturity assessment solution and possibly on purchase of software	2.4.2.3	2018	100,000		
Other activities related to core business systems or network	Implementation of the second phase of shared services (continuation from 2017)	3	Project Manager Infrastructure Manager System Administrator Network Administrator	The activity is required to further harmonise eu-LISA's data centre infrastructure management and will include: - delivery of shared infrastructure (software integration); - delivery of shared storage (hardware); - maintenance activities for previously installed shared solutions	2.4.1.5	2020	3,646,950	4,500,000	2,200,000
Other activities related to core business systems or network	Data warehouse implementation to improve automated reporting and statistics generation Phase 2 (continuation from 2017)	2.45	Project Manager Application Administrators Customer Relationship Manager Test Engineer	The budget is necessary to supply the necessary hardware, software and licences for the reporting solution	2.4.1.30	2018	700,000		
Other activities related to core business systems or network	Conducting a study for implementing service-oriented architecture	1	Project Manager	The budget is necessary to supply licences for the project implementation	2.4.1.16	2018	50,000		
Other activities related to core business systems or network	Implementation of additional systems development life cycle	0.7	Project Manager Test Coordinator Team Coordination	The budget is necessary for the purchase of: - two additional virtual servers; - additional licences	2.4.2.4	2018	70,000		
Other activities related to core	Operational management of the systems' communication	3	Network Administrator	The budget is necessary for purchasing: - communication systems (VIS Mail, SIS II)	2.4.1.28	N/A	500,000	500,000	500,000

Type of activity	Activities	FTEs 2018 <small>75</small>	Type of FTEs 2018	Budget justification	Reference	End of project	2018 budget	2019 budget	2020 budget
business systems or network	infrastructure and related communication systems			Mail evolution); - hardware/software maintenance					
Other activities related to core business systems or network	Introduction of advanced network statistics (continuation from 2017)	1.1	Project Manager Network Engineer	The budget is for: - hardware purchase (probes, servers/appliances); - software licences (operating system/selected software licences); - integration services (pilot implementation, execution and conclusion, final solution implementation); - hardware/software maintenance (support costs for the implemented hardware and software elements)	2.4.2.1	2019	650,000		
Other activities related to core business systems or network	Evolution of common test tools	0.6	Test Engineer	The budget includes purchase of hardware, software, licences, implementation and training	2.4.1.17	2018	600,000		
Other activities related to core business systems or network	Implementing of Advance Reporting mechanism for ITSM processes KPIs and SLAs/OLAs	3	Service Desk Operators System Administrator Project Management	The budget is necessary for supply of hardware, software, licences, solution implementation and initial support	2.4.2.2	2018	150,000		
Other activities related to core business systems or network	Preparation for TESTA-ng second generation	0.55	Project Manager Network Administrator	N/A	2.4.1.27	2018			
Other activities related to core business systems or network	Level 2 management of the IT infrastructure of the core business systems	4	Service Desk Operators	N/A	2.3.1.10	N/A			

Type of activity	Activities	FTEs 2018 <small>75</small>	Type of FTEs 2018	Budget justification	Reference	End of project	2018 budget	2019 budget	2020 budget
Other activities related to core business systems or network	Regular operational management of the communication infrastructure contracts (budget execution, acquisition, renewal, contract management)	pm	pm	pm	2.3.1.11	N/A	pm	pm	pm
Other activities related to core business systems or network	Handover of the activities related to implementation of the budget, acquisition, renewal and contractual matters of the VIS and SIS II communication infrastructure	pm	pm	pm	2.4.1.29	pm	pm	pm	pm
Other activities related to core business systems or network	Ensure uninterrupted and high-quality operations of the core business systems	8	Helpdesk Operators	N/A	2.3.1.2	N/A			
Other activities related to core business systems or network	Develop reference Technical Tender Specifications for Calls for Tenders of Large Scale IT Systems	1.25	Project Manager System Administrator Network Administrator Infrastructure Officer/Manager Process Manager	N/A	2.4.1.1	2018			
Other activities related to core business systems or network	Conducting a study on virtual desktops for administrators	0.5	Project Manager	N/A	2.4.1.4	2018			
Other activities related to core business systems or network	Centralise Oracle licensing	0.2	Project Manager Technical Expert	N/A	2.4.1.6	N/A			

Type of activity	Activities	FTEs 2018 <small>75</small>	Type of FTEs 2018	Budget justification	Reference	End of project	2018 budget	2019 budget	2020 budget
Other activities related to core business systems or network	Provide privacy-by-design guidance	0.2	Data Protection Officer	N/A	2.2.1.5	N/A			
Other activities related to core business systems or network	Support the Agency with the EDPS inspections	0.1	Data Protection Officer	N/A	2.1	N/A			
Security activities related to core business systems and network	Common shared infrastructure security implementation second phase	0.5	Security Officer	For activity 'Common shared infrastructure security implementation second phase', the cost are necessary to cover the following (including service setup costs and annual running costs): - SIEM Phase 2 - technical vulnerability management - compliance verification management - privileged identity management	2.4.1.35	2019	3,700,000	527,000	
Security activities related to core business systems and network	Operate, plan and develop the information security elements of the Security and Continuity Management System	2.4	Security Officer	The budget is necessary for licence renewals for security software	2.1	N/A	30,000		
Security activities related to core business systems and network	Operate, plan and develop the business continuity/disaster recovery/emergency response parts of the Security and Continuity Management System	1.2	Security Officers	The budget is for: - external consultancy cost; - organising the BC and security exercise for SIS II; - awareness and other activities	2.1	N/A	200,000		
Security activities related to core business systems and network	Others 2019-2020					N/A		1,000,000	1,500,000

Type of activity	Activities	FTEs 2018 <small>75</small>	Type of FTEs 2018	Budget justification	Reference	End of project	2018 budget	2019 budget	2020 budget
Security activities related to core business systems and network	Implementing a secure, isolated web browsing infrastructure on the corporate IT	0.3	Security Officer	N/A	2.4.1.37	2018			
Security activities related to core business systems and network	Implementation of an EU-Restricted information exchange system (continuation from 2017)	0.2	Security Officer	N/A	2.4.1.36	2018			
SIS II evolutions	Support for MS (SIS II)	3	Test Manager	The budget is needed to support the testing of new versions of National Systems connecting to the SIS II central system	2.3.1.7	N/A	450,000	450,000	450,000
SIS II evolutions	SIS II evolutions	1.5	Project Manager Application Administrator IT Specialist	The budget is necessary for consultancy, software development and implementation services	2.4.1.20	2020	2,385,000	2,500,000	2,500,000
SIS II evolutions	SIS II AFIS consolidation and preparation for implementation of Phase 2	2.5	Project Manager Business Specialist IT Expert Application Administrators Test Manager Release Manager	Adding new SIS II AFIS features will need additional specialised biometric software and additional resources for implementation	2.4.1.19	2020	7,540,000	7,440,000	
SIS II evolutions	AFIS maintenance (execution from 2019 on)	TBD		The amount is necessary to pay for corrective and adaptive maintenance service packages		N/A		3,350,000	3,350,000
SIS II evolutions	OTHERs 2019-2020					N/A			
SIS II maintenance	SIS II maintenance	4	Application Manager Project Manager Technical Release Coordinator Application Administrator Business Analyst Test Engineer	The amount is necessary to pay for corrective and adaptive maintenance service packages	2.3.1.5	N/A	6,000,000	6,000,000	6,000,000

Type of activity	Activities	FTEs 2018 <small>75</small>	Type of FTEs 2018	Budget justification	Reference	End of project	2018 budget	2019 budget	2020 budget
SIS II maintenance	Operational management of SIS II (transition for the new SIS II MWO, continuation from 2017)	1	Application Manager Project Manager	N/A	2.3.1.6	N/A			
Activities subject to adoption of new legal basis	SIS II recast	3	IT Expert	The budget is based on preliminary estimates	2.4.1.21	TBD	12,893,000	2,051,000	1,982,000
Activities subject to adoption of new legal basis	SIS II Return Decision	1.5	IT Expert	The budget is based on preliminary estimates	2.4.1.22	TBD	2,520,000	447,000	447,000
Activities subject to adoption of new legal basis	DubliNet operational management	0.5	Application Manager Operators Application Administrator	The budget will be necessary for operational management, and renewal of certificates	2.3.1.12	N/A	200,000		
Activities subject to adoption of new legal basis	Development of new system for the Dublin Allocation Mechanism follow-up	2.1	Application Manager Project Manager Application Administrator	The budget is necessary to cover the costs of hardware, system infrastructure, licences and software development to cover the new functionalities	2.4.1.33	2020	983,000	135,000	735,000
Activities subject to adoption of new legal basis	Eurodac reform – functional changes and capacity upgrade	2.5	Application Administrator Project Manager	The budget is necessary to cover software changes (functional update) and infrastructure update and licences (programmable matching accelerator boards, storage, network equipment, etc.)	2.4.1.24	2020	11,670,000	5,600,000	
Technology monitoring expenditure	Implementation of Research and Technology Monitoring Roadmap	0.95	Research and Development Officer	N/A	2.3.2.1	N/A			
Training directly related to operations	Training eu-LISA staff related to operations	0.4	Learning and Development Officer	The budget for the activity will cover the cost of organising training, including hiring external trainers, equipment, facilities, etc.	2.3.4.1	N/A	300,000	300,000	300,000

Type of activity	Activities	FTEs 2018 <small>75</small>	Type of FTEs 2018	Budget justification	Reference	End of project	2018 budget	2019 budget	2020 budget
Training directly related to operations	Providing training to the MS on the technical use of the systems	1.5	Training Coordinator for the MS SIRENE Policy Expert	Covering of all logistical and training content preparation and delivery costs	2.3.1.14	N/A	450,000	450,000	450,000
VIS/BMS evolutions	BMS 1.0 decommissioning	0.5	Project Manager System Administrator	EUR 133,000 under MWO II – based on MWO/RFS040/IAR040i – BMS 1.0 decommissioning	2.4.1.9	2018	133,000		
VIS/BMS evolutions	USK renewal	2	Project Manager Project Assistant IT Assistant	N/A	2.4.1.13	Start date + 24 months	pm		
VIS/BMS evolutions	Others 2019-2020			N/A				8,762,000	15,640,000
VIS/BMS evolutions	BMS database increase (continuation from 2017)	3.1	Project Manager System Administrator Application Administrator Test Engineer Database Administrator Security Officer	N/A	2.4.1.8	2019			
VIS/BMS evolutions	VIS database increase from 60 million to 100 million entries (continuation)	2.05	Project Manager Data Centre Manager System Administrator Application Manager Security Officer Network Administrator Test Engineer Technical Release Coordinator Business Analyst	N/A	2.4.1.14	2018			

Type of activity	Activities	FTEs 2018 <small>75</small>	Type of FTEs 2018	Budget justification	Reference	End of project	2018 budget	2019 budget	2020 budget
			Database Administrator						
VIS/BMS evolutions	Implementation of VIS/BMS end-to-end testing platform (continuation from 2017)	2.1	Project Manager System Administrator Application Administrator Test Coordinator Test Engineer Data Centre Manager Network Administrator Security Officer Database Administrator	N/A	2.4.1.10	2019			
VIS/BMS evolutions	Reinforcement of the VIS/BMS testing infrastructure (continuation)	2	Project Manager Test Engineer System Administrator Network Administrator Security Officer	N/A	2.4.1.15	2018			
VIS/BMS evolutions	Tuning of BMS transactional throughput (continuation from 2017)	1.6	Project Manager System Administrator Application Administrator Test Engineer Application Manager Business Analyst Database	N/A	2.4.1.12	2018			

Type of activity	Activities	FTEs 2018 <small>75</small>	Type of FTEs 2018	Budget justification	Reference	End of project	2018 budget	2019 budget	2020 budget
			Administrator Security Officer						
VIS/BMS evolutions	Tuning of VIS transactional throughput (continuation from 2017)	1.6	Project Manager System Administrator Application Administrator Test Engineer Application Manager Business Analyst Database Administrator Security Officer	N/A	2.4.1.11	2018			
VIS/BMS maintenance	VIS maintenance	5.1	Application Manager Project Manager Technical Release Coordinator Application Administrator Business Analyst Business Relationship Manager Test Engineer	The budget for the activity includes adaptive, corrective, perfective and preventive maintenance sets for the VIS application, infrastructure and programme management services	2.3.1.1	N/A	9,700,000	10,169,000	11,981,000

Type of activity	Activities	FTEs 2018 <small>75</small>	Type of FTEs 2018	Budget justification	Reference	End of project	2018 budget	2019 budget	2020 budget
VIS/BMS maintenance	BMS maintenance	4.5	Application Manager Project Manager Technical Release Coordinator Application Administrator Business Analyst Test engineer	The budget for the activity includes adaptive, corrective, perfective and preventive maintenance sets for the VIS application, infrastructure and programme management services	2.3.1.4	N/A	9,700,000	10,169,000	11,981,000
VIS/BMS maintenance	VIS Mail maintenance	0.1	Customer Relationship Project Manager	The budget for the activity includes adaptive, corrective, perfective and preventive maintenance sets for the VIS Mail application	2.3.1.9	N/A	120,000	120,000	pm

Annex II: Human and financial resources 2018-2020

Table 1 – Expenditure

Annex II: Table 1: Expenditure

Expenditure	2017		2018*	
	Commitment appropriations	Payment appropriations	Commitment appropriations	Payment appropriations
Title 1	16,133,700	16,133,700	20,388,000	20,388,000
Title 2	8,382,400	8,382,400	13,033,550	13,033,550
Title 3	131,285,718	131,285,718	170,775,369	138,055,369
Total expenditure	155,801,818	155,801,818	204,196,919	171,476,919

* Additional appropriations for ECRIS and revised ER – additional tasks (unknown when the draft budget 2018 was prepared in January 2017) amounting to EUR 30 million will be added to eu-LISA's Financial Statement upon adoption of the legal basis. For details, see Annex II – Table 3 – Overview of Revenue and Expenditures.

Annex II: Table 1: Expenditure

EXPENDITURE	Commitment appropriations						
	Executed budget 2016	Budget 2017	Draft budget 2018*		VAR 2018/2017	Envisaged in 2019*	Envisaged in 2020*
			Agency request	Budget forecast			
Title 1							
Staff Expenditure	14,199,322	16,133,700	20,388,000		126.37%	18,433,000	22,292,000
11 Salaries and allowances	12,630,633	14,633,210	18,468,300		126.21%	16,592,700	19,976,600
- of which establishment plan posts	11,056,029	12,512,810	14,681,200		117.33%	13,753,200	15,869,500
- of which external personnel	1,574,604	2,120,400	3,787,100		178.60%	2,839,500	4,107,100
12 Expenditure relating to staff recruitment	77,386	122,250	321,100		262.66%	132,700	159,600
13 Mission expenses	410,628	330,000	388,700		117.79%	426,000	546,900
14 Socio-medical infrastructure	697,152	602,740	717,100		118.97%	761,600	969,600
15 Training	383,523	445,500	492,800		110.62%	520,000	639,300
16 External services							
17 Receptions and events							
Social welfare							
Other staff-related expenditure							

Title 2							
Infrastructure and operating expenditure	7,898,066	8,382,400	13,033,550		155.49%	10,695,000	10,695,000
20 Rental of buildings and associated costs	1,125,165	1,412,500	1,425,000		100.88%	1,732,000	1,732,000
21 Information and communication technology	1,518,037	1,500,000	1,500,000		100.00%	1,837,000	1,837,000
22 Movable property and associated costs	36,134	420,000	1,220,000		290.48%	495,000	495,000
23 Current administrative expenditure	490,805	345,000	775,000		224.64%	475,000	475,000
24 Postage/telecommunications	22,000	30,000	30,000		100.00%	36,000	36,000
25 Meeting expenses	151,004	491,900	543,700		110.53%	608,000	608,000
26 Information and publications	522,058	1,233,000	1,428,000		115.82%	1,533,000	1,533,000
27 External support services	3,105,447	1,650,000	3,376,850		204.66%	2,221,000	2,221,000
28 Security	927,417	1,300,000	2,735,000		210.38%	1,758,000	1,758,000
Title 3							
Operational expenditure	58,293,682	131,285,718	170,775,369		130.08%	227,499,000	145,112,000
Shared system infrastructure	7,005,327	8,701,300	13,245,950		152.23%	7,352,000	5,025,000
SIS II	13,451,408	7,174,428	32,404,669		451.67%	22,238,000	14,729,000
VIS	31,199,690	36,258,733	22,111,306		60.98%	29,220,000	39,602,000
EDAC	1,509,478	19,934,457	15,558,944		78.05%	8,560,000	3,560,000
Entry/Exit System		54,520,000	57,513,000		105.49%	144,326,000	21,606,000
ETIAS			23,467,000			11,023,000	55,800,000

External support services related to core systems	2,936,597	3,518,800	5,384,500		153.02%		
Meeting and missions related to core services	305,605	428,000	340,000		79.44%	4,600,000	4,600,000
Training related to operations	739,948	750,000	750,000		100.00%		
New systems	1,145,630						
TOTAL EXPENDITURE	80,391,070	155,801,818	204,196,919		131.06%	256,448,000	177,910,000

* Additional appropriations for ECRIS and revised ER – additional tasks (unknown when the draft budget 2018 was prepared in January 2017) amounting to EUR 30 million will be added to eu-LISA's Financial Statement upon adoption of the legal basis. For details, see Annex II – Table 3 – Overview of Revenue and Expenditures.

Table 2 – Revenue

Annex II: Table 2: Revenue

Revenues	2017	2018*
	Revenues estimated by the agency	Budget forecast
EU contribution	153,334,200	167,946,000
Other revenue	2,467,618	3,530,919
Total revenues	155,801,818	171,476,919

* Additional appropriations for ECRIS and revised ER – additional tasks (unknown when the draft budget 2018 was prepared in January 2017) amounting to EUR 30 million will be added to eu-LISA's Financial Statement upon adoption of the legal basis. For details, see Annex II – Table 3 – Overview of Revenue and Expenditures.

Annex II: Table 2: Revenue

REVENUES	2016	2017	2018*		VAR 2019/2 018	Envisaged 2019*	Envisaged 2020*
	Executed budget	Revenues estimated by the agency	As requested by the agency	Budget forecast			
1 REVENUE FROM FEES AND CHARGES							
2. EU CONTRIBUTION	94,083,000	153,334,200	167,946,000		136%	228,361,000	182,926,000
of which administrative (Title 1 and Title 2)							
of which operational (Title 3)							
of which assigned revenues deriving from previous years' surpluses							
3 THIRD COUNTRIES CONTRIBUTION (incl. EFTA and candidate countries)	2,291,582	2,467,618	3,530,919				
of which EFTA	2,291,582	2,467,618	3,530,919				
of which candidate countries							
4 OTHER CONTRIBUTIONS	149,591						
of which delegation agreement, ad hoc grants	21,723						
5 ADMINISTRATIVE OPERATIONS							
6 REVENUES FROM SERVICES RENDERED AGAINST PAYMENT							
7 CORRECTION OF BUDGETARY IMBALANCES							
TOTAL REVENUES	96,524,173	155,801,818	171,476,919		136%	228,361,000	182,926,000

* Additional appropriations for ECRIS and revised ER – additional tasks (unknown when the draft budget 2018 was prepared in January 2017) amounting to EUR 30 million will be added to eu-LISA’s Financial Statement upon adoption of the legal basis. For details, see Annex II – Table 3 – Overview of Revenue and Expenditures.

Table 3 – Overview of revenue and expenditures

Table 3 – Overview of revenue and expenditures (EUR)

		2017		2018		2019		2020		
		Commitment appropriations	Payment appropriations	Commitment appropriations	Payment appropriations	Commitment appropriations	Payment appropriations	Commitment appropriations	Payment appropriations	
Title 1 Staff expenditure	eu-LISA estimates	13,989,700	13,989,700	16,326,000	16,326,000	14,196,000	14,196,000	14,839,000	14,839,000	
	Subject to new legal basis	LFS EES development	1,876,000	1,876,000	1,876,000	1,876,000	1,876,000	1,876,000	4,221,000	4,221,000
		LFS Eurodac	268,000	268,000	268,000	268,000	268,000	268,000	268,000	268,000
		LFS Dublin allocation								
		LFS SIS II recast border/police cooperation			210,000	210,000	210,000	210,000	210,000	210,000
		LFS SIS II recast return			70,000	70,000	70,000	70,000	70,000	70,000
		LFS ETIAS			1,638,000	1,638,000	1,813,000	1,813,000	2,684,000	2,684,000
	Total Title 1	16,133,700	16,133,700	20,388,000	20,388,000	18,433,000	18,433,000	22,292,000	22,292,000	
Title 2 Infrastructure and operating expenditure	eu-LISA estimates	8,332,400	8,332,400	11,375,550	11,375,550	9,300,000	9,300,000	9,300,000	9,300,000	
	Subject to new legal basis	LFS EES development	50,000	50,000						
		LFS ETIAS			1,658,000	1,658,000	1,395,000	1,395,000	1,395,000	1,395,000
	Total Title 2	8,382,400	8,382,400	13,033,550	13,033,550	10,695,000	10,695,000	10,695,000	10,695,000	
eu-LISA estimates		63,686,718	63,686,718	61,529,369	61,529,369	63,737,000	63,737,000	64,352,000	64,352,000	

eu-LISA PUBLIC

204 — EU-LISA PROGRAMMING DOCUMENT 2018-2020

Title 3 Operational expenditure	Subject to new legal basis	LFS EES development	54,519,000	38,149,000	57,513,000	40,259,000	144,326,000	101,028,000	21,606,000	15,124,000
		LFS Eurodac	11,330,000	7,931,000	11,870,000	8,309,000	5,600,000	3,920,000		8,640,000
		LFS Dublin allocation	1,750,000	1,750,000	983,000	983,000	135,000	135,000	735,000	735,000
		LFS SIS II recast border/police cooperation			12,893,000	2,500,000	2,051,000	7,893,000	1,982,000	4,651,000
		LFS SIS II recast return			2,520,000	1,008,000	447,000	1,959,000	447,000	447,000
		LFS ETIAS			23,467,000	23,467,000	11,023,000	11,023,000	55,800,000	55,800,000
		Total Title 3		131,285,718	111,516,718	170,775,369	138,055,369	227,319,000	189,695,000	144,922,000
TOTAL EXPENDITURE	eu-LISA estimates	86,008,818	86,008,818	89,230,919	89,230,919	87,233,000	87,233,000	88,491,000	88,491,000	
	<i>Additional payment appropriation to equalise with commitment appropriations</i>		19,769,000							
	Subject to new legal basis	LFS EES development	56,445,000	40,075,000	59,389,000	42,135,000	146,202,000	102,904,000	25,827,000	19,345,000
		LFS Eurodac	11,598,000	8,199,000	12,138,000	8,577,000	5,868,000	4,188,000	268,000	8,908,000
		LFS Dublin allocation	1,750,000	1,750,000	983,000	983,000	135,000	135,000	735,000	735,000
		LFS SIS II recast border/police cooperation			13,103,000	2,710,000	2,261,000	8,103,000	2,192,000	4,861,000
		LFS SIS II recast return			2,590,000	1,078,000	517,000	2,029,000	517,000	517,000
		LFS ETIAS			26,763,000	26,763,000	14,231,000	14,231,000	59,879,000	59,879,000
Total expenditure		155,801,818	155,801,818	204,196,919	171,476,919	256,447,000	218,823,000	177,909,000	182,736,000	
Additional tasks (unknown when the draft budget 2018 was prepared in January 2017) to be included in	LFS ECRIS			4,029,000	4,029,000	4,116,000	4,116,000	4,116,000	4,116,000	
	LFS revised ER –			2,902,000	2,902,000	3,178,000	3,178,000	3,454,000	3,454,000	

eu-LISA Financial Statement upon adoption of the legal basis	additional staff revision								
	LFS revised ER – Insourcing of CAs			-281,000	-281,000	-281,000	-281,000	-281,000	-281,000
	LFS revised ER – transfer of network			19,221,000	19,221,000	19,221,000	19,221,000	19,221,000	19,221,000
	LFS revised ER – studies/consultancy			4,000,000	4,000,000	4,000,000	4,000,000	4,000,000	4,000,000
Total expenditure				29,871,000	29,871,000	30,234,000	30,234,000	30,510,000	30,510,000

Table 4 – Budget outturn and cancellation of appropriations

Annex II: Table 3: Budget outturn and cancellation of appropriations (EUR)

Budget outturn	2014	2015	2016
Revenue actually received (+)	57,192,206	71,256,223	96,524,173
Payments made (-)	-48,890,014	-59,374,948	-74,526,778
Carry-over of appropriations (-)	-15,462,805	-22,002,810	-8,462,207
Cancellation of appropriations carried over (+)	1,690,194	10,690,034	474,015
Adjustment for carry-over of assigned revenue appropriations from previous year (+)	875		2,460,299
Exchange rate differences (+/-)	-1,561	-820	-206
Adjustment for negative balance from previous year (-)	-2,748,755	-8,219,860	-7,652,181
Total	-8,219,860	-7,652,181	8,817,115

Annex III:

The planning of human resources during the term of this multiannual programme, 2018-2020, takes into account the situation in 2016-2017 and the staffing plans for 2018-2020.

Table 1 below presents the number of staff split by category and function group. Out of the total number of 155 posts in 2016 (118 TA posts, 29 CA posts⁷⁶ and 8 SNE posts), at the end of the year 3 TA posts became vacant, leaving a total of 115⁷⁷ establishment plan posts being occupied on 31.12.2016. Recruitment to fill these vacancies has been initiated and will be completed in 2017. One of these vacant posts was blocked because of a staff cut due in 2017, namely one AST 3 post.

The table shows the increase in the total number of posts for the contract agents and the temporary agents due to the expected adoption of the legal base for the Entry/Exit System, ETIAS, SIS II returns and SIS II Borders as described in *Table 9 – Additional staff – summary of the planning for additional staff*. It also includes the 5% cut in posts for temporary agents.

The numbers presented in brackets show the short-term contract agent posts, which were created thanks to the budgetary savings in 2014 and 2015 and are fulfilling the purpose of addressing the urgent staffing needs related to the tasks performed or of replacing a staff member on a leave of long duration.

⁷⁶ The eu-LISA budget for 2016 reflects 12 CA posts being authorised. The additional 12 posts were authorised by the Management Board and the Executive Director during the course of 2015 and 2016 after the draft budget estimates were submitted for consultation.

⁷⁷ This includes one accepted job offer with a starting date in Q1 2017.

Table 1 – Staff population and its development: overview of all categories of staff

Staff population		Actually filled as of 31.12.2015	Authorised under EU budget 2016	Actually filled as of 31.12.2016	Authorised under EU budget for 2017	In draft budget for 2018	Envisaged in 2019	Envisaged in 2020
Officials	AD	0	0	0	0	0	0	0
	AST	0	0	0	0	0	0	0
	AST/SC	0	0	0	0	0	0	0
TAs	AD	73	74 ⁷⁸	72	88 ⁷⁹	112 ⁸⁰	115 ⁸¹	94+40.5 ⁸²
	AST	44	44 ⁸³	43	43 ⁸⁴	43 ⁸⁵	43	43

78 This figure includes a cut of 1 post in the context of 5% staff cuts over the period 2013-2017.

79 This figure includes a cut of 1 post in the context of 5% staff cuts over the period 2013-2017 and an increase of 13 posts for the EES and 2 posts for the Eurodac recast.

80 This figure includes a cut of 1 post in the context of 5% staff cuts over the period 2013-2017, 7 additional posts planned for ETIAS and 18 additional posts due to a change in the establishing Regulation expected in 2018.

81 This figure includes a cut of 1 post in the context of 5% staff cuts over the period 2013-2017, 7 additional posts planned for ETIAS and 21 additional posts due to a change in the establishing Regulation.

82 This figure includes a cut of 1 post in the context of 5% staff cuts over the period 2013-2017, 7 additional posts planned for ETIAS, 23 additional posts due to a change in the establishing Regulation and 17.5 additional posts planned for the operational phase of the EES (subject to the adoption of the 2020 budget).

83 This figure includes a cut of 1 post in the context of 5% staff cuts over the period 2013-2017.

84 This figure includes a cut of 1 post in the context of 5% staff cuts over the period 2013-2017, 1 post cut for the deployment pool and an increase of 1 post for the EES.

85 This figure includes a cut of 1 post in the context of 5% staff cuts over the period 2013-2017 and 1 additional post due to a change in the establishing Regulation expected in 2018.

	AST/SC	0	0	0	0	0	0	0
Total officials and TA		117	118	115	131	155	158	177.5

Staff population	Actually filled as of 31.12.2015	Authorised under EU budget 2016	Actually filled as of 31.12.2016	Authorised under EU budget for 2017	In draft budget for 2018	Envisaged in 2019	Envisaged in 2020
CA GF IV	8 (+3)	11 ⁸⁶ (+3)	18 ⁸⁷ (+5) ⁸⁸	27 ⁸⁹	78 ⁹⁰	77.5 ⁹¹	85 ⁹²

86 This figure represents 11 additional posts in comparison with 2015 (12 + 6 + 1 + 4 = 23): 6 posts for the Network Administrators, 1 post for the Corporate Business Continuity Specialist (approved by the decision of the MB of eu-LISA of 11.04.2015) and 4 posts for Eurodac that were allocated from 2016 by the decision of the Management Board of eu-LISA of 18.11.2015, based on document 2015-180. Posts in brackets represent posts created thanks to the budget savings (2 posts for Procurement Officers and 1 post for Administrative Officer created in 2015).

87 Includes 2 additional posts for the AFIS SIS II project (request following the decision of the MB of eu-LISA No 2016-024 on AFIS of 15.03.2016).

88 Includes 2 additional posts created in 2016 by ED decision No 45-2016 of 12.05.2016: for a System Engineer in the Corporate Services Sector and the Policy Officer in the Liaison Office of eu-LISA.

89 It is considered that any post that remains for longer than 2 years shall be funded not by savings in the budget but by budgetary appropriations.

90 Includes 27 posts approved for 2017, 14 additional posts for the PD 2018-2020, 19 additional posts (5 for ECRIS TCN, 10 for ETIAS and 4 for SIS II Borders and Returns) and 18 for insourcing intra muros.

91 Includes 27 posts approved for 2017, 14 additional posts for the PD 2018-2020, 16.5 additional posts (12.5 for ETIAS and 4 for SIS II Borders and Return) and 18 for insourcing intra muros.

92 Includes 27 posts approved for 2017, 14 additional posts for the PD 2018-2020, 24 additional posts (20 for ETIAS and 4 for SIS II Borders and Return) and 18 for insourcing intra muros.

CA GF III	1	1 (+1) ⁹³	1 (+2) ⁹⁴	3	31 ⁹⁵	37 ⁹⁶	42 ⁹⁷
CA GF II	0	0		0	2 ⁹⁸	2	2
CA GF I	0	0		0	0	0	
Total CA	12	12 (+4)	19 (+7)	30	111	116.5	129
SNE	5	8	6	9	11 ⁹⁹	11	11
Structural service providers ¹⁰⁰	0	0	0	0	0	0	0
TOTAL	134	138 (+4)	140 (+7)	170	277	285.5	317.5
External staff for occasional replacement	0			1			

⁹³ This figure includes in brackets 1 CA post for an HR Administrative Assistant that was created to replace a staff member on extended leave and support the work of the HRTU (personnel administration due to the increasing number of staff).

⁹⁴ Includes 1 additional post created in 2016 by ED decision No 45-2016 of 12.05.2016: for Assistant to the Head of the GCU in Tallinn.

⁹⁵ Includes 3 posts approved for 2017, 3 additional posts for the PD 2018-2020 objectives and 25 additional posts for insourcing intra muros.

⁹⁶ Includes 3 posts approved for 2017, 3 additional posts for the PD 2018-2020 objectives and 31 additional posts for insourcing intra muros (25 from 2018 and 6 subject to the further cost-benefit analysis).

⁹⁷ Includes 3 posts approved for 2017, 3 additional posts for the PD 2018-2020 objectives, 5 additional posts for ETIAS and 31 additional posts for insourcing intra muros (25 from 2018 and 6 subject to the further cost-benefit analysis).

⁹⁸ Includes 2 additional posts for insourcing intra muros.

⁹⁹ Includes 3 additional SNE posts for EES, Eurodac recast and AFIS.

¹⁰⁰ The structural and external service providers in 2016 are described in Annex IV point A (e).

Table 2 – Multiannual staff policy plan 2018-2020

The establishment plan outlines an indicative plan for 2018-2020, taking into account the establishment plan figures approved for 2016 and 2017.

In 2016, no changes to the establishment plan were requested with the use of the 10% flexibility rule.

Changes to the numbers in the given grades are due to the calculation of the posts for the purpose of reclassification of the staff members. Figures for 2019 and 2020 are indicative.

Category and grade	Establishment plan in EU Budget 2016		Filled as of 31/12/2016		Modifications in 2016 in application of flexibility rule		Establishment plan in voted EU Budget 2017		Modifications in 2017 in application of flexibility rule		Establishment plan in Draft EU Budget 2018 ¹⁰¹		Establishment plan 2019		Establishment plan 2020	
	Officials	TAs	Officials	TAs	Officials	TAs	Officials	TAs	Officials	TAs	Officials	TAs	Officials	TAs	Officials	TAs
AD 16		0		0		0		0		0		0		0		0
AD 15		0		0		0		1 ¹⁰²		1		1		1		1

¹⁰¹ Additional staffing due to the changed establishing Regulation has not been reflected in the table for 2018, as it is still subject to the adoption of the legal proposal and the 2018 budget.

¹⁰² For reclassification of 1 post from grade AD 14 to AD 15 planned at the time of renewal of the employment contract.

Category and grade	Establishment plan in EU Budget 2016		Filled as of 31/12/2016		Modifications in 2016 in application of flexibility rule		Establishment plan in voted EU Budget 2017		Modifications in 2017 in application of flexibility rule		Establishment plan in Draft EU Budget 2018 ¹⁰¹		Establishment plan 2019		Establishment plan 2020	
	Officials	TAs	Officials	TAs	Officials	TAs	Officials	TAs	Officials	TAs	Officials	TAs	Officials	TAs	Officials	TAs
AD 14		1		1		1		1		1		1		1		1
AD 13		2		2		2		2		2		2		2		2
AD 12		3		3		3		3		3		3		3		3
AD 11		3		3		3		4 ¹⁰³		4		5 ¹⁰⁴		5		5
AD 10		5		5		5		6 ¹⁰⁵		6		8 ¹⁰⁶		8		8

103 For reclassification of 1 post from grade AD 10 to AD 11.

104 For reclassification of 1 post from grade AD 10 to AD 11.

105 For reclassification of 1 post from grade AD 9 to AD 9.

106 For reclassification of 1 post from grade AD 9 to AD 10 and 2 additional posts for ETIAS.

Category and grade	Establishment plan in EU Budget 2016		Filled as of 31/12/2016		Modifications in 2016 in application of flexibility rule		Establishment plan in voted EU Budget 2017		Modifications in 2017 in application of flexibility rule		Establishment plan in Draft EU Budget 2018 ¹⁰¹		Establishment plan 2019		Establishment plan 2020	
	Officials	TAs	Officials	TAs	Officials	TAs	Officials	TAs	Officials	TAs	Officials	TAs	Officials	TAs	Officials	TAs
AD 9		9		9		9		10 ¹⁰⁷		10		13 ¹⁰⁸		14 ¹⁰⁹		14
AD 8		12		12		12		17 ¹¹⁰		17		17 ¹¹¹		16		16

¹⁰⁷ For reclassification from grade AD 8 to AD 9.

¹⁰⁸ For reclassification from grade AD 8 to AD 9.

¹⁰⁹ For reclassification from grade AD 8 to AD 9.

¹¹⁰ For reclassification from grade AD 7 to AD 8 and 1 additional post for EES.

¹¹¹ For reclassification from grade AD 7 to AD 8.

Category and grade	Establishment plan in EU Budget 2016		Filled as of 31/12/2016		Modifications in 2016 in application of flexibility rule		Establishment plan in voted EU Budget 2017		Modifications in 2017 in application of flexibility rule		Establishment plan in Draft EU Budget 2018 ¹⁰¹		Establishment plan 2019		Establishment plan 2020	
	Officials	TAs	Officials	TAs	Officials	TAs	Officials	TAs	Officials	TAs	Officials	TAs	Officials	TAs	Officials	TAs
AD 7		13		13		13		17 ¹¹²		17		21 ¹¹³		21		21
AD 6		14		14		14		13 ¹¹⁴		13		12 ¹¹⁵		14 ¹¹⁶		14
AD 5		12		10		12		14 ¹¹⁷		14		11 ¹¹⁸		9 ¹¹⁹		9

¹¹² Includes 4 additional posts for EES.

¹¹³ For reclassification from grade AD 6 to AD 7 and 2 additional posts for ETIAS.

¹¹⁴ For reclassification from grade AD 6 to AD 7.

¹¹⁵ Includes 2 additional posts for ETIAS.

¹¹⁶ For reclassification from grade AD 5 to AD 6.

¹¹⁷ For reclassification from grade AD 5 to AD 6, cut of 1 post, 8 additional posts for the EES and 2 additional posts for Eurodac recast.

¹¹⁸ For reclassification from grade AD 5 to AD 6, cut of 1 post and 1 additional post for ETIAS.

¹¹⁹ For reclassification from grade AD 5 to AD 6.

Category and grade	Establishment plan in EU Budget 2016		Filled as of 31/12/2016		Modifications in 2016 in application of flexibility rule		Establishment plan in voted EU Budget 2017		Modifications in 2017 in application of flexibility rule		Establishment plan in Draft EU Budget 2018 ¹⁰¹		Establishment plan 2019		Establishment plan 2020	
	Officials	TAs	Officials	TAs	Officials	TAs	Officials	TAs	Officials	TAs	Officials	TAs	Officials	TAs	Officials	TAs
Total AD		74		72		74		88		88		94		94		94
AST 11		0		0		0		0		0		0		0		0
AST 10		0		0		0		0		0		0		0		0
AST 9		1		1		1		1		1		1		1		1
AST 8		1		1		1		2 ¹²⁰		2		2 ¹²¹		2		2

120 For reclassification from grade AST 7 to AST 8.

121 For reclassification from grade AST 7 to AST 8.

Category and grade	Establishment plan in EU Budget 2016		Filled as of 31/12/2016		Modifications in 2016 in application of flexibility rule		Establishment plan in voted EU Budget 2017		Modifications in 2017 in application of flexibility rule		Establishment plan in Draft EU Budget 2018 ¹⁰¹		Establishment plan 2019		Establishment plan 2020	
	Officials	TAs	Officials	TAs	Officials	TAs	Officials	TAs	Officials	TAs	Officials	TAs	Officials	TAs	Officials	TAs
AST 7		2		2		2		3 ¹²²		3		4 ¹²³		5 ¹²⁴		5
AST 6		6		6		6		8 ¹²⁵		8		9 ¹²⁶		10 ¹²⁷		10
AST 5		12		12		12		12 ¹²⁸		12		14		15 ¹²⁹		15

¹²² For reclassification from grade AST 6 to AST 7.

¹²³ For reclassification from grade AST 6 to AST 7.

¹²⁴ For reclassification from grade AST 6 to AST 7.

¹²⁵ For reclassification from grade AST 5 to AST 6.

¹²⁶ For reclassification from grade AST 5 to AST 6.

¹²⁷ For reclassification from grade AST 5 to AST 6.

¹²⁸ For reclassification from grade AST 4 to AST 5.

¹²⁹ For reclassification from grade AST 4 to AST 5.

Category and grade	Establishment plan in EU Budget 2016		Filled as of 31/12/2016		Modifications in 2016 in application of flexibility rule		Establishment plan in voted EU Budget 2017		Modifications in 2017 in application of flexibility rule		Establishment plan in Draft EU Budget 2018 ¹⁰¹		Establishment plan 2019		Establishment plan 2020	
	Officials	TAs	Officials	TAs	Officials	TAs	Officials	TAs	Officials	TAs	Officials	TAs	Officials	TAs	Officials	TAs
AST 4		12		12		12		14 ¹³⁰		14		11 ¹³¹		8 ¹³²		8
AST 3		10		9		10		3 ¹³³		3		1 ¹³⁴		1		1
AST 2		0		0		0		0		0		0		0		0
AST 1		0		0		0		0		0		0		0		0

¹³⁰ For reclassification from grade AST 4 to AST 5 and 1 additional post for EES.

¹³¹ For reclassification from grade AST 3 to AST 4.

¹³² For reclassification from grade AST 4 to AST 5.

¹³³ For reclassification from grade AST 3 to AST 4 and cut of 2 posts (1 post cut under 5% cuts and 1 post for deployment pool).

¹³⁴ For reclassification from grade AST 3 to AST 4 and cut of 1 post.

Category and grade	Establishment plan in EU Budget 2016		Filled as of 31/12/2016		Modifications in 2016 in application of flexibility rule		Establishment plan in voted EU Budget 2017		Modifications in 2017 in application of flexibility rule		Establishment plan in Draft EU Budget 2018 ¹⁰¹		Establishment plan 2019		Establishment plan 2020	
	Officials	TAs	Officials	TAs	Officials	TAs	Officials	TAs	Officials	TAs	Officials	TAs	Officials	TAs	Officials	TAs
TOTAL		118		115		118		131 ¹³⁵		131		136		136		136

¹³⁵ Cut of 3 posts.

Annex IV:

A. Recruitment policy

The Agency's recruitment policy as regards the selection procedures, the entry grades of different categories of staff, the type and duration of employment and different job profiles is ruled by the Conditions of Employment of Other Servants of the European Union and the implementing rules to the Staff Regulations of Officials of the European Union concerning the engagement and use of temporary agents, the contract agents and seconded national experts (SNEs).

In 2016, several recruitment and selection procedures took place to replace the staff leaving eu-LISA during the course of the year (6 TA posts) as well as for the new staff (11 + 3 CA posts and 3 SNE posts approved for 2016).

The recruitment policy describes the situation as from the start of the eu-LISA establishment, emphasising the present situation.

a) Officials

eu-LISA has no permanent posts in its Establishment Plan.

b) Temporary agents

The staff members of eu-LISA have been and will continue to be recruited to carry out core activities, i.e. permanent tasks that are essential to the proper operation of eu-LISA over time, such as operational, managerial and administrative tasks, and the operational tasks in relation to the Agency's mandate that cannot be outsourced.

In 2016, eu-LISA recruited staff by launching the external selection procedures or used the reserve lists for the selection procedures organised for the Agency in the previous years. One interagency recruitment call was published by the Agency, but the candidate chosen did not accept a job offer.

In 2016, preparatory work for the recruitments for the EES was carried out: the job profiles, the job descriptions and the vacancy notices were prepared for the posts identified to enable a smooth recruitment process as soon as the legal basis for the project is adopted.

Entry grade by each key function:

Recruitment is done at the grade advertised in the vacancy notice, which is decided in accordance with the Staff Regulations and Conditions of Employment of Other Servants of the European Union and the respective implementing rules as well as the corresponding job description. In 2016, the Agency was considered to reach its cruising speed. Therefore, the replacements for the posts vacant as a result of departures were made at the grade specified in the Conditions of Employment of Other Servants of the European Union.

The entry grades for long-term temporary agents in 2016 were as follows:

- AST 3 to AST 4;
- AD 5 to AD 8.

Duration of contracts:

The internal eu-LISA Guidelines on contract renewal¹³⁶ lay down that the temporary agents (2f) are offered a first fixed-term contract of 5 years, renewable for another time period not exceeding 5 years. Subsequent extensions shall be indefinite. In November 2016, the Management Board of eu-LISA authorised¹³⁷ the Executive Director of eu-LISA to grant indefinite contracts to temporary staff after the first contractual term in line with the applicable legal provisions (Article 8 of the Conditions of Employment of Other Servants of the European Union and Article 16 of Management Board decision No 2015-166 of 18.11.2015).

All renewals of contract will be subject to a thorough examination of the performance of the staff member and will depend on eu-LISA's PD, priorities and available budgetary provisions. The internal guidelines on contract renewal have been developed for this purpose.

Recruitment procedure:

The key phases of the selection procedures for the recruitment of temporary agents and the contract agents are similar and can be summarised as follows:

- A vacancy notice is published (defining eligibility and selection criteria, indicating type and duration of the contract and recruitment grade).
- Potential candidates are pre-selected on the basis of their application files, evaluating their eligibility and compliance with the selection criteria.

¹³⁶ Decision of the Executive Director No 43/2016 of 31 May 2016.

¹³⁷ Decision No 2016-123 of 16 November 2016 (reference document 2016-140).

- The best-qualified eligible candidates are asked to undergo a written test, as well as an interview covering their specific abilities in their area of expertise, general aptitudes and language skills.
- The Selection Committee proposes a list of successful candidates to the Executive Director¹³⁸, who decides on the appointment of a candidate and the establishment of a reserve list. Inclusion on the reserve list does not guarantee employment. The result of the selection process is communicated to the selected candidates.

c) Contract agents

Contract agents have been employed to work on specific, time-limited projects, to fill gaps during long-term absences, and to cover peaks of workload for limited periods. Staff employed as contract agents carry out administrative and technical tasks which are essential for the proper operation of eu-LISA over time, in particular administrative support. For the selection procedure of contract agents, eu-LISA launches the external selection procedure or uses the reserve lists provided by the European Personnel Selection Office (EPSO) or the reserve lists established by the Agency.

Contract agents have been offered time-limited contracts with a maximum duration of 5 years, which may be renewed once for another fixed period of maximum 5 years, in accordance with Article 85 of the Conditions of Employment of Other Servants of the European Union; or contracts with a duration of 2 years, which may also be renewed once and used for short-term projects. A 1-year-long contract without a possibility of renewal may be offered to replace a staff member on a long absence. However, this proved an ineffective solution resulting in refusal of a job offer from the candidates who successfully passed the selection process.

Any further renewal of an employment contract shall be for an indefinite period. Renewals of contracts for contract agents will depend on eu-LISA's PD priorities and available budgetary provisions and will be subject to a thorough examination of the performance of the staff member.

d) Seconded national experts¹³⁹

SNEs are seconded to eu-LISA by the EU Member States to cover specialised tasks to ensure that the operations of eu-LISA remain firmly in touch with Member States' needs as end users. The duration of their secondment is set in accordance with the agreement reached with their original national administrations.

¹³⁸ For the posts where the appointment to a post is made by the Management Board of the Agency according to the requirements set in the Establishing Regulation, a decision is taken by the Management Board.

¹³⁹ SNEs are not employed by the Agency.

eu-LISA adopted the necessary implementing measures¹⁴⁰ on seconded national experts, which describe the selection procedures, duration of secondment, working conditions, allowances and expenses.

e) Structural service providers¹⁴¹

In 2016, eu-LISA used external service providers for the services or projects that could not be covered by the Agency's staff because of staff shortages at eu-LISA or the specialised nature of the qualifications or knowledge required, which is not available at the Agency. It is foreseen that in the next years they will continue to be used as well. The table below presents the services used in 2016.

It should be noted that the duration of a contract means the duration of a framework contract. The services under a framework contract are provided on signature of individual contracts, the duration of which varies between 2 months and 1 year.

¹⁴⁰ Notification of the MB decision, document No 2012-025 of 28 June 2012.

¹⁴¹ Structural service providers are not employed by the Agency.

Structural service providers to eu-LISA in 2016

No	Tasks assigned	Resources in FTE	Tender procedure	Contract duration	Service description
1	External support	57 FTE ¹⁴²	FWC – LISA/2014/OP/03 (lots 1-4)	4 years (2015-2018)	<p>This contract covers diverse services of (a) ICT and (b) administrative nature that entail but are not limited to:</p> <ul style="list-style-type: none"> • development and implementation of the internal IT infrastructure (the core corporate information systems such as Document Management System, Missions Management System); • supporting the operational activities related to BMS and SIS II; • customisation and integrated governance for activity-based management including budgeting, project management, procurement and contract management; • supporting performance of tasks such as internal and external communication, secretarial assistance; and supporting the secretariat of the Management Board; • streamlining training, leave and time management activities in the remit of HR in preparation for the customisation and introduction of the e-HR tool.

¹⁴² This number represents 57 individual contracts for the intra-muros support services and the services being provided (status for 31.12.2016). In 2016, 67 specific contracts were signed: 57 TM (Time and Means) intra muros and 10 extra muros (QTM – Quoted Time and Means; FP – Fixed Price).

No	Tasks assigned	Resources in FTE	Tender procedure	Contract duration	Service description
2	External assistance	7 FTE	HOME/2010/SIV I/FW/-A/C2- 03/01	4 years	External assistance for project management, consultancy and quality assurance to European large-scale IT systems projects in Home Affairs matters.

B. Appraisal of performance and reclassification/promotions

For the second year, in 2016 a reclassification exercise took place at eu-LISA in its full scope in accordance with the rules in place. The results of this exercise are presented in Table 1 below.

The rate of promotions in 2016 was 23%, which is in line with the average rate in Annex IB to the Staff Regulations (26.63%). The average seniority in grade, however, at the time of the reclassification taking effect, was 2.61 years, which was below the average set in Annex IB to the Staff Regulations. Recognition for the hard work performed in the start-up phase conditions of the organisational development was considered important in carrying out the reclassification exercise with regard to the eligible staff whose performance was evaluated as being above satisfactory, and in some cases outstanding. In the future, following the rolling 5-year period, the average seniority will increase to the levels set out in the Conditions of Employment of Other Servants of the European Union and in the Implementing Rules on the reclassification of temporary agents and the contract agents¹⁴³ that were adopted by eu-LISA in 2016.

¹⁴³ Decisions of the Management Board of eu-LISA No 2016-016 of 15 March 2016 laying down general implementing provisions regarding Article 54 of the Conditions of Employment of Other Servants of the European Union and No 2016-017 of 15 March 2016 on general provisions for implementing Article 87(3) of the Conditions of Employment of Other Servants of the European Union.

Table 1 – Reclassification of temporary staff/promotion of officials

Category and grade	Active staff at 01.01.2015		How many staff members were promoted/reclassified in 2016		Average number of years in grade of reclassified/promoted staff members
	Officials	TAs	Officials	TAs	
AD 16		0		0	N/A
AD 15		0		0	N/A
AD 14		1		0	N/A
AD 13		0		0	N/A
AD 12		2		1	3
AD 11		2		0	N/A
AD 10		6		2	2.9
AD 9		6		1	2.25
AD 8		8		1	2
AD 7		18		6	2.63
AD 6		7		1	2

Category and grade	Active staff at 01.01.2015		How many staff members were promoted/reclassified in 2016		Average number of years in grade of reclassified/promoted staff members
	Officials	TAs	Officials	TAs	
AD 5		24		7	2.73
Total AD		74		19	2.62
AST 11		0		0	N/A
AST 10		0		0	N/A
AST 9		0		0	N/A
AST 8		0		0	N/A
AST 7		2		2	2.38
AST 6		2		1	2
AST 5		14		3	2.75
AST 4		6		0	N/A
AST 3		19		2	2.90
AST 2		1		0	N/A
AST 1		0		0	N/A

Category and grade	Active staff at 01.01.2015		How many staff members were promoted/reclassified in 2016		Average number of years in grade of reclassified/promoted staff members
	Officials	TAs	Officials	TAs	
Total AST		44		8	2.60
AST/SC1		0		0	N/A
AST/SC2		0		0	N/A
AST/SC3		0		0	N/A
AST/SC4		0		0	N/A
AST/SC5		0		0	N/A
AST/SC6		0		0	N/A
Total AST/SC		0		0	N/A
Total		118		27	2.61

Table 2 – Reclassification of contract staff

In 2016, the Implementing Rules¹⁴⁴ guiding the reclassification process of the contract agents were adopted by eu-LISA and the first reclassification of contract staff took place.

Function group	Grade	Active staff at 01.01.2015	How many staff members were reclassified in 2016	Average number of years in grade of reclassified staff members
CA IV	18		N/A	N/A
	17		N/A	N/A
	16	1	1	2
	15		N/A	N/A
	14	4	2	2.21
	13		N/A	N/A

¹⁴⁴ Decision of the Management Board of eu-LISA No 2016-017 of 15 March 2016 on general provisions for implementing Article 87(3) of the Conditions of Employment of Other Servants of the European Union.

Function group	Grade	Active staff at 01.01.2015	How many staff members were reclassified in 2016	Average number of years in grade of reclassified staff members
CA III	12		N/A	N/A
	11		N/A	N/A
	10		N/A	N/A
	9	1	1	2.42
	8		N/A	N/A
CA II	7		N/A	N/A
	6		N/A	N/A
	5		N/A	N/A
	4		N/A	N/A
CA I	3		N/A	N/A
	2		N/A	N/A

Function group	Grade	Active staff at 01.01.2015	How many staff members were reclassified in 2016	Average number of years in grade of reclassified staff members
	1		N/A	N/A
Total		6	4	2.21

C. Mobility policy

The introduction of a new category of temporary staff (TA 2f) at the agencies in the new Staff Regulations of Officials and Conditions of Employment of Other Servants of the European Union, which entered into force on 1 January 2014, facilitates mobility within eu-LISA and between the agencies.

In 2015, eu-LISA adopted a model decision¹⁴⁵ on the engagement and use of temporary agents (TA 2f). Because of the organisational structure and development of eu-LISA, the internal mobility needs and opportunities are assessed when each vacancy or new post being created. In addition, transfers between posts may be taken into account.

In 2016, two internal transfers and change of duties took place: the Head of the Human Resources and Training Unit was appointed to the newly created post of Advisor to the Executive Director, and the Internal Communication Assistant in the General Coordination Unit was transferred to the post of the Document Management Assistant in the Corporate Services Sector in the Resources and Administration Department.

¹⁴⁵ Decision of the Management Board of eu-LISA No 2015-166 of 11 November 2015 laying down general implementing provisions on the procedure governing the engagement and use of temporary staff under Article 2(f) of the Conditions of Employment of Other Servants of the European Union.

Interinstitutional mobility is also a reality in eu-LISA. In 2016, 7 persons left eu-LISA in order to work for the European Commission, the European Parliament or another European agency and 6 of the 20 new staff members recruited came from another European Institution, agency or body.

D. Gender and geographical balance

The gender distribution by function type and level is presented in the table below.

Staff of eu-LISA split by gender

Gender	Administrators			Assistants		Total
	TA	CA	SNE	TA	CA	
Male	55	17	5	29	1	107
Female	17	6	1	14	2	40
Total staff	72	23	6	43	3	147

The visible lack of gender balance at eu-LISA is due to the work regime (work in shifts and on stand-by duty on a continuous basis) and the fact that most of the IT positions, which are in the Agency's Operations Department in Strasbourg, are filled by men. A greater level of interest among men in employment at eu-LISA is also visible in the number of applications received for the recruitment calls.

In 2014, eu-LISA introduced flexitime in order to facilitate the work-life balance of its staff members. In 2015, the Agency created internal guidelines on teleworking and adopted the Implementing Rules to the Staff Regulations on teleworking¹⁴⁶ and started to apply them. In 2016, these rules were in force, while awaiting finalisation of the text of the model decision for the agencies on teleworking by the European Commission.

Geographical balance

Among the staff of eu-LISA there is representation of 21 EU nationalities.

Recruiting staff from a wide geographical range contributes to the diversity of cultures and mutual exchange. eu-LISA perceives it as a natural tendency that, its main locations being in Tallinn and Strasbourg, Estonian and French staff are over-represented, constituting up to 30% of the total employees in the respective locations, and considers that this does not constitute a major distortion of the geographical balance. The fact that the largest group of personnel is French is because some personnel working for the French national authorities on IT projects who transferred to the Agency at the time of its establishment joined eu-LISA following the competition procedure for these highly specialised posts.

The nationalities of eu-LISA's staff (temporary agents) per function group are presented in the table below.

¹⁴⁶ Decision of the Management Board of eu-LISA No 2015-100 of 11 November 2015 on the implementation by analogy of the Commission Decision of 16 December 2013 amending Article 7(5) and (7) of Commission Decision C(2009)10224 of 18 December 2009 concerning the implementation of teleworking in Commission departments from 2010 to 2015.

Staff of eu-LISA split by nationality

Recruitment status on 31.12.2016				
Nationality	AD	AST	Total AD + AST	Percentage
Austria (AT)	0	0	0	0
Belgium (BE)	4	4	8	6.96
Bulgaria (BG)	3	0	3	2.61
Croatia (HR)	1	0	1	0.87
Cyprus (CY)	0	0	0	0.00
Czech Republic (CZ)	1	1	2	1.74
Denmark (DK)	0	0	0	0.00
Estonia (EE)	4	6	10	8.70
Finland (FI)	0	1	1	0.87
France (FR)	17	9	26	22.61
Germany (DE)	4	1	5	4.35
Greece (EL)	5	1	6	5.22
Hungary (HU)	4*	2	6	5.22
Ireland (IE)	1	0	1	0.87

Recruitment status on 31.12.2016				
Nationality	AD	AST	Total AD + AST	Percentage
Italy (IT)	8	1	9	7.83
Latvia (LV)	0	3	3	2.61
Lithuania (LT)	2	3	5	4.35
Luxembourg (LU)	0	0	0	0.00
Malta (MT)	0	0	0	0.00
Netherlands (NL)	0	1	1	0.87
Poland (PL)	4	2	6	5.22
Portugal (PT)	1	2	3	2.61
Romania (RO)	8	4	12	10.43
Slovakia (SK)	2	0	2	1.74
Slovenia (SI)	0	0	0	0.00
Spain (ES)	3	1	4	3.48
Sweden (SE)	0	0	0	0.00
United Kingdom (UK)	0	1	1	0.87
Total staff	72	43	115	100.00

*Including 1 job offer accepted in 2016.

In order to achieve a representation of nationalities reaching percentages similar to the representation of nationalities in the general EU population, since October 2014 the Agency has been adding specific messages to all its vacancy announcements encouraging candidates from the countries under-represented in eu-LISA to apply. The nationalities of the other groups of eu-LISA's staff population (contract agents and the seconded national experts) are presented in the table below.

eu-LISA's contract agents and SNEs split by nationality

Nationality	Recruitment status on 31.12.2016		
	CA FG IV	CA FG III	SNE
Austria (AT)			
Belgium (BE)	1		
Bulgaria (BG)			1
Croatia (HR)			
Cyprus (CY)			
Czech Republic (CZ)			
Denmark (DK)			
Estonia (EE)	1	1	
Finland (FI)	1		
France (FR)	9*	1	
Germany (DE)			2
Greece (EL)	2		2

Nationality	Recruitment status on 31.12.2016		
	CA FG IV	CA FG III	SNE
Hungary (HU)			
Ireland (IE)			
Italy (IT)	1		
Latvia (LV)			1
Lithuania (LT)			
Luxembourg (LU)			
Malta (MT)			
Netherlands (NL)			
Poland (PL)	1		
Portugal (PT)	1		
Romania (RO)	3	1	
Slovakia (SK)	1		
Slovenia (SI)			
Spain (ES)	2*		
Sweden (SE)			
United Kingdom (UK)			
Total staff	23	3	6

* Including 1 job offer accepted in 2016.

The representation of German colleagues in this group helps to increase the representation of German citizens in the staff population of the Agency.

It is inherently difficult to attract applicants from some countries because of a combination of several factors that make conditions adverse in comparison with their countries of origin, for example Sweden, the United Kingdom or Germany. These factors include relatively high costs of accommodation for foreigners, the long distance from many places of origin of the Agency staff members and high cost of transportation to reach them, the general labour conditions, which make it difficult for family members of eu-LISA staff to find a job in the places where they are assigned, and a low correction coefficient in Tallinn.

The issue of geographical balance will continue to be addressed by paying attention to this aspect during future recruitment processes. The main focus of the selection process will continue to be on the merit of the candidates. However, if two candidates achieve the same number of points during the evaluation, the nationals of the countries that have not reached the recruitment level in terms of geographical representation will be recommended for recruitment in order to bring more balance and maintain the diversity already achieved.

E. Schooling

In accordance with the establishing Regulation, the EU Member States hosting eu-LISA provide the best possible conditions to ensure the proper functioning of the Agency, including multilingual, European-oriented schooling.

Since September 2013, Tallinn has offered the possibility of obtaining education on the basis of the Accredited European School (type II) curriculum. Twelve children of eu-LISA staff attend the European School in Tallinn. The other children are placed in the International College (3) or in private nurseries (1) in cases where the European School is not in a position to offer its services.

The European School (type II) in Strasbourg was founded in September 2008. Twenty-three children of eu-LISA staff members attended the European School in Strasbourg in 2016. Nine children were using services of the private or municipal nurseries.

An agreement signed in 2014 with the European Commission for the financial contributions to the European Schools in Tallinn and Strasbourg describes the yearly contribution the Agency should pay on the basis of the number of pupils coming from eu-LISA staff. For the school year 2017/2018, the yearly contributions is estimated to exceed EUR 410,000.00, taking into account the increased number of staff.

In both locations, there are also other possibilities of obtaining education based on an international curriculum or on a well-recognised national curriculum in the international sections of the city's secondary schools and international colleges.

In order to assist the staff whose children are under 4 years of age and for whom the European Schools cannot provide care, eu-LISA introduced in 2014 a nursery allowance for the reimbursement of the costs related to the provision of care for small children by kindergartens or nurseries that have signed service contracts with eu-LISA. This initiative will also be continued in future, as it has made a positive impact on accepting the job offers, especially in Tallinn, where it is relatively difficult to provide this type of assistance to working mothers, even though the number of staff members benefiting from this service has decreased because some children have reached school age.

Taking into account the experience of other European agencies, the existence of multilingual, European-oriented schooling has direct implications for the attractiveness of the Agency as an employer. Therefore, eu-LISA will support the objectives of the European agencies in this field in the work of the European Agencies Network.

Annex V: Buildings

Information to be provided per building:	Name, location and type of building	Other comment
	European Union House, Rävala 4, Tallinn, Estonia	eu-LISA occupies the ground, first and sixth floors of the building
Surface area (m ²) Of which office space Of which non-office space	1,443.5 (sixth floor) and 378 (ground and first floors) 601.8 (sixth floor) and 200.6 (ground and first floors) 841.7 (sixth floor) and 177.4 (ground and first floors)	
Annual rent (EUR)	0 (sixth floor); 0 (ground and first floor)	eu-LISA pays only the running costs. For the ground and first floors, the rent is reimbursed by the Estonian Ministry of the Interior to eu-LISA
Type and duration of rental contract	Memorandum of understanding (sixth floor) until 31 December 2017 30 months' rent contract (ground and first floors) until 28 February 2018	
Host country grant or support	Estonia pays for rent	Rent is paid by the Estonian Ministry of the Interior
Present value of the building	N/A	

	Name, location and type of building	Other comment
Information to be provided per building:	18 Rue de la Faisanderie, 67100 Strasbourg, France	N/A
Surface area (m ²) Of which office space Of which non-office space	2,380 806 1,574	

Annual rent (EUR)	HOME-2012-LISA/CT/EUROMODULES/2013/SC1: 10,790 (LISA-2014-NP-15: 21,000)	
Type and duration of rental contract	HOME-2012-LISA/CT/EUROMODULES/2013/SC1: 4 containers – 36 months LISA-2014-NP-15: 5 containers – 10 months	HOME-2012-LISA/CT/EUROMODULES/2013/SC1: until 30 April 2016 LISA-2014-NP-15: until 29 February 2016
Host country grant or support	France granted entire premises to eu-LISA for EUR 1 on 29 May 2013	
Present value of the building	Building value: EUR 685,212 (net book value as of 31/12/2016) Land value: EUR 1,665,315 (net book value as of 31/12/2016) Building under construction: EUR 4,793,504 (net book value as of 31/12/2016)	

	Name, location and type of building	Other comment
Information to be provided per building:	Austrian Central Federal Back-Up Centre in Sankt Johann im Pongau, Austria	Back-up facility
Surface area (m ²)	626	
Of which office space	223	
Of which non-office space	403	
Annual rent (EUR)	591,328	Operational expenditure
Type and duration of rental contract	Indefinite Operational Agreement with Republic of Austria	
Host country grant or support	N/A	
Present value of the building	Data not available	

	Name, location and type of building	Other comment
--	-------------------------------------	---------------

Information to be provided per building:	eu-LISA Liaison Office, 20 avenue d'Auderghem, 1040 Brussels 62 m ² (two offices on second floor)	Plan to extend rental area by 36 m ² since 1 April 2017
Surface area (m ²) Of which office space	62 62	
Annual rent (EUR)	12,385	
Type and duration of rental contract	Rent agreement	New rental contract as of 1 April 2017 including additional office
Host country grant or support	N/A	
Present value of the building	N/A	

BUILDING PROJECT STRASBOURG

In March 2013, eu-LISA's Management Board decided to fully upgrade the existing data centre in Strasbourg, which houses the CUs of eu-LISA's large-scale IT systems, and construct a new independent office building to accommodate existing and predicted future eu-LISA staff members, as well as welfare and training facilities. The upgrade and construction project is intended to build an office building of three floors (projected space 3,728 m²); refurbish the existing main building (1,497 m², built in 1992), where large-scale IT systems are housed; construct a new energy building of two stores to house vital energy back-up systems (projected space 488 m²); and construct a new security gatehouse in line with up-to-date standards (projected space 99 m²). This project will expand the overall surface area from 1.365 m² to 5.812 m², including several highly specific technical or operational areas.

A design and build tender was awarded to a general contractor, which started the design development phase in 2015. The construction project suffered some delays due to the need to amend the original contract to include some improvements in the design of the new facility as well as the fact that contractor struggled to provide input of the necessary quality at all times. From a financial point of view, the project remained within the approved contractual budget approved by the budgetary authority. It is expected that the new office building in Strasbourg will be delivered by the contractor in February 2018. Nevertheless, with a view to the coming years, there is a general concern about the capacity of the renovated site in Strasbourg to host all staff of the Agency and contractors, considering major developments in the JHA area, namely implementation of the EES, introduction of ETIAS and other initiatives subject to the adoption of their legal bases, which were unknown when the project started.

BUILDING PROJECT HEADQUARTERS IN TALLINN

It has been decided to construct a new building as the permanent headquarters of eu-LISA in Tallinn, Estonia. The building is expected to be completed by the end of 2017. The project expenses are covered by the Estonian Government, confirmed by a government decision. The project is in the architectural concept design evaluation phase. The plot of the construction site is 5,628 m². The net surface area of the building is approximately 3,000 m², with the possibility of extending the area by 2,000 m² in the future.

Substantial progress has been made on this project in accordance with the approved plan. In particular, the preliminary design and detailed technical design were completed and approved. The interior design is close to completion. Design proposals were further analysed by a group of engineers from different fields to assess the level of compliance with applicable industry standards as well as their overall compatibility. The construction work started in Q2 of 2017.

Annex VI: Privileges and immunities

Agency privileges	Privileges granted to staff	
	Protocol of privileges and immunities/diplomatic status	Education/day care
<p>eu-LISA's statutory staff in Tallinn, provided they are not permanent residents of Estonia before taking up their appointment in the Agency, shall have reimbursement from the Estonian Government of a sum equal to the VAT paid for purchase of goods in Estonia (limited to a specific list of goods) during a period of 1 year from taking up duties at the Agency in Tallinn to facilitate their establishment in Estonia.</p> <p>The Executive Director and the Statutory Staff of eu-LISA in Tallinn and family members forming part of their household, unless they are employed, shall be exempt from all compulsory contributions to the Estonian social security scheme insofar as they are covered by the</p>	<p>Headquarters Agreement between eu-LISA and the Republic of Estonia, Article 12</p>	<p>An Accredited European School was established in Tallinn in autumn 2013.</p> <p>The European School provides the type II curriculum at nursery and primary as well as secondary level of education.</p> <p>Children from 4 years of age can be admitted to the European School</p>

Agency privileges	Privileges granted to staff	
	Protocol of privileges and immunities/diplomatic status	Education/day care
<p>scheme of social security benefits of officials and other servants of the Union.</p> <p>The Executive Director and the Statutory Staff of the Agency shall enjoy:</p> <p>immunity from arrest and detention and immunity from jurisdiction for the words uttered, texts produced or other actions carried out in the exercise of their official duties for the agency, even once they are no longer active Staff of the Agency;</p> <p>exemption from any national, regional or municipal tax over salaries, emoluments and benefits received from the Agency or on its behalf, including benefits in the event of sickness, accident, pensions and unemployment;</p> <p>the right to import, free of duty and without restriction of prohibition, their furniture and personal effects, including motor vehicles for personal use, from the country of their last residence or from the country of which they are nationals, during a period of 2 years from the date</p>		

Agency privileges	Privileges granted to staff	
	Protocol of privileges and immunities/diplomatic status	Education/day care
<p>of first taking up their appointment in Tallinn;</p> <p>the right to export their furniture and personal effects including motor vehicles for personal use, without restrictions or duties, during a period of 2 years from the date of ceasing their duties with the Agency.</p> <p>In case of armed conflict, civil unrest, terrorist attack or any other event putting at risk the safety and/or wellbeing of the Executive Director and the Statutory Staff as well as members of the family forming part of their household, others than nationals of Estonia, the Government shall provide the same repatriation facilities as are granted to diplomatic representatives in case of international crisis.</p>		
<p>eu-LISA's statutory staff in Strasbourg and family members forming part of their household shall be exempt from all compulsory contributions to the</p>	<p>Agreement on the technical site of the European Agency for the Operational Management of Large-Scale IT systems in the area of Freedom, Security and</p>	<p>The French Government committed itself to finding the best possible solution to educate the children of the staff of the Agency and family members forming part of their</p>

Agency privileges	Privileges granted to staff	
	Protocol of privileges and immunities/diplomatic status	Education/day care
<p>French social security scheme insofar as they are covered by the scheme of social security benefits of officials and other servants of the Union (Article 13). To the extent that they are covered by the social security scheme of their state of origin, seconded experts shall also be exempt from all compulsory contributions to the French social security scheme.</p> <p>The statutory staff of the Agency shall enjoy the following privileges, immunities, exemptions and facilities:</p> <p>immunity from jurisdiction for acts performed by them in their official capacity, including their words spoken or written, even after termination of their functions;</p> <p>the facilities customarily accorded to officials of international organisations, in respect of currency or exchange regulations;</p> <p>the right to import free of duty their furniture and effects at the time of first taking up their post in France, including their vehicle for their personal</p>	Justice between eu-LISA and the Government of France, Articles 13 and 16	household and to offer them a primary- and secondary-level education tailored to their individual needs and providing the opportunity to obtain internationally recognised qualifications. The government committed itself furthermore to ensuring that access to the European School of Strasbourg, which offers a baccalaureate recognised by all EU Member States, is guaranteed for the children of Agency staff and members of their families forming part of their household, in accordance with Article 4 of the Accreditation and Cooperation Agreement between the Board of Governors of the European Schools and the European School of Strasbourg, signed in Brussels on 24 May 2011

Agency privileges	Privileges granted to staff	
	Protocol of privileges and immunities/diplomatic status	Education/day care
<p>use, acquired either in the State of their last residence or in the State of which they are nationals on the terms ruling in the home market in that State, for 15 months from the date they take up their post in France within the Agency, subject to the conditions considered necessary by the French Government;</p> <p>the right to re-export free of duty their furniture and effects as well as their vehicle for their personal use, subject to conditions considered to be necessary by the French Government.</p>		

Annex VII: Evaluations

Ex-ante evaluations

With regard to the provisions of Article 29(5) of Framework Financial Regulation, in June 2017, the Management Board, after taking note of the process and collateral documents for ex-ante evaluations, decided to adopt an Ex-ante Evaluation Policy and Process and authorised the Executive Director to make further adjustments in the process and collateral documentation as required. The Management Board invited the Executive Director to proceed with the pilot implementation of the process and to report its results in the regular board meeting in November 2017, when a decision will be made on the threshold amount to be applied when choosing activities for ex-ante evaluation. Upon this decision the list of 2018 activities subject to ex-ante evaluation will be established.

Systems' performance evaluations

To evaluate and monitor the performance of the systems under the management of eu-LISA and to support the execution of the requirements of Article 12(1)(t) of Regulation (EU) No 1077/2011 of the European Parliament and of the Council of 25 October 2011 to carry out reports on the technical functioning of SIS II and VIS, the Management Board has approved a standard service level agreement by means of document 2013-084.

Internal control standards

The framework of 16 internal control standards, as adopted by the eu-LISA Management Board by means of its decision 057-2014 of 15 June 2014, is the applied framework of internal control criteria for eu-LISA. The Management Board decision has confirmed the validity of the framework for the organisation and entrusted the Executive Director with the implementation of the standards. However, the internal control standards (ICSs) relate to various of the organisation's business areas, which are all equally important; eu-LISA, while striving to fulfil its objectives resulting from the Agency's planning cycle, seeks to achieve and maintain compliance with ICSs to demonstrate good governance in its actions and activities and towards its stakeholders. According to the annual procedure, at the beginning of 2018 the Agency's Internal Control Coordinator will meet eu-LISA's managers and staff with internal control standard (ICS)-related functions (e.g. Data Protection Officer) to evaluate the outcomes of 2017 ICS activities and to set up the individual lists of measures in order to further achieve or to maintain compliance with eu-LISA's internal control standards in 2018.

The following table shows the 16 internal control standards with their rationales.

Number	Title	Definition
ICS 1	Mission	eu-LISA's raison d'être is clearly defined in up-to-date and concise mission statements developed from the perspective of the eu-LISA's customers.
ICS 2	Ethical and	Management and staff are aware of and share appropriate ethical and organisational values and uphold these through their own

	Organisational Values	behaviour and decision-making.
ICS 3	Staff Allocation and Mobility	The allocation and recruitment of staff is based on the eu-LISA's objectives and priorities. Management promote and plan staff mobility so as to strike the right balance between continuity and renewal.
ICS 4	Staff Evaluation and Development	Staff performance is appraised annually. Adequate measures are taken to develop the skills necessary to achieve the objectives set.
ICS 5	Objectives and Performance Indicators	eu-LISA's objectives are clearly defined and updated when necessary. These are formulated in a way that makes it possible to monitor their achievement. Key performance indicators are established to help management evaluate and report on progress made in relation to their objectives.
ICS 6	Risk Management Process	A risk management process that is in line with applicable provisions and guidelines is integrated into the annual activity planning.
ICS 7	Operational Structure	eu-LISA's operational structure supports effective decision-making by suitable delegation of powers. Risks associated with eu-LISA's sensitive functions are managed through mitigating controls and ultimately staff mobility. Adequate IT governance structures are in place.
ICS 8	Processes and Procedures	eu-LISA's processes and procedures used for the implementation and control of its activities are effective and efficient, adequately documented and compliant with applicable provisions. They include arrangements to ensure segregation of duties and to track and give prior approval to control overrides or deviations from policies and procedures.
ICS 9	Management Supervision	Management supervision is performed to ensure that the implementation of activities is running efficiently and effectively while complying with applicable provisions.
ICS 10	Business Continuity	Adequate measures are in place to ensure continuity of service in case of "business-as-usual" interruption. Business Continuity Plans are in place to ensure that eu-LISA is able to continue operating to

		the extent possible whatever the nature of a major disruption.
ICS 11	Document Management	Appropriate processes and procedures are in place to ensure that the eu-LISA's document management is secure, efficient (in particular as regards retrieving appropriate information) and complies with applicable legislation.
ICS 12	Information and Communication	Internal communication enables management and staff to fulfil their responsibilities effectively and efficiently, including in the domain of internal control. Where appropriate, eu-LISA has an external communication strategy to ensure that its external communication is effective, coherent and in line with the Commission's key political messages. IT systems used and/or managed by eu-LISA (where eu-LISA is the system owner) are adequately protected against threats to their confidentiality and integrity.
ICS 13	Accounting and Financial Reporting	Adequate procedures and controls are in place to ensure that accounting data and related information used for preparing the organisation's annual accounts and financial reports are accurate, complete and timely.
ICS 14	Evaluation of Activities	Evaluation of expenditure programmes, legislation and other non-spending activities are performed to assess the results, impacts and needs that these activities aim to achieve and satisfy.
ICS 15	Assessment of Internal Control Systems	Management assess the effectiveness of eu-LISA's key internal control systems, including the processes carried out by implementing bodies, at least once a year.
ICS 16	Internal Audit Capability	eu-LISA has an Internal Audit Capability (IAC), which provides independent, objective assurance and consulting services designed to add value and improve the operations of eu-LISA.

Action Plan on the findings of evaluation of the Agency

In 2015 and in 2016, in accordance with Article 31(1) of the establishing Regulation, the Commission carried out the first evaluation of the Agency within three 3 years from the start of its operations, supported by an external contractor. The evaluation has been carried out in close cooperation with the Management Board of eu-LISA and the Agency itself. Following this evaluation, in 2017, the Management Board of eu-LISA adopted document 2017-023 *Action Plan on the findings of evaluation of the Agency*, flowing the recommendations from this

evaluation. Regular update on the status of the implementation of the Action Plan is provided to the Management Board.

Annex VIII: Risks 2018¹⁴⁷

RISK 1	The potential project pitfalls of the Strasbourg site extension might endanger desired outcomes
RISK 2	Lack of sufficient statutory staff might negatively affects the Agency in achieving its assigned tasks or even may lead to non-compliance events
RISK 3	Lack of 24/7 support for Corporate Services endangering 24/7 availability of corporate services
RISK 4	Smart Borders delegation agreement eligibility

Risk ¹⁴⁸	Response	Risk Owner
RISK 1	Mitigate: To closely monitor the Strasbourg site extension project as to receive immediate warnings about potential situations resulting in risk of financial claim of penalties from Contractor to the Agency or insufficient capacity, as well as to establish a transition plan that sufficiently addresses possible scenarios (e.g. to keep facilities originally foreseen to be demounted as to ensure operational performance).	Head of Operations Department
RISK 2	Mitigate: To align the organizational structure of the Agency for minimizing possible negative effects and scenarios. On midterm perspective, to convert (current) service provider functions/ capabilities into contract agent positions – following applicable regulations and strategies (e.g. eu-LISA Sourcing Strategy), based on a comprehensive evaluation and in duly justified cases, as to enhance the level of statutory staff.	Executive Director
RISK 3	Mitigate: To establish a short-term solution by negotiating with the external service supplier on extending working hours of intra-muros to establish sufficient capacities. On mid-/long-term perspective, necessary resources should be provided according to the Agency's applicable strategies and guidelines, e.g. the Sourcing Strategy, as to ensure business continuity.	Head of Resources and Administration Department

¹⁴⁷ As estimated in 2016. Subject to revision in 2017.

¹⁴⁸ The ranking of risks follows the outcome of the 2016 risk assessment efforts.

RISK 4	Mitigate: in the checks performed on eligibility of grant funds to Member States, strict compliance with the grant agreements and financial/procurement rules is enforced. This is done to reduce the scope of errors be detected by the Commission, which might result in ineligibility of expenditure incurred by the Agency.	Head of Finance and Procurement Unit
--------	---	--------------------------------------

Annex IX: Procurement plan Year 2018

The present annex includes tenders planned in the year in direct support of operational activities included in the programming document/financial statement, with an estimated value above EUR 135 000. When available, information is also provided for non-operational tenders.

The plan does not include specific contracts issued through framework contracts already awarded by the Agency, the European Commission or other EU institutions.

Number	PD reference	Subject	Type of procedure	Contract type	Duration of contract (years)	Estimated multiannual value (up to 2020) (EUR 000)	Estimated value in 2018 (EUR 000)	Indicative quarter for launch	Comments
3	2.4.1.31	Entry/Exit System implementation	Restricted	FWC	4	142 052	TBD	Q1 2018	Second phase of the restricted procedure. The launch of the tender is subject to the adoption of the legal basis, and the date of adoption will affect the awarded value in 2018
3	2.1	Communication and events	Open	FWC	4	7 000	800	Q1 2018	This procedure might be launched already in 2017
3	2.1	Operational quality assurance and external support	Open	FWC	4	77 000	4 000	Q1 2018	This procedure might be launched already in 2017
4	2.4.1.32	Development of ETIAS	Restricted	FWC	4	29 204	3 000	Q3/4 2018	Second phase of the restricted procedure. The launch of the tender is subject to the adoption of the legal basis
5	2.4.1.34	ECRIS-TCN implementation	Restricted	FWC	1	11 928	3 766	Q4/2018	Second phase of the restricted procedure. The launch of the tender is subject to the adoption of the legal basis

Annex X: Organisation chart 2018

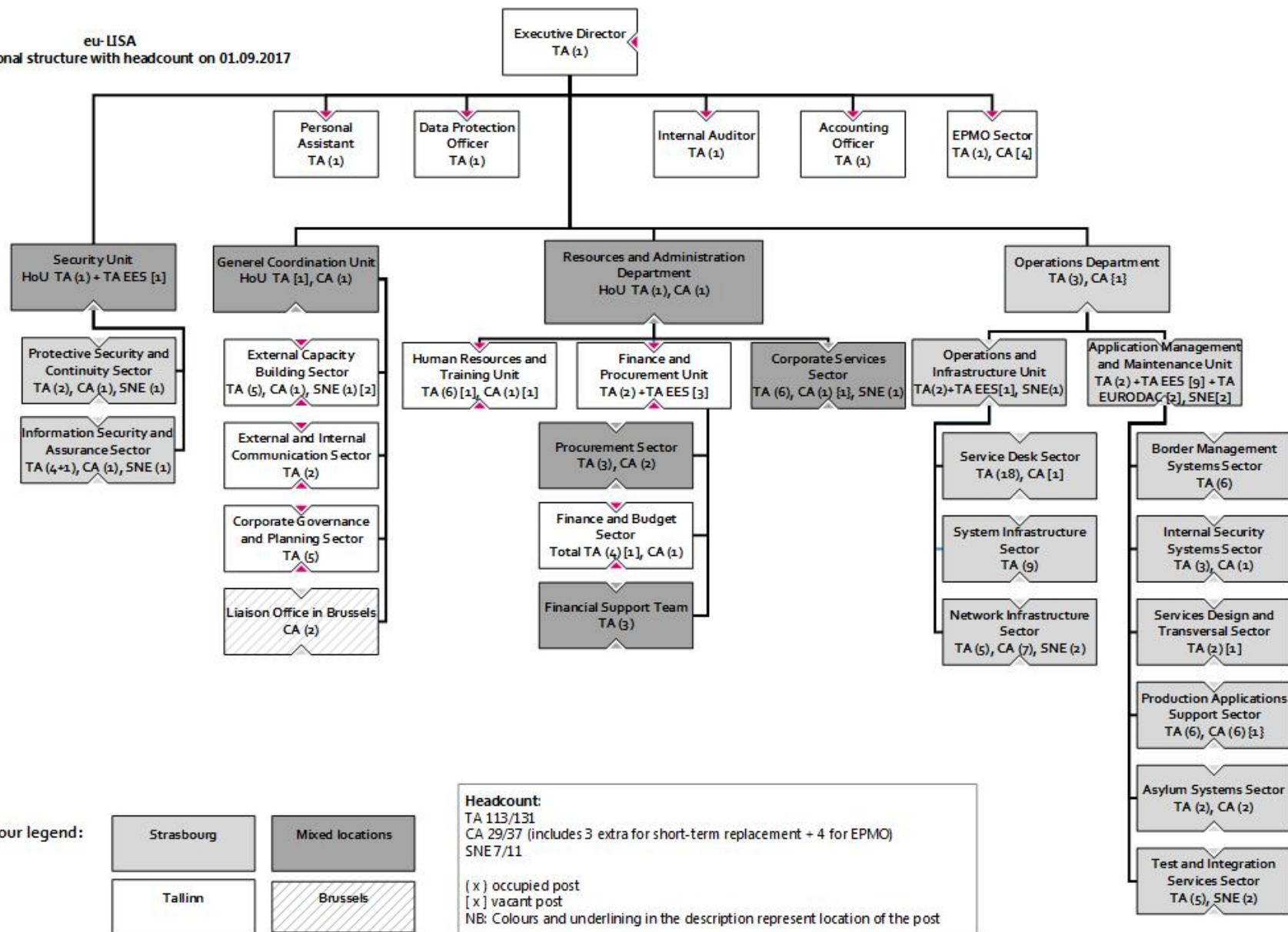
In 2016, the following changes were made to the organisational structure of eu-LISA affecting the headcount:

The post of an Advisor to the ED was created and the Head of the HRTU was transferred to this post while the duties of the Head of the HRTU were allocated to the Head of RAD.

The organisational chart shows the situation on 16 May 2016. It should present the situation on 31 December 2016. Therefore, it will be adjusted in January 2017, should the situation change.

For each organisational cell of eu-LISA, it presents the number of the posts in brackets () and the number of vacant posts in square brackets [].

eu-LISA
Organisational structure with headcount on 01.09.2017



Headcount:
 TA 113/131
 CA 29/37 (includes 3 extra for short-term replacement + 4 for EPMO)
 SNE 7/11

(x) occupied post
 [x] vacant post
 NB: Colours and underlining in the description represent location of the post

Annex XI: Standard SLA

In 2013, the Management Board of eu-LISA adopted document **2013-084 Standard SLA for IT systems managed by eu-LISA**, which defines the services provided by eu-LISA to Member States within its mandate.

Annex XII: Common Service Level indicators

The Common Service Level Indicators applicable for all large-scale IT systems are described in eu-LISA's **Service Level Management policy, Annex 2 SLA report requirements**