NOTE

From: eu-LISA
To: Delegations
Subject: Report on the state of play of development of the EES

Delegations will find attached a copy of a letter received by the General Secretariat of the Council on 30 January 2019, concerning the Report on the state of play of development of the Entry/Exit System.
Tallinn, 30 January 2019

Subject: Report on the state of play of the development of the EES

Dear Christine,

Pursuant to Article 72(2) of Regulation (EU) 2016/1125, eu-LISA shall submit a report to the European Parliament and to the Council on the state of play of the development of the EES Central System every six months.

I am hereby enclosing the second progress report addressing the aforementioned provision and covering the period from July to December 2018.

I remain at your disposal should you need any additional information.

Yours sincerely,

[Signature]
Kurm Gaikov
Executive Director

Annex: Report on the state of play of the development of the EES

Copy: Mr Claude Moraes, Chair of the Committee on Civil Liberties, Justice and Home Affairs, European Parliament

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Report on the state of play of the development of the EES as per Article 72(2) of Regulation (EU) 2017/2226

2nd EES Report
2nd Semester 2018
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Preamble

On 29 December 2017, Regulation (EU) 2017/2226 of 30 November 2017 establishing an Entry/Exit System (EES) as well as the amendments needed to integrate the new EES into the Schengen Borders Code entered into force.

The EES will electronically register the third-country nationals visiting the Schengen area for a short stay. EES aims at facilitating the border checks, reducing delays, ensuring reliable identification of over-stayers, in addition to strengthening internal security and the fight against terrorism.

The European Union Agency for the Operational Management of large-scale IT systems in the Area of Freedom, Security and Justice (eu-LISA or the Agency), in cooperation with the users of the system indicated in the above-mentioned Regulation, is empowered to develop and implement the EES. On 6 April 2016, the EES Regulation proposal was tabled by the European Commission, together with a Communication to the European Parliament and the Council for “Stronger and Smarter Information Systems for Borders and Security”. In Political agreement was reached in early 2017 and the EES Regulation entered into force on 29 December 2017. The Regulation delineates a period of three years of development for eu-LISA and the users of the system. The legal proposal foresees the use of operational appropriations for a total € 278,013,000 assigned to eu-LISA for the years 2017 until 2020 as part of the multiannual financial framework (MFF) 2014-2020. This amount shall cover the development part of all strands of the project, i.e. Central System, National Uniform Interface (NUI), the Networks and all other central system components defined in the legal base. The costs of hosting the NUI as well as those related to the connection of the national border infrastructure to it will be managed by the Commission. It should be noted that the timetable for utilisation of the budget allocated to the EES, as prepared by the European Commission in the Legislative Financial Statement (LFS) to the EES proposal, foresaw adoption of the EES proposal by the end of 2016. The later entry into force of the relevant legislation implies a shift in consumption timelines. The Agency will have to manage implications using the toolset provided by the Financial Regulation.

Being the centre of excellence in the field of development and management of large-scale IT systems, the Agency has been mandated to implement all activities concerning development, implementation and operational management of the central EES as well as connecting the National Systems (via the NUI) with the central EES.

During the implementation phase, eu-LISA will be responsible for the technical development and financial management of the central EES system, notably the award and management of contracts, whereas the Commission will manage the grants to Member States (MS) to cover the expenditures for integration of relevant national systems with the NUI.

According to Article 72 of Regulation (EU) 2017/2226, eu-LISA shall ensure that procedures are in place to monitor the development of the EES in light of objectives relating to planning and costs and to monitor the functioning of the EES in light of objectives relating to the technical output, cost-effectiveness, security and quality of service. By 30 June 2018, and every six months thereafter during the development phase of the EES, eu-LISA shall submit a report to the European Parliament and to the Council on the state of play of the development of the EES Central System, the Uniform Interfaces and the Communication Infrastructure between the EES Central System and the Uniform Interfaces. That report shall contain detailed information about the costs incurred and information as to any risks which may impact the overall costs of the EES to be borne by the general budget of the Union.
This is the second Report prepared in accordance with Art. 72 of the EES Regulation and covers the six month period from July 2018 to December 2018.

1. Progress against milestones

The Agency initiated preparatory works related to the implementation of EES in parallel with the process of adoption of the EES legal proposal in order to ensure smooth implementation of the system as soon as its legal base is adopted. This approach proved to be beneficial allowing the agency to accomplish number of tasks related to recruitment of additional staff, preparation of necessary tender procedures, development of necessary technical specifications and support to the Commission in preparation and adoption of necessary Implementing acts.

More specifically, in the reporting period Agency completed the Tender Technical Specifications (TTS) and successfully published the 2th phase of the restricted Call for Tender (CfT) for development of EES on 9 October 2018, in line with eu-LISA’s Management Board recommendation. The Agency prepared the initial EES detailed indicative implementation planning (covering both phases at central and national levels) in coordination with the Member States and the European Commission and under supervision of the established governance bodies, such as eu-LISA’s Management Board, the EES Programme Management Board (PMB), the EES Advisory Group and the Smart Borders (SB) Committee.

The initial detailed EES implementation planning has been developed and refined in close collaboration with the Member States in the course of the EES Advisory Group (AG) meetings. In the second half of 2018, six EES AG meetings were organised. However, the final detailed planning and all related collateral documents (e.g. detailed test planning illustrating the dependent MS activities) can be finalised only after the EES contract is awarded and the respective contractor commences its activities. eu-LISA estimates that final detailed plans will be available at the beginning of the second quarter of 2019 (Q2 2019).

The implementation activities will include the development and implementation of the EES Central System, the National Uniform Interface (NUI), the Web Services for Third Country Nationals (TCNs) and Carriers, the Communication Infrastructure, the Biometric Matching System, the changes in VIS and BMS in order to meet EES requirements and the central data repository intended to facilitate provision of reports and statistics. The progress of the implementation is continuously followed-up by the EES PMB and eu-LISA’s Management Board and in alignment with the EES implementation timeline of 36 months, calculated starting from June 2018.

Practical aspects of EES implementation have been organised by eu-LISA in three parallel work streams, namely:

- Recruitment;
- Procurement;
- Tender Technical Specifications.

The status of each individual work stream is summarised below.

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1 Subject of adoption of respective Implementing Regulation, currently under discussion between Commission and carriers.
1.1 Recruitment

According to the LFS attached to the EES proposal, the establishment plan of the Agency was amended through the addition of 14 Temporary Agent (TA) posts (11 technical profiles and 3 financial profiles).

As of today, eu-LISA has completed the selection process for all the posts. The on boarding process for the 11 technical profiles started on 16 January 2018 and was completed on 1 April 2018. The selection process for financial and security profiles have been completed and the new staff on boarded on the 1st of November 2018.

1.2 Procurement

Already in Q3 2016, eu-LISA started preparatory work for the necessary tender documentation for the procurement procedures for the implementation of EES. In order to build a system which will be highly scalable, the Agency decided to split the procurement into two parallel streams. The first one concerns implementation of the Central EES. The second one is dedicated to the Biometric Matching System (BMS) for EES. The specifications include also the latest requirements for the development of a Workflow Engine (WFE) in EES.

As of the time of writing this report, the status of the abovementioned procurement procedures is as follows:

**Call for tenders LISA/2017/RP/03 EES Central System**

Phase 1 of the procurement procedure was launched on 30 August 2017. Deadline to submit offers was set at 25 October 2017 and later extended to 8 November 2017. The evaluation of phase 1 was finalised on 21 June 2018. Phase 2 was launched on 9 October 2018, including the specifications for the WFE solution, as requested by the Management Board. The deadline to submit offers was 3 January 2019. The opening of offers took place on 07 January 2019. The Evaluation is ongoing and the award of the Framework Contract resulting from this call for tenders is planned for the end of Q1 2019.

**Call for tenders LISA/2018/RP/02 EES BMS**

Phase 1 of the EES BMS restricted CFT was launched on 20 June 2018. The submission date for candidates was the 1st of October 2018. The opening was held on 16 October 2018 and the evaluation is under finalisation. Launch of phase 2 is planned during Q1 2019 and the award of the Framework Contract during Q3 2019.

In addition to these two major tender procedures, eu-LISA will have to conclude following additional contracts to address:

- The necessary changes in VIS/BMS stemming from EES Regulation;
  
  The necessary changes will be implemented via a Specific Contract under the existing VIS/BMS Framework Contract (LISA/2015/RP/02). The implementation is planned to start in Q2 2019.

- Upgrade of the VIS communication infrastructure to meet EES implementation requirements.

  The Agency requested a proposal from the current service provider for the VIS TESTA-ng network (FWC Dil/07600). The contractor suggested a phased approach which would start with a feasibility study. A Specific Contract is planned to be signed on the feasibility study in January 2019.
1.3 Tender Technical Specifications

Since Q4 2017, the Agency has been supporting the European Commission in drafting the Implementing Acts (IAs) for EES, supporting the European Commission in this activity. The Agency actively contributed to the discussions between the Commission and the Member States in the remit of the Smart Borders Committee focused on the drafting of respective IAs. The Implementing Acts were essential prerequisites for the Agency to finalize the technical specifications of the EES and to progress with the implementation of the system according to Art. 36 of the EES Regulation. At the time of drafting this report, all Implementing Acts have been finalized and agreed with the Member States. They also passed the Commission’s internal review procedures. The formal adoption of the Implementing Acts is in progress and is expected to be finished by the end of Q1 2019.

The Agency is in process of finalization of the Tender Technical Specifications for EES BMS. It is expected in Q1 2019.

A total of 13 expert group meetings were organised by eu-LISA, of which four were dedicated to the technical specifications for biometric components. All the requirements in the Implementing Acts have been translated to the Tender Technical Specifications (TTS) of EES.

Since Q3 2018 the Agency is working on the specifications related to the upgrade of the VIS communication infrastructure to meet the EES implementation requirements. These specifications have been finalized at the end of 2018. The specifications will serve as the basis to start a feasibility study with the VIS TESTA-ng provider in Q1 2019.

1.4 Programme governance

The EES Regulation defines in Art. 37(2) the governance bodies that should be active in the period of development and implementation of the system. In this respect, the Agency has performed the following actions:

- A Programme Management Board (PMB), composed of ten Members has been established, in line with the provisions of the EES Regulation. The Programme Management Board aims at ensuring the adequate management of the design and development phase of the EES and the consistency between central and national EES projects.

- The EES Advisory Group (AG) has been established. The first EES Advisory Group (AG) meeting took place on 25 June 2018 in Tallinn, Estonia. The Chair, nominated by the eu-LISA Executive Director, has been formally appointed and by now six EES AG have been held, the last one for 2018 on 3rd of December.

- In parallel, the Agency, in cooperation with CEPOl and EBCGA, has commenced necessary preparatory activities related to preparations of relevant trainings for EES end-users. Representatives of all three Agencies participated in a common webinar that took place in December 2018. The training needs assessment that will feed further elaboration of training curricula by the Agencies was introduced during the meeting and will be completed in the course of Q1 2019.

Additionally, in accordance with the Art. 37, the eu-LISA Management Board should adopt the technical specifications of the EES Central System and its evolutions, of the physical architecture (including the Communication Infrastructure of the NUls), of the Communication Infrastructure, of the Secure
Communication Channel between the EES Central System and the VIS Central System, of the web service and of the data repository.

- Prior to the adoption by the Management Board, the Commission will assess the EES tender documentation, in parallel with the finalization of the 2nd phase of the EES Tender. With this approach the risk of having delays in the EES Implementation (due to the review of the tender specifications) will be substantially reduced. The formal procedure for adoption of decision by the Management Board has been defined. It entails a prior full assessment of the specifications by the EES PMB.

- At the end of November 2018, the Agency has sent to the Commission the request for a formal review of the above-mentioned documentation. The Commission is expected to assess:
  - that the documentation contents are compliant with the EES Regulation and that each item in the specification is required by the Regulation, and
  - that the EES Regulation is completely reflected in the documentation and whether there are items of the Regulation not covered by the specifications.

It is expected both reviews to be accomplished by the end of Q1 2019.

2. Budget execution

The EES Legislative Financial Statement (LFS) accompanying the European Commission’s proposal for the establishment of EES is based on the European Commission’s Cost Study published by DG HOME in October 2014 as a complement to the Smart Borders Study. An initial total budget of €278 Million has been assigned to eu-LISA for the design, implementation and maintenance of the EES and associated services in the period 2017-2020; this sum includes the personnel and running costs. The significant delay in the adoption of the legal basis, and the corresponding delay in the possibility for the Agency to initiate the necessary procurement, resulted in the adoption of significant global commitments in 2017 and 2018.

The following table provides a breakdown of the budget by year, and a summary of implementation as of 31 December 2018.

<table>
<thead>
<tr>
<th>Commitment appropriations financed in the LFS</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commitment appropriations financed in the LFS</td>
<td>54,570,000</td>
<td>22,612,000</td>
<td>161,225,000</td>
<td>21,605,000</td>
<td>273,012,000</td>
</tr>
<tr>
<td>Transfer of additional commitment appropriations to EES</td>
<td>1,214,768</td>
<td></td>
<td></td>
<td></td>
<td>1,214,768</td>
</tr>
<tr>
<td>Total commitment appropriations</td>
<td>55,784,768</td>
<td>22,612,000</td>
<td>161,225,000</td>
<td>21,605,000</td>
<td>274,227,768</td>
</tr>
</tbody>
</table>

Global commitment (commitments earmarked for consumption in Year N or Year N+1)

<table>
<thead>
<tr>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>54,570,000</td>
<td>55,576,253</td>
<td></td>
<td></td>
<td>110,146,253</td>
</tr>
</tbody>
</table>

Consumption by individual commitments within the budget year

<table>
<thead>
<tr>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>3,171,535</td>
<td>3,171,535</td>
<td></td>
<td></td>
<td>6,343,070</td>
</tr>
</tbody>
</table>

Total consumption

<table>
<thead>
<tr>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>54,570,000</td>
<td>8,112,535</td>
<td></td>
<td></td>
<td>62,682,535</td>
</tr>
</tbody>
</table>

It should be noted that Agency did not execute any payments related to EES implementation during reporting period.
3. Major Issues

For the EES Implementation Project, the following major issues have been identified:

<table>
<thead>
<tr>
<th>Issue</th>
<th>Description</th>
<th>Management approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complexity of the NUI</td>
<td>The National uniform Interface (NUI) shall connect relevant national systems with the central EES. During the discussions related to the Implementing Act for the NUI, Member States added a number of additional requirements to increase the efficiency of the NUI. However, as a result, the complexity of the NUI has been increased substantially as well. A side effect might be increased development costs of the NUI.</td>
<td>The Agency took mitigating action (as incorporating additional requirements coming from the EES users into the TTS), closed the current issue and categorised it as a risk (highlighting the impact on the timeline).</td>
</tr>
<tr>
<td>Utilization of carried-forward budget from 2017</td>
<td>The LFS attached to the EES proposal tabled by the Commission provided a breakdown of the budget for development of the system over the period 2017-2020. It has been built on the assumption that the EES proposal will be adopted by the end of 2016. Because the EES Regulation was only adopted in late 2017 and entered into force on 25.12.2017, eu-LISA was not able to use the allocated budget for 2017 and it was carried-forward to 2018. According to Art. 13 of the Financial Regulation it shall be used by the end of 2018 or otherwise it might be lost.</td>
<td>The Agency took the mitigating actions to use the carried-forward budget for other EES-related activities, particularly those related to the Visa Information System (VIS) network upgrade and VIS/BMS changes stemming from the EES Regulation, and considers the issue as resolved.</td>
</tr>
</tbody>
</table>

4. Major Risks

For the EES Implementation Project, the following major risks have been identified:

<table>
<thead>
<tr>
<th>Risk title</th>
<th>Risk description</th>
<th>Management approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>Budget shortcoming for the EES changes in VIS/BMS</td>
<td>Possible budget shortcomings due to higher than anticipated costs for development of capabilities for the changes in VIS/BMS to meet EES requirements.</td>
<td>Reduce</td>
</tr>
<tr>
<td>Capacity limitations of the data centre of the Agency in Strasbourg</td>
<td>EES shall meet very high targets for its availability and performance. That makes the footprint of the system significantly bigger than initially anticipated, thus increasing requirements for data centre space, cooling and power supply. Depending on the final</td>
<td>The Agency is looking for architectural solutions to reduce the impact of this issue. It is analysed the possibility to deploy a temporary data centre in the operational site in Strasbourg to bridge the gap. At the same time, the Agency initiated preparatory works</td>
</tr>
<tr>
<td><strong>EES implementation budget</strong></td>
<td>There is a risk that the budget allocated in the LFS might not be sufficient to cover all necessary tasks for EES implementation due to the higher complexity of the system and market response to the tender procedures.</td>
<td></td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td><strong>VIS/BMS evolution due to EES Regulation</strong></td>
<td>EES EO preparation activities (testing in particular) are strongly linked to the readiness of the VIS/BMS changes resulting of the EES Regulation. The dependencies are at both central and MS levels (alignment of visa systems with the new IC).</td>
<td></td>
</tr>
</tbody>
</table>
| **NUI Delivery** | Impact on the associated preparatory and test activities both at central as well as at national levels; associated impact in relation with the TAP location (or relocation).  
Dependency on the MS data centre readiness to host the TAP/NUI.  
Dependency on the Business Continuity Planning/Disaster Recovery Plan (BCP/DRP) related aspects.  
Effect: cascaded delay in the testing activities. Moreover, upon delivery and installation of the NUI, MS would need training activities (2-3 months); thus, impact on the overall planning. |
| **VIS network upgrade** | Available budget for the upgrade of VIS Network is approximately 3 times lower than the offer from the network contractor.  
The contractor provided an offer to the Agency.  
The delay in reaching an agreement with the Network contractor for upgrading VIS network will have impact on the EES and ETIAS planning. |
| **EES project milestones not met by MS** | Any delay encountered by a MS during the national preparation of EES related activities (EES Central System, VIS/BMS, VIS network) |

For the 2nd extension of the operational site, which will provide a permanent solution to the capacity limitations of its present data centre.

Reduce

Monitor. Further assessment will be done after award of the EES development contract at the end of Q3 2019.

Reduce

Harmonisation of different milestones.  
Indicative planning shared with the stakeholders.  
The Agency is already preparing all the necessary documentation to be shared with the VIS/BMS contractor.  
Monitor VIS MWO to comply with project deadline.

Reduce

The Agency together with the involved stakeholders have initiated the exercise.  
A draft document (DC preparation) detailing all aspects in relation with the topic has been delivered to the EES AG.  
The Agency has already taken risk mitigation actions in the TTS (early NUI Hardware delivery and phased approach for Software development).  
Planning details and associated mitigating actions will be further elaborated in priority.  
Upon contractual arrangements, get the contractor’s commitment with planned milestones (applicable also to the MS).  

Share

Escalated.

High level meeting took place and a phased approach was agreed to upgrade the network.

Further assessment will be performed once contractor submits its final offer.

Share
| Coordination at national level | Given the numerous dependencies and parallel activities at national level, any coordination issue will have an impact both on central as well as on other national activities. EIO of EES is impacted. | Reduce Management Board decided to enhance the support of EES AG members. They shall act as Single Point of Contact between their respective countries and the AG. Strong coordination within the different national teams is required. | Share indicative planning asap with the Ms. Ms to report on monthly basis at AG and PMB level. |
1 Regulation (EU) 2017/1221 of the European Parliament and of the Council of 30 November 2017 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 the Member States and determining the conditions for access to the EES for law enforcement purposes, and amending the Convention implementing the Schengen Agreement and Regulations (EC) No. 767/2008 and (EU) No. 607/2013.


* European Commission Technical Study on Smart Borders - Cost Analysis, October 2014.

***End of the Report***