

SIS II – Report on the technical functioning*

July 2017

eu-LISA • European Agency for the operational management of large-scale IT systems in the area of freedom, security and justice

SIS II

SIS II plays a crucial role in facilitating the free movement of people within the Schengen area, and ensuring a high level of security by supporting border controls at the external Schengen borders as well as law enforcement and judicial cooperation throughout Europe. The system enables competent authorities to enter and consult data on wanted persons, persons who may not have the right to enter or stay in the EU, missing persons – in particular children – and objects (such as banknotes, aircraft, boats, cars, vans, containers, firearms and identity documents) that may have been stolen, misappropriated or lost.

The EU Member States connected to SIS II are Austria, Belgium, Bulgaria, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden and the UK. Associated Countries connected to SIS II are Iceland, Norway, Switzerland and Liechtenstein. Croatia connected to SIS II in June 2017 whilst the authorities of Ireland and Cyprus are currently preparing for technical connection to SIS II. Europol and Eurojust also consult the system, within their respective mandates.

eu-LISA's role

eu-LISA ensures the operational management of SIS II thus guaranteeing the continuous, uninterrupted exchange of data between national authorities 24 hours a day, 7 days a week.

eu-LISA is also responsible for providing training in specific fields to national SIS II operators, SIRENE staff and Schengen evaluators. Publishing annual statistics as well as lists of authorities that can access the system is also a part of the Agency's mandate. Moreover, eu-LISA is tasked with managing the accession of new Member States and authorised bodies to SIS II.



The *Report on the technical functioning of Central SIS II and the Communication Infrastructure, including the security thereof and the bilateral and multilateral exchange of supplementary information between Member States* is part of the eu-LISA legal reporting obligations, as per Article 50(4) of Regulation (EC) No 1987/2006 and Article 66(4) of Council Decision 2007/533/JHA. Said technical report, submitted to the European Parliament, the Council and the Commission, is the second one prepared by eu-LISA since SIS II became operational in 2013.

The report covers the period from 01 January 2015 until 31 December 2016. It encompasses information available at central level (operational activities, availability and performance, change management, releases, test activities, etc.) together with statistical data provided by the Member States in the framework of annual statistic exercises.

The Report at a glance

During the reporting period, the SIS II Central system functioned in a stable manner in compliance with the agreed to response times. The system was regularly available registering only a few incidents that did not prevent the normal use of the system. SIS II proved to be the main and most powerful platform for cooperation and information exchange in the EU. It was heavily utilized by the Member States as a result of increased terrorist threats in Europe and by law enforcement agencies due to growing information exchange needs. In 2016, SIS II was searched almost 4 billion times, one billion more than in 2015.

* This document is provided purely for information purposes, it highlights key points of the accompanying report "Report on the technical functioning of Central SIS II and the Communication Infrastructure, including the security thereof and the bilateral and multilateral exchange of supplementary information between Member States".

© European Agency for the operational management of large-scale IT systems in the area of freedom, security and justice, 2017

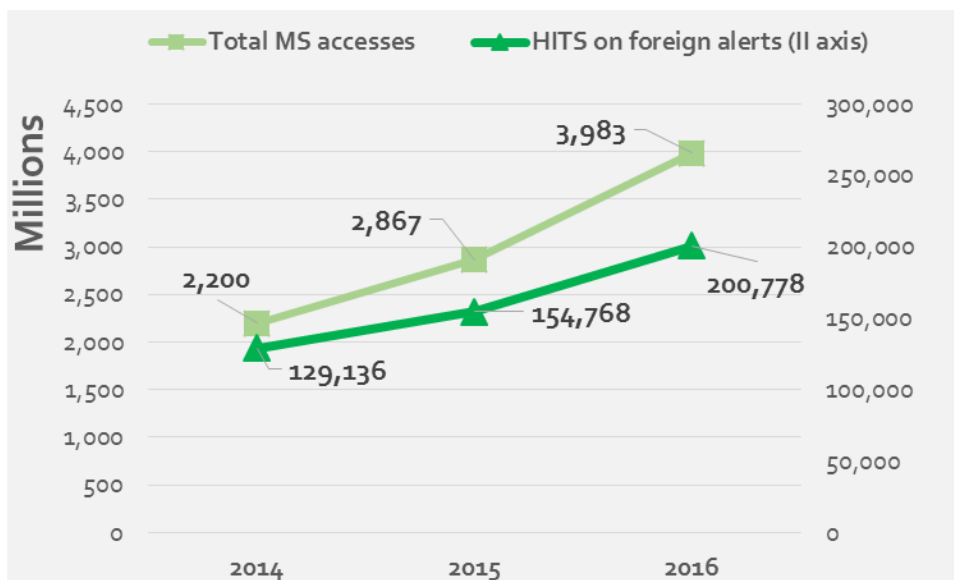
ISBN 978-92-95208-63-6

ISSN 2443-8286

doi:10.2857/ 824021

EL-AD-17-001-EN-N





In line with the increase in searches, the reported number of hits considerably grew during the reporting period. Member States reported 200,778 hits on foreign alerts in 2016, which represents an increase of almost 30% compared to data reported on for 2015.

On 31 December 2016, there were over 70 million alerts stored in the system, showing a net increase of 51% since the entry into operation of the system in April 2013.

Taking into account the observed increase in the use of SIS II as well as the recent and upcoming changes which will bring additional searches, it was decided to increase the capacity of the SIS II database and to extend the Central SIS II searching capacity to avoid service degradation. The database capacity upgrade to 100 million alerts went into production in the last quarter of 2016. In April 2017, the Agency implemented a short-term solution by upgrading the infrastructure in order to increase the search capacity.

In 2016, the implementation of the Automated Fingerprint Identification System project (AFIS), providing biometric matching capabilities to SIS II was initiated. This new functionality will allow the identification of a person based on fingerprints stored in SIS II. The Agency used a two-step approach, where all the necessary preparatory work, including the design of the AFIS solution, were carried out in 2016. Implementation is being carried out in 2017 and the entry into operation of phase 1 is foreseen for the first quarter of 2018.

During the reporting period, different studies were carried out in order to identify the best technology for a future Central System simulator and further improve the availability of the system as well as prepare the implementation of state-of-the-art user access management architectures. In addition, in a continuous process to increase the usability and effectiveness of SIS II eu-LISA, in cooperation with the Member States, has defined requirements and reports to support data quality efforts. In the summer of 2016, a first set of reports on data quality were made available. At the end of 2016 the second phase of the project was launched, with an emphasis on persons alerts. As of May 2017, an exhaustive set of reports is available to Member States on a monthly basis.

In February 2015, the EDPS carried out an inspection of the Central SIS II and no critical findings were reported.

On 21 December 2016, following an overall evaluation of SIS II carried out in early 2016, the European Commission presented three legislative proposals aimed at strengthening the operational effectiveness and efficiency of SIS II. The triple structure of the SIS reform package reflects the different patterns of participation of the Member States in the Schengen acquis insofar as the different fields of border checks, police and judicial cooperation and return are concerned. The proposed improvements will further enhance the ability of the system to fight terrorism and cross-border crime, improve border and migration management and ensure an effective information exchange between Member States to increase the security of European citizens.

About the Agency

eu-LISA is the European Agency that ensures 24/7 operational management of the European Union's (EU) largest IT systems and their respective communication infrastructures in the area of freedom, security and justice: Eurodac, SIS II and VIS. With information technology, eu-LISA safeguards the EU's internal security and supports the implementation of asylum, migration and border management policies for the benefit of citizens.
www.eulisa.europa.eu