

Second generation Schengen Information System (SIS II): establishment, operation and use

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The Commission presented this report on the availability and readiness of technology to identify a person on the basis of fingerprints held in the second generation Schengen Information System (SIS II).

Given that it is becoming increasingly difficult to establish the identity of a person due to changing names and the use of aliases or fraudulent documents and that this practice not only undermines border security but also the internal security of the EU, the Commission stated that a **reliable method to establish identity** is needed. The use of fingerprints would be an efficient way for both border guards and law enforcement officials to identify persons sought by the authorities and to detect cases of document fraud.

To date there is **no EU-wide system** which would allow the checking of persons on the basis of fingerprints.

The second generation Schengen Information System (SIS) entered into operations on 9 April 2013. A new feature is the storage of fingerprints in the central system. At present, prints are used to confirm the identity of a person located as a result of a search, usually on name and date of birth. This is a “one-to-one” search - the person’s prints are compared to one set of prints stored in SIS. However the possibility to identify a person on the basis of his/her fingerprints requires an evolution to the present law enforcement practice: the comparison of a person’s prints to all sets of prints – a “one-to-many” search – to identify the person solely on the basis of fingerprints. This functionality requires the implementation of an Automatic Fingerprint Identification System (AFIS).

AFIS has been successfully used in numerous national and cross-border cooperation databases. For the E. U. the obvious examples are the Visa Information System (VIS) and EURODAC.

Both the **SIS II Decision** and the [SIS II Regulation](#) provide a legal basis for using AFIS. Before this functionality is implemented, the Commission must present a report on the availability and readiness of the required technology, on which the European Parliament shall be consulted.

The objective of this present report is to address this requirement and to confirm that fingerprint identification technology is available and ready for its integration into SIS-II.

The level of readiness and availability have to be assessed in the context of the unique situation and characteristics of SIS II which present a series of technical and organisational challenges requiring appropriate and customised solutions.

This report, supported by a study conducted by the Commission’s Joint Research Centre (JRC), also outlines the **technical and organisational requirements** in the context of SIS, describes the type of scenarios where fingerprints are used operationally and includes recommendations for the successful implementation of AFIS functionality.

The JRC study and its findings: the Horizon 2020 EU Research and Innovation Framework Program describes the readiness and availability of technology using a nine-point scale: level 1 represents the observation of basic principles, level 9 the proving of actual systems in an operational environment. AFIS technology has already achieved level 9 with many systems working world-wide.

Recommendations: overall, the report confirmed the readiness and availability of AFIS technology. In addition, the Commission considered that the implementation of the following recommendations should be considered to support the successful deployment and use of an AFIS in SIS:

- need for complementary statistics;
- promotion of best practices;
- common exchange standard;
- Prüm and SIS II complementarity;
- storage of multiple datasets;
- quality of capture points;
- quality of identification systems;
- quality check central service;
- reporting on lower quality fingerprint card;
- integrity of the database;
- consultation and queries;
- performance benchmark.

The next steps: action plan: the completion of the study and the submission of this report for consultation to the European Parliament are the first steps towards the provision of AFIS functionality in the SIS environment. In practical terms, the high-level description of activities which must now take place, with euLISA and the Member States, can be summarised as follows:

- establish the requirements for the special quality check to ascertain the fulfilment of a minimum data quality standard;
- finalise the user requirements and the sizing of the required system;
- define the architecture of the required system;
- define the technical specifications and the timeline for implementation;
- carry out the project leading to the implementation of the SIS AFIS.

In conclusion, the Commission that the AFIS functionality has already been intrinsically linked with law enforcement and border databases. SIS constitutes one of these databases and alerts related to persons will not deliver their full capacity and usefulness without the support of an AFIS.

In the light of the analysis and observations summarised in this report, the Commission concluded that **AFIS technology has reached sufficient levels of readiness and availability** in order to be integrated in SIS.