ANNEX

MINIMUM DATA QUALITY STANDARDS AND TECHNICAL SPECIFICATIONS
FOR THE USE OF PHOTOGRAPHS AND DACTYLOSCOPIC DATA IN SIS.

1.   **Dactyloscopic data**

1.1.   *Categories of dactyloscopic data used in SIS*

The following categories of dactyloscopic data may be used in SIS:

(a)   flat fingerprints, including flat thumb slaps and flat four-finger slaps;

(b)   rolled fingerprints;

(c)   palm prints.

1.2.   *Permitted dactyloscopic data formats*

Member States may transmit to Central SIS:

(a)   data captured using live-scan devices at the national level that are capable of capturing and segmenting up to ten individual fingerprints; rolled, flat or both;

(b)   'inked' fingerprints and palm prints; rolled, flat or both, which are digitally scanned at the relevant quality and resolution.

The Automated Fingerprint Identification System of Central SIS (CS-SIS AFIS), as defined in Article 33(2) of Regulation (EU) 2018/1861, must be compatible and interoperable with the dactyloscopic data formats mentioned under points (a) and (b).

1.3.   *Minimum data quality standards and technical specifications*

1.3.1.   File and compression format ('dactyloscopic container')

The input format for the transmission of dactyloscopic data ('dactyloscopic container') to SIS must be compliant with the SIS NISTstandard based on the ANSI/NIST[1] binary format.

A 'SIS NIST checker' will be established at the level of the technical support function of Central SIS (CS-SIS) to check compliance of the transmitted dactyloscopic container with the defined SIS NIST standard.

Dactyloscopic containers that do not comply with the defined SIS NIST standard will be rejected by CS-SIS AFIS and will not be stored in Central SIS. If a non-compliant file is rejected by CS-SIS AFIS, CS-SIS will send an error message to the Member State that has transmitted the data.

1.3.2.   Image format and resolution

Fingerprint and palm print images referred to in points (a), (b) and (c) of Section 1.1 must be of a nominal resolution of either 1 000 ppi or of 500 ppi with 256 grey levels in order to be processed by CS-SIS. 500 ppi images must be entered using the WSQ format while 1 000 ppi images must be in JPEG2000 (JP2) format.

1.3.3.   Quality thresholds for the storage and use of fingerprints and palm prints images in CS-SIS AFIS

Dactyloscopic images must comply with the quality thresholds laid down in the SIS Interface Control Document and Detailed Technical Specifications in order to be stored and used in CS-SIS AFIS.

Member States are recommended to check the compliance with the quality thresholds of the dactyloscopic images before transmitting them to CS-SIS.

Compliant dactyloscopic containers that contain dactyloscopic images on fingerprints or palm prints below the quality thresholds will not be stored in CS-SIS AFIS and will not be used for biometric searches. Dactyloscopic containers that contain dactyloscopic images rejected by CS-SIS AFIS may only be used to confirm the identity of a person in accordance with Article 33(1) of Regulation (EU) 2018/1861. CS-SIS will send an error message to the Member State that has transmitted the data when a file has been rejected by CS-SIS AFIS due to the low quality of the images.

1.4.   *Biometric searches*

CS-SIS AFIS will provide a biometric search functionality for all types of dactyloscopic images satisfying the quality requirements established in Section 1.3.3.

The performance requirements and biometric accuracy for the different categories of biometric searches in CS-SIS AFIS are laid down in the SIS Interface Control Document and Detailed Technical Specifications.

2.   **Photographs**

A minimum resolution of 480 × 600 pixels with 24 bits of colour depth must be used when entering photographs in SIS.

Commission Implementing Decision (EU) 2020/2165 of 9 December 2020 on laying down rules...
Document Generated: 2023-09-15

3

(**1**)   American National Standard for Information Systems / National Institute of Standards and Technology.

Changes to legislation:
There are currently no known outstanding effects for the Commission Implementing Decision
(EU) 2020/2165, ANNEX.