AFIS Information Sheet
Automated Fingerprint Identification System

Function
The Automated Fingerprint Identification System AFIS aids the identification of people and traces at crime scenes by virtue of the biometric characteristics of finger and palm prints. The national AFIS database has been operated by the Federal Office of Police (Fedpol) since 1984. Because of its proven quality and efficiency, today’s police forces could not do without it.

Basis
Fingerprints are reliable means of identifying people and traces evidence at crime scenes because the pattern of the friction or epidermal ridges of fingers and palms is unique to every person and cannot be manipulated. The associated science is known as dactyloscopy (Greek: daktylos = "finger" and skopein = "to examine"). AFIS aids the identification of people by comparing a new fingerprint with prints already stored in the database. The fingerprint expert, however, is ultimately responsible for the final evaluation.

Applications
The type of person identification applied depends on the situation:

<table>
<thead>
<tr>
<th>Type of inquiry</th>
<th>Aim</th>
<th>User / field of application</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 finger (both thumbs)</td>
<td>Very fast person identification (within a few minutes)</td>
<td>Police, Border Guard Corps, embassies (visa applications) State Secretary for Migration (Asylum Section)</td>
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<tr>
<td>10 finger (without palms)</td>
<td>Person identification and investigations on unsolved trace evidence from the crime scene</td>
<td>State Secretary for Migration (Asylum Section)</td>
</tr>
<tr>
<td>10-Finger (with palms)</td>
<td>Person identification and investigations on unsolved trace evidence from the crime scene</td>
<td>Police¹ (police fingerprinting) Border Guards</td>
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<tr>
<td>Traces at crime scenes</td>
<td>Identification of trace evidence at crime scene</td>
<td>Police¹ (secure evidence at crime scene)</td>
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¹ Including exchange with foreign authorities, if legally permissible
Process

People’s finger and palm prints are taken either directly by means of a high-definition scanner or using ink on a fingerprint sheet that is afterwards scanned into the database. The data is subsequently transmitted either by a secure wired or wireless connection. Fedpol’s AFIS DNA Services Division receives the data and, following a quality check, defines the identification features of the prints, carries out a check in the AFIS database and verifies the results manually. The pseudonymised search result is supplemented with the corresponding personal and case data and then transmitted to the client via a secure channel.

The content of the search result can either incriminate or clear a person of suspicion.

Example of fingerprint scanning using a portable AFIS terminal:

![Fingerprint scanning using a portable AFIS terminal](image)

Data protection

The AFIS database only stores fingerprints. Personal and case details are physically removed from the prints and stored in a separate database. A connection between the two sets of data is only made when a search turns up a hit with a print already stored in the database. This procedure ensures adherence to the legal provisions on data security.

Statistics

The AFIS database currently contains about 52,000 2-finger prints, 869,000 10-finger prints as well as 98,000 outstanding crime scene traces.

Approximately 250,000 checks are made annually with the help of the database. Around 100,000 of these are person identification checks, including 2,700 that turn up a hit relating to outstanding crime scene trace evidence.

Further information

http://www.fedpol.admin.ch/fedpol/de/home/sicherheit/personenidentifikation.html

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2 Ordinance on processing biometric identification data (SR 361.3)

3 As at: 31.12.2015