



INTERPOL

FACT SHEET

Facial recognition

Computerized facial recognition is a relatively new technology, being introduced by law enforcement agencies around the world in order to identify persons of interest.

Coupled with an automated biometric software application, this system is capable of identifying or verifying a person by comparing and analysing patterns, shapes and

The INTERPOL Face Recognition System (IFRS) contains facial images received from more than 160 countries which makes it a unique global criminal database.

More than 650 criminals, fugitives, persons of interest or missing persons have been identified since the launch of INTERPOL's facial recognition system at the end of 2016.

► FACTORS IN FACIAL IDENTIFICATION

Unlike fingerprints and DNA, which do not change during a person's life, facial recognition has to take into account different factors, such as:

- Ageing
- Plastic surgery
- Cosmetics
- Effects of drug abuse or smoking
- Pose of the subject

Working with good quality images is also crucial. Low or medium quality images may be not searchable in the IFRS system and, if they are, the accuracy of the search and the results themselves can be significantly affected.

An ICAO standard passport photo would be ideal, since this is a frontal image of the subject that has even lighting on the face and a neutral background.

► HOW DOES IT WORK?

When a facial image (probe image) is entered into the system it is automatically encoded by an algorithm and compared to the profiles already stored in the system. This results in a 'candidate' list of the most likely matches.

We always carry out a manual process – we call this Face Identification – to verify the results of the automated system. Qualified and experienced INTERPOL officers examine the images carefully to find unique characteristics that can lead to one of the following results: 'Potential candidate', 'No candidate' or 'Inconclusive'.

This information is then passed on to the countries that provided the images, and to those that would be concerned by the profile or a match. All information is handled in line with INTERPOL's Rules on the Processing of Data.

► CROSS-CHECKING WITH INTERPOL NOTICES

All face images in Notices and Diffusions requested by member countries are searched and stored in the face recognition system, provided they meet the strict quality criteria needed for recognition.

Facial recognition

Member countries can also request a 'search only' in the face system, for example, to carry out a check on a person of interest at airports or other border crossings. The results are returned quickly to enable immediate follow-up action, and images are not recorded in the system.

► **BRINGING EXPERTS TOGETHER**As this computerized biometric comparison technology is still in its infancy in most countries, standards and best practices are still in the process of being created, and INTERPOL is contributing to this.

Held every two years, INTERPOL's International Fingerprint and Face Symposium provides an opportunity for experts from around the world to share best practice and latest developments.

We also host meetings of the Face Expert Working Group twice a year. This is INTERPOL's advisory group for new technology, identification procedures, training needs and for producing official documents to assist member countries in this field.

The Expert Group produced a best practice guide for the quality, format and transmission of facial images to promote accurate and effective recognition. We strongly encourage our member countries to use the facial recognition service and to follow the recommendations.



INTERPOL

► **CONTACT INFORMATION:**

Contact us via our web site. For matters relating to specific crime cases, please contact your local police or the INTERPOL National Central Bureau in your country.

► **Twitter:** @INTERPOL_HQ

► **YouTube:** INTERPOLHQ

► **WWW.INTERPOL.INT**

