# BRIEFING NOTE

## INTERNATIONAL CONFERENCE on BIOMETRICS for BORDERS 2019:

### Morphing and Morphing Attack Detection Methods.

**In support of the CBD Divisional Meeting of 14 March 2019 this briefing note introduces the concept and the strategic objectives of the International Conference on Biometrics for Borders 2019 (ICBB19), which will be organised by RIU in October 2019 in Warsaw, Poland.**

### 1. Rationale and Strategic Objective of an Annual International Conference on Biometrics for Borders

Biometric technologies that are used to recognise persons have become an integral part of the border checks process, with the application of biometric technologies providing new opportunities to border management to facilitate legitimate travelers while at the same time making borders more secure. At the same time, this large-scale integration of biometric technologies into the border control infrastructure introduces new challenges to border security: Biometric systems can be attacked and subverted for the purpose of passing through border control undetected. This means that with the introduction of novel technologies supporting biometric recognition, countermeasures that can prevent, detect or defeat such attacks are needed. For Frontex and the border management community, the exploration and development of advanced biometric technologies and related capacities is crucial to border security and the facilitation of legitimate travellers, especially when considered in the context of the set of EU-wide measures proposed by the Smart Borders Package. However, the Agency currently plays the role of contributor: Frontex participates in the conferences organised by other major players in the field of biometrics, who are not border management authorities, but who are increasingly setting the agenda on biometrics in the context border control and border security. For this reason, Frontex will organise a series of annual conferences – **International Conference on Biometrics for Borders** – dedicated to the topic of biometrics, its (possible) use in border control, and the challenges they may pose to border security. The **primary strategic objective** of the Conference is to position the Agency as a key player in this area of research and enable Frontex to become a driving force in providing support and expertise to Member States/COM on the topic biometrics, and the range of possible *applications* and *implications* for borders.

### 2. Scope of the ICBB2019

Different thematic areas of interest will be covered on a year by year basis, with the ICBB2019 focusing largely on the topic of morphing and its implications for border management. Morphing in the context of border control is a relatively new and undocumented phenomenon. Researchers, law enforcement authorities and industry alike are already actively engaged in research aimed at addressing and overcoming this challenge. This year's Conference will provide a platform for international dialogue by bringing together the law enforcement community that acknowledges morphing as a potential problem, and the research community and industry that are actively developing ways to prevent, detect and/or defeat morphing attacks. To help catalogue the various research efforts and latest developments in detection techniques and algorithms, the following key objectives have been identified:

- Discuss the current situation and the problem for borders;
- Inventory and discuss ongoing (research) activities related morphing and morphing attack detection methods;
- Identify current practices aimed at the detection and/or prevention of morphing attacks;
- Establish a network between border management authorities and academia for the exchange of information on on-going research and latest developments in morphing attack detection algorithms/methods.

With the 2019 focus on morphing, the Conference will also be aligned the objectives of the European Commission as outlined in the 2016 Action Plan to strengthen the European response to travel document fraud. Through the action plan the European Commission aims to strengthen R&D activities in the area of breeder documents and document verification, including addressing the issue of morphing, in the framework of the Horizon 2020 programme for Secure Societies 2018-2020.

### 3. Target Audience and Organisation

The target audience for this two-day conference consists of national authorities from the European Union (EU) Member States and non-EU countries, EU policy-makers and agencies, researchers and industry active in the field of biometrics. The first day of the Conference will target relevant EU and non-EU national authorities, EU policy-makers and agencies. The second day of the Conference will be bring them together the research community and the industry to support the aforementioned key objectives.

- Annual **International Conference on Biometrics for Borders** focusing on different thematic areas of interest.

- **Position the Frontex as a key player in the field of biometrics** and enable the Agency to become a driving force for support and expertise to its primary stakeholders on the topic of biometrics, and the range of possible *applications* and *implications* for borders (e.g. methods of identifying abuse such as software for morphing, reverse engineering).

- 2019: **Morphing and its implications for border management**:
  - ✓ Two-day Conference
  - ✓ National authorities from around the world
  - ✓ Research and Industry (e.g. dedicated academic sessions and industry side-event)

A platform for international dialogue by bringing together the law enforcement community that acknowledges morphing as a potential problem, and the research community and industry that are actively developing ways to prevent, detect and/or defeat morphing attacks.

- **2019 Objectives:**
  - ✓ Discuss the current situation and the problem for borders;
  - ✓ Inventory and discuss ongoing (research) activities related morphing and morphing attack detection methods;
  - ✓ Identify current practices aimed at the detection and/or prevention of morphing attacks;
  - ✓ Establish a network between border management authorities and academia for the exchange of information on on-going research and latest developments in morphing attack detection algorithms/methods.