



**Minutes - Working Group 2 (WG2)
COST Action CA16101 “MULTI-modal Imaging of FOREnsic SciEnce
Evidence - tools for Forensic Science”**

*Catania, Italy
17/09/2019 (16:00-18:00)*

Participants: 23 people (List at the end of the document)

The meeting started with a few remarks from Simona Francese regarding the main points we need to take in consideration in the light of the deliveries of the cost action (see at the end of the document):

A) cooperation with end-user

During the conference Dr. Giovanni Tessitore (Italian Police) and Dr. Aldo Mattei (Carabinieri – Italy) has very interesting presentations.

Dr. Tessitore mentioned ENFSI guidelines for facial comparison <http://enfsi.eu/wp-content/uploads/2017/06/ENFSI-BPM-DI-01.pdf> :

How does our work align with them?

Both Dr Tessitore and Dr. Mattei mentioned software application they started to use in their work: AFIS system (fingerprint matching automated system), AFRS (automated facila recognition Sytem)
Can we help to validate them?

This would go in the direction of giving feedback to end users to improve the conversion of experimental techniques software into implementation (GPIII goal)

B) engagement of the INDUSTRY

We need to start a dialog with Industry. This is very important point.

Is it possible to succeed in engaging biometric industries working on facial recognition and collaboration with the GPIII goals and / or as part of the RRS?

C) multimodality approach is important

We need to explore the way to approach the problem with a multimodality approach. e.g. we should explore the way to combine the information of fingerprints and facial recognition

try to contact prof. Nappi (<http://www.rafbis.com/bip2015old/index.php/prof-michele-nappi>), who works on integration of multi-biometric data. Could we invite him? Could we collaborate with him?



1. Welcome and short presentation of the participants

Alessandro Trivilini started with a short intro, clarifying that we have 1 publication and other 4 (?) publications in progress thanks to Italy and Greece and the RRS. This is very good, but we need also to focus on the points mentioned by Simona.

Followed a short presentation of the participants with particular focus on competences, and possibility to engage Industry.

Unfortunately, no one has possibility to engage Industry in the short future. Only, Chiara Villa mentioned that she may contact Videometer, one of the company that was present at the Workshop in Vienna.

Then, the participants divided in two groups based on the relative competences: one on face recognition and the other of Fingerprints.

See list of participant at the end.

Claudio Vairo will be the referee for the group on Facial recognition (FACE).

It has been decided to send to the End user of each country a questionnaire (Idea of Matus Pleva) to start a dialogue. A flowchart (Deliverable 2) will be also developed in the near future

Nesli ERDOGMUS will be the referee for the group on Fingerprints (FINGERPRINTS)

It has been decided the Nesli will provide synthetic fingerprints to the students of Sebastian Battiato who will analyse them with their developed algorithm. Fausto Galvin (who as a double position as Academia and End user) together with his colleagues at the Procura della Repubblica di Udine will then analyse the fingerprints and see if they can recognized if they are "real" using their manual procedure

NEXT TASKS/DEALINES

Mid of October

Group Face: the first draft of the questionnaire needs to be sent to Alessandro

Mid of November:

Group Face: the first draft of the flowchart needs to be sent to Alessandro.

Group Fingerprints: a framework with time, data, and algorithm needs to be sent to Alessandro

Minutes by Chiara Villa 20.09.2019

List of participants

NAME	COUNTRY	ROLE	EMAIL	GROUP /ROLE
Alessandro Trivilini	Switzerland	Academia	Trivilini, Alessandro (SUPSI) <Alessandro.Trivilini@supsi.ch>	leader of the group, coordinator
Chiara VILLA	Denmark	Academia	chiara.villa@sund.ku.dk	help-coordinator
Claudio VAIRO	Italy	Academia	claudio.vairo@isti.cnr.it	referee for the FACE group
Nikolous Passalis	Greece	Academia	passalis@csd.auth.gr	FACE group
Andres Udal	Estonia	Academia	andres.udal@taltech.ee	FACE group
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Mattia Litrico	Italy	Academia	mattia.litrico@gmail.com	FINGERPRINTS group
Oliver Giudice		Academia	giudice@dmi.unict.it	FINGERPRINTS group
Fausto Galvan	Italy	Academia/end user	galvanfausto14@gmail.com	FINGERPRINTS group

DELIVERABLE 1 – MONTH 18 (Sept 2018)

Production of guidelines e-document identifying strategies enabling compatibility with imaging technologies. The End Users will be TASKED with leading an interactive dialogue informing participants on needs, desirables, relevant legal and ethical issues, national requirements and guidelines for evidence recovery and preservation, protection of human rights and for admissibility in Court. –

On 5.11.2017 *“After the Workshop and the overall conference this document will start to be drafted. Core group members will be involved in the drafting but other contributions are welcome and especially from the end users. The document integrates the paper based RRS initiated by WG1”*

This has happened informally. Information have not been collated conclusively.

- WG leaders hold more knowledge than the rest of us but have made reports available.
- We also need to capture information on STSM follow up

Nothing has happened

DELIVERABLE 2 – MONTH 24 (March 2019)

Generation of decisional e-tree flowcharts indicating the most efficient technology in context plus multi-modal capabilities. The flowcharts will be devised according to 1. evidence type, 2. intelligence and 3. specifications (i.e. quantification, sensitivity, robustness, resolution, portability need) according to the state of the art at the time of evaluation.

Nothing has happened as yet-

I believe This has much to do with the summary from the paper based study initiated by WG1



DELIVERABLE 3 – MONTH 36 (March 2020)

Publication(s) on current state-of-the-art of multi-modal imaging (MMI) technologies through a) capabilities, limitations, desirables analysis; b) improved understanding of artefacts' impact on image processing and best practice guidelines; c) conceptualisation of software capabilities integrating mathematical algorithms, databases and statistical modelling; d) centralised MMI software development with expanded processing capabilities.

Nothing has happened as yet