

# **ENFSI European Fingerprint Working Group**

## **Best Practice Manual for Fingerprint Examination**

Maj. Aldo Mattei, PhD

RIS Carabinieri, Italy

# Outline



**1** **Framework:** Development

**2** **Content:** Chapters of the Manual

**3** **Future:** Update and further elaborations

Development

Manual

Update



## Monopoly Project 2012

### **Towards European Forensic Standardisation through Best Practice Manuals (TEFSBPM)**



“With the financial support of the Prevention of and Fight against Crime Programme  
European Commission – Directorate-General Home Affairs”

2011 EU Council Decision - Council conclusions on the vision for European Forensic Science 2020

*the EU Member States and the EC working together to ensure the even-handed, consistent and efficient administration of justice and the security of citizens in the area of forensic science*

## Monopoly Project 2012



“With the financial support of the Prevention of and Fight against Crime Programme  
European Commission – Directorate-General Home Affairs”

**TEFSBPM *project*.** 12 forensic disciplines selected by the ENFSI Board and granted to develop best practice manuals to facilitate the standardisation in forensic sciences across European Union. The project is an important stepping stone in the realization of the 2020 Vision with contributions towards several of the vision statements within the EU Council Decision



## Monopoly Project 2012

# TEFSBPM objective

The key objective of TEFSBPM will be the harmonisation of the forensic Best Practice Manuals (BPMs) across Europe involving a wide range of forensic areas. The development of these BPMs will be in line with the following general principles:

1. The BPMs will be developed in line with the core values recognised across the ENFSI community.
2. The forensic BPMs will have a broad scope and include such areas as personnel, equipment, materials and premises.
3. The BPMs will be drafted in line with the ENFSI document “Guidance on the Production of Best Practice Manuals within ENFSI” and will use the ENFSI BPM template.

Monopoly Project 2012

## TEFSBPM documents

### **Project B1**

Guidelines for Best Practice in the Forensic Examination of Digital Technology

### **Project B2**

Pan-European Best Practice in Forensic Handwriting Examinations

### **Project B3**

Best Practice Manual for Colouring Methods in Gunshot Residue Analysis

### **Project B4**

Best Practice Manual for Road Accident Reconstruction Examination

### **Project B5**

Microscopic Identification and Comparison of Human and Animal Hair Best Practice Manual

Monopoly Project 2012

## TEFSBPM documents

### **Project B6**

Best Practice Manual for Fingerprint Examination

### **Project B7**

Specification for DNA Pattern Recognition and Comparison

### **Project B8**

Best Practice Manual for the Application of Molecular Methods for the Forensic Examination of Non-Human Biological Traces

### **Project B9**

Best Practice Manual for the Forensic Recovery, Identification and Analysis of Explosives Traces

## Monopoly Project 2012

# TEFSBPM documents

### **Project B10**

Best Practice Manual for the Forensic Investigation of Fire Scenes which have Resulted in Fatalities

### **Project B11**

Best Practice Manual for the Forensic Investigation of Fire Scenes which involve the Clandestine Manufacture of Improvised or Homemade Explosive Devices

### **Project B12**

Best Practice Manual for the Forensic Investigation of Fire Scenes which Involve the Clandestine Manufacture of Illicit Synthetic Drugs



## Monopoly Project 2012

# **ENFSI-BPM-FIN-01**

## **Ver. 01 – November 2015**

Team members:

- Helen Bandey (CAST – UK)
- Linda Koomen (NFI – NL)
- Kaja Krogsaeter (NCIS – N)
- Anko Lubach (NFI – NL)
- Aldo Mattei (RaCIS – I)

Developed between 2014 and 2015, 7 in person meetings, peer reviewed by an external independent panel of experts (from USA and EU).

## Monopoly Project 2012

# ENFSI-BPM-FIN-01

Ver. 01 – November 2015

General topics

V

Im

Id

General topics

Development

Manual

Update



## General information

- **ENFSI copyright**
- ***Not for sale***
- ***The text may not be copied for resale***
- ***Free download @***

**[http://www.enfsi.eu/sites/default/files/documents/6.\\_fingerprint\\_examination\\_0.pdf](http://www.enfsi.eu/sites/default/files/documents/6._fingerprint_examination_0.pdf)**

Development

Manual

Update



## General information

- **Official language: English**
- **Translations allowed**
- **Translations soon available:**
  - **Spanish**
  - **German**

Development

Manual

Update



## Content of the document

- **The document considers:**
  - **Visualisation (development);**
  - **Imaging;**
  - **Individualisation (ACE-V)**
- **Limited application to the laboratory procedures (Not for Crime Scene)**
- **Philosophy underneath the document**

**“DO NOT reinvent the wheel”**

Development

Manual

Update



## General information

- **Gives an overview of the state of the art of the current best practices adopted by laboratories in EU**
- **Overarching document above the local SOPs**
- **Applicable to different legal systems**
- **It is NOT a Standard**

Development

Manual

Update



## Content

- **16 Chapters and 2 Appendix**
- **Chapters:**
  - **Aims**
  - **Scope**
  - **Definitions and Terms**
  - **Methods: Fingerprint Visualisation and Imaging**
    - **CAST FVM**
  - **Methods: Fingerprint Individualization (ACE-V)**

Development

Manual

Update



Content

- **Chapters:**
  - **Validation and uncertainty of measurement**
  - **Proficiency testing**
  - **Customer or case requirements**
  - **Initial examination**
  - **Handling items**
  - **Case review**
  - **Presentation of evidence**
  - **Health and safety**
  - **References**



Development

Manual

Update



Content

## REFERENCES

- [1] Fingerprint Visualisation Manual, First Edition, 2014, Home Office Centre for Applied Science and Technology, Editor: Dr H Bandey, ISBN: 978-1-78246-234-7
- [2] Lee and Gaensslen's Advances in Fingerprint Technology 3rd Edition, Editor: R. Ramotowski, CRC Press, 2013, ISBN: 978-1-4200-8834-2
- [3] [http://www.swgfast.org/documents/documentation/121124\\_Standard-Documentation-ACE-V\\_2.0.pdf](http://www.swgfast.org/documents/documentation/121124_Standard-Documentation-ACE-V_2.0.pdf), accessed 15th September 2015.
- [4] <http://nvlpubs.nist.gov/nistpubs/SpecialPublications/NIST.SP.1151.pdf>, accessed 15th September 2015.
- [5] GYRO system – A recommended approach to more transparent documentation G.Langenburg/C.Champod, JFI volume 61 issue 4, p. 373-384
- [6] Guidelines for the Assessment of Fingerprint Detection Techniques, International Fingerprint Research Group (IFRG), 2014, Vol.64, Issue 2, pp. 174-200
- [7] Sears et al. A Methodology for Finger Mark Research, Sci & Just 2012;52:145-160. [8] <https://www.gov.uk/government/publications/fingerprint-source-book>, Home Office Centre for Applied Science and Technology UK. Accessed 3rd February 2015
- [9] ENFSI Guideline for evaluative reporting in forensic science, published 8th March 2015 by ENFSI, editor S.Willis.

Development

Manual

Update



Content

- **Appendix 1:**
  - **Fingermark visualisation processes**
- **Appendix 2:**
  - **Glossary (special referencies)**

<sup>1</sup>Forensic Science Regulator, Codes of Practice and Conduct: Fingerprint Comparison, FSR-C-128

<sup>2</sup>Forensic Science Regulator, Fingerprint Examination – Terminology, Definitions and Acryonyms, FSR-I-402, Issue 1, 2015

<sup>3</sup>Fingermark Visualisation Manual, First Edition, 2014, Home Office Centre for Applied Science and Technology, Editor: Dr H Bandey, ISBN: 978-1-78246-234-7

Development

Manual

Update



# ENFSI-BPM-FIN-01

Ver. 01 – November 2015

*What's next?*

- **Creation of a permanent ENFSI EFPWG BPM Task Group on a voluntary base**
- **Schedule a mandatory revision of the BPM in a timeframe of 2 years**
- **Ver. 02 issued by November 2017**
- **Call for peer review panelists May 2017**



# ENFSI-BPM-FIN-01

Ver. 01 – November 2015

*What's next?*

- **Any potential document of interest and/or standard published within the timeframe will be considered and eventually referenced or incorporated (with the agreement of the authors)**
- **Potential interest to collect general public comments and/or stakeholders comments before release of Ver. 02**



Monopoly Project

Past

T3



## Monopoly Project T3 PTs and CEs in fingerprint domain

### Objectives

- develop two global PTs/CEs for ENFSI members within the years 2015-2016
- gain the knowledge on the real costs associated

Development

Manual

Update



# ENFSI-BPM-FIN-01

Ver. 01 – November 2015

*Anything else?*

- **Start to draft a manual on minimum requirements**
- **It will refer to existing or soon to be published standards**
- **The scope of the document will be to fix the baseline of acceptability of the operational procedure in the fingerprint laboratories within ENFSI**



## Contacts

Maj. Aldo Mattei  
SS 114 km 6,400  
98128 Messina, Italy  
+39 334 692 0741  
aldo.mattei@carabinieri.it

+39 320 721 5020  
aldo.mattei@gmail.com

Thank you

