

SHUTTLE OMC EVENT  
Roissy, France, January 30<sup>th</sup> – 31<sup>st</sup>, 2019



# SHUTTLE

## A European Toolkit for Trace analysis

S. Berkani

IRCGN - Forensic Science Laboratory of the French Gendarmerie,  
Pontoise, FRANCE



Netherlands Forensic Institute  
Ministry of Justice and Security



GOVERNO DE PORTUGAL  
MINISTERIO DA JUSTIÇA



Hogeschool van Amsterdam

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<https://ec.europa.eu/programmes/horizon2020>



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# OUTLINE

## CONTEXT

Case scenario

Current process for Trace analysis

## SHUTTLE

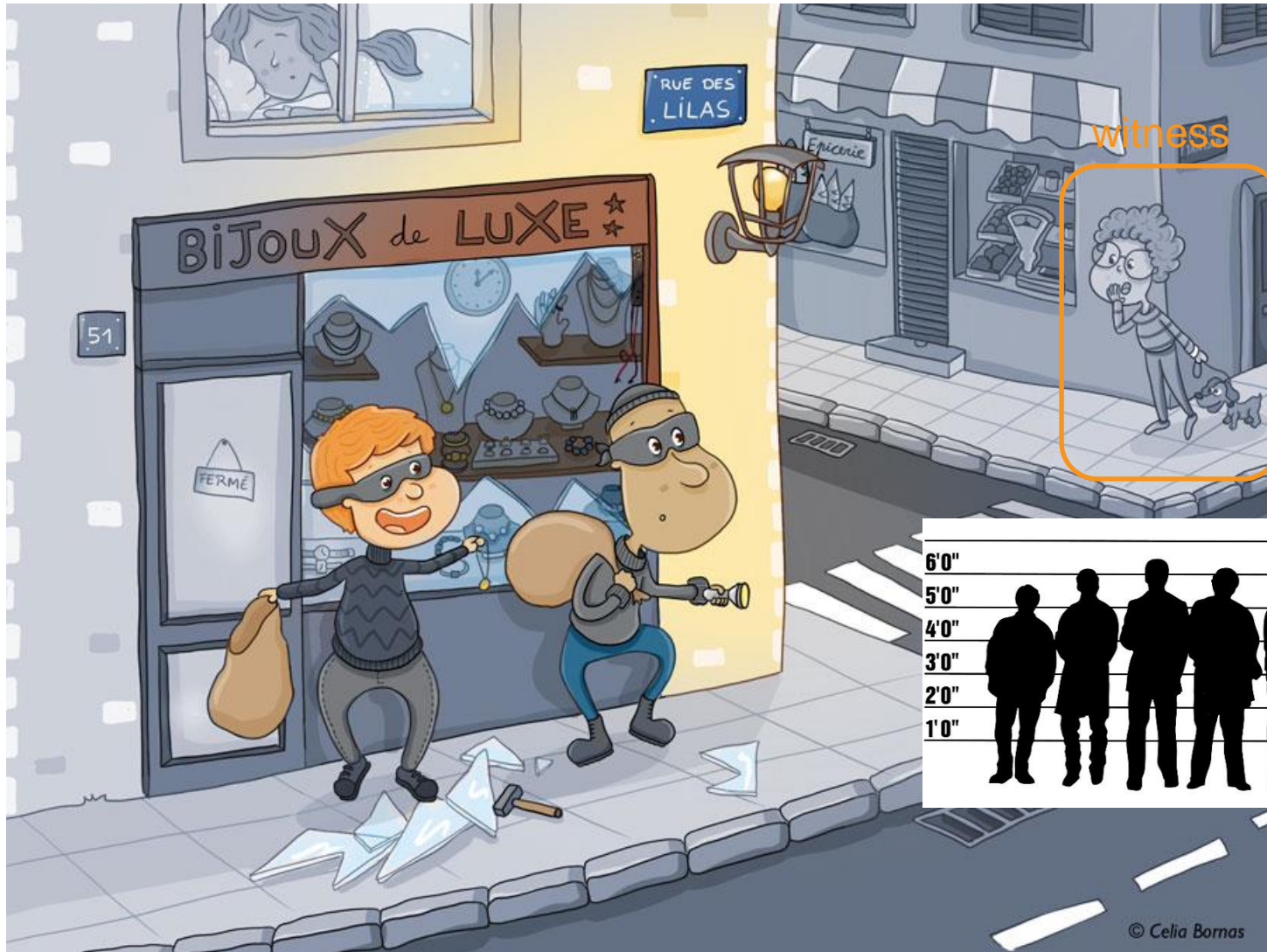
What is SHUTTLE

Aims



# CONTEXT

## Case scenario



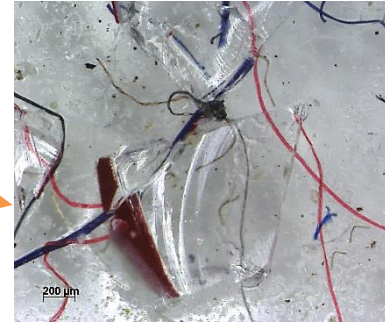
# CONTEXT

## Current process for Trace analysis

Tapes Lifts

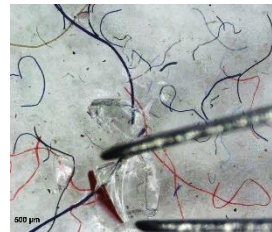


Optical  
Microscopy



Time  
consuming

isolation



damaging

Further  
analysis



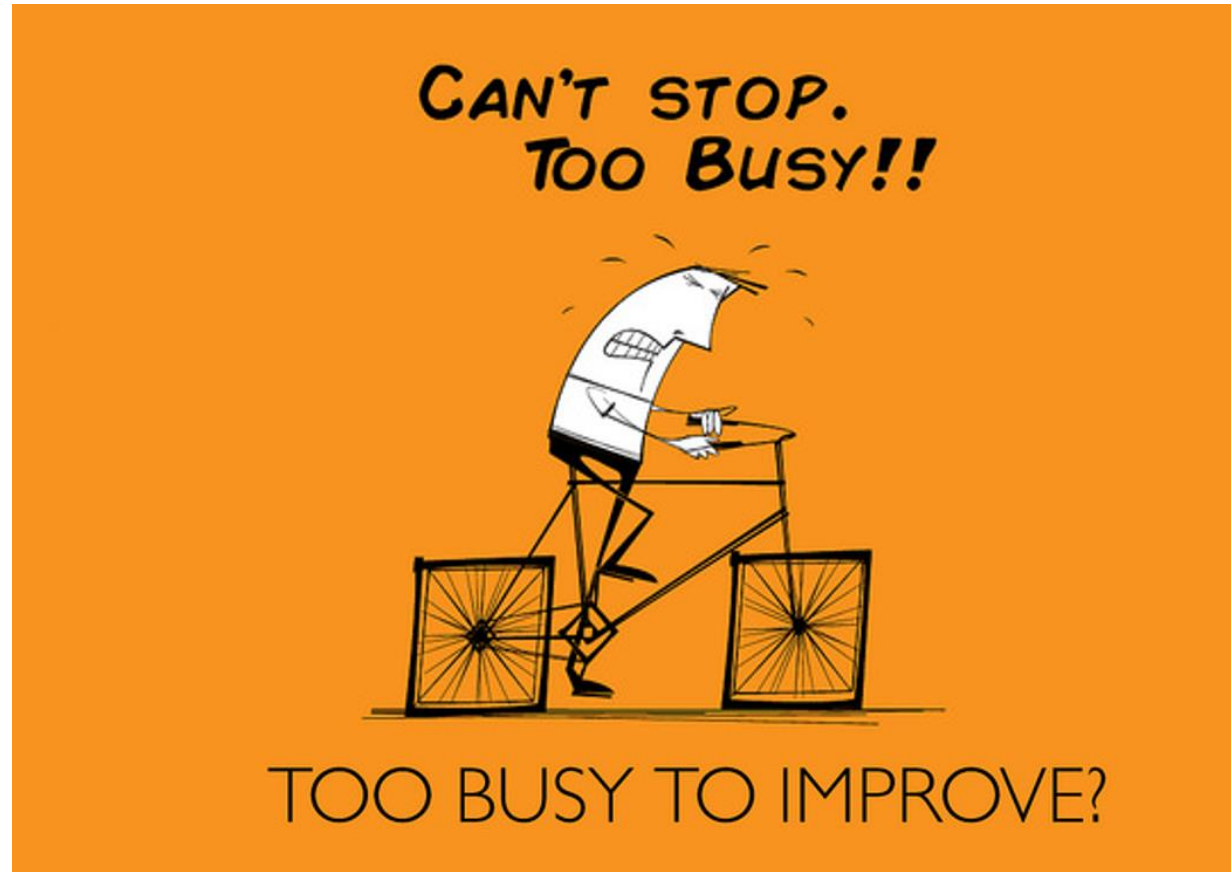
missing

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# CONTEXT

## Current process for Trace analysis



- Need to enhance the current methodology for a better integration of forensic disciplines
- Need more objectivity
- Need a method less hazardous for the traces

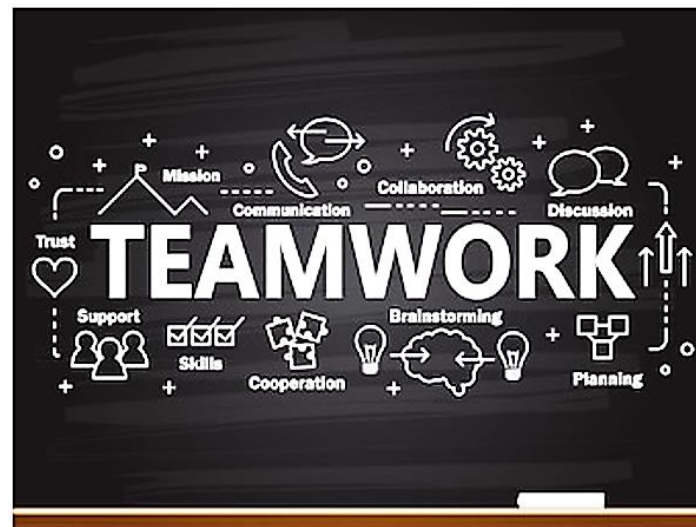
# SHUTTLE

## What is SHUTTLE?



**S**cientific  
**H**igh-throughput  
**U**nified  
**T**oolkit for  
**T**race analysis by forensic  
**L**aboratories in  
**E**urope

Financed by the H2020 program, eight European forensics laboratories have teamed up to develop a **toolkit**, which will render more **objective** and **scientific** the trace analysis.



# SHUTTLE

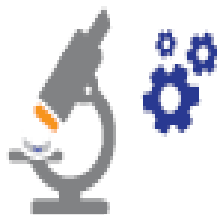
## Aims

Tapes Lifts



Optimized tape that can be directly use with the toolkit.

Automated microscope



Acquire images of traces, do spectrometric color analysis as well as a number of illumination modes

Image processing



algorithms will process the images acquired and classify the different types of traces present

data acquired can be related to data acquired by other techniques

Database and search algorithms



search algorithms allow searches for similar samples in the database

Pattern recognition procedures





# SHUTTLE

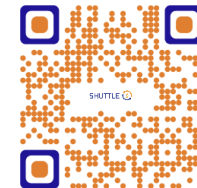
## Aims



- Make a powerful and versatile toolkit which solve the major issues in forensic sciences.
- Improve the information exchange and the synergy between different criminal research laboratories to fight against international crime.

Project Management Office (ARTTIC)  
[shuttle-sec09-arttic@eurtd.com](mailto:shuttle-sec09-arttic@eurtd.com)

SHUTTLE project website:  
[www.shuttle-pcp.eu](http://www.shuttle-pcp.eu)



# THANK YOU



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