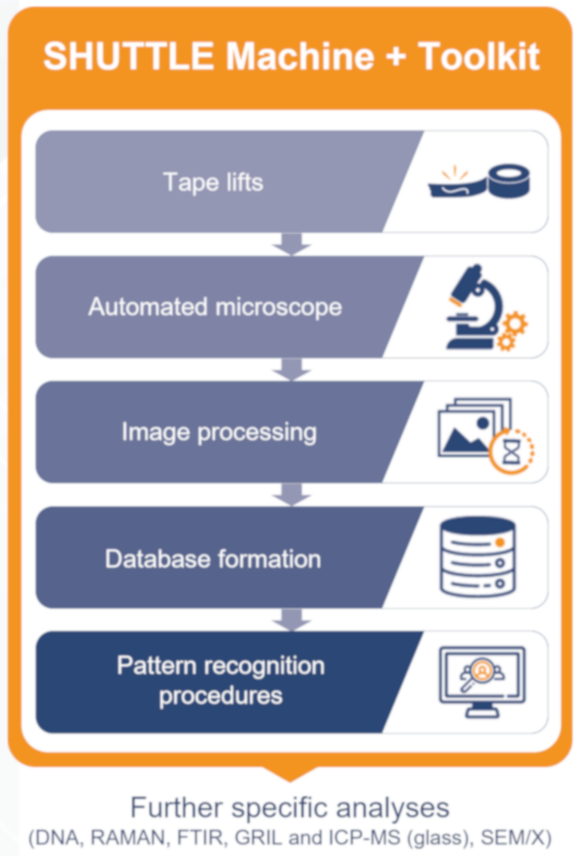
SHUTTLE

Scientific High-throughput and Unified Toolkit for Trace analysis by forensic Laboratories in Europe

PROJECT OVERVIEW

SHUTTLE has developed a toolkit to facilitate analysis of microtraces collected in crime scenes by automating a significant part of forensic trace evidence examinations. The R&D is done by contractors through competitive phases in a **Pre-Commercial Procurement** (**PCP**) by six European forensic institutes. SHUTTLE is an EU-funded **Horizon 2020** project coordinated by the **MINISTERE DE L'INTÉRIEUR** with a consortium of 8 partners and budget of 10.5M€.



SHUTTLE PHASE 3 PROTOTYPE

AG SHUTTLE Toolkit Jena

The instrument can scan samples and process the acquired images simultaneously. It enables morphological and spectral imaging of the whole sample area, thereby fully digitalizing the sample. Its software automatically finds and annotates traces and classifies them with the help of AI. It also provides different result view options, zoom and navigate through the whole sample. Innovations of the toolkit:

- A novel combination of optics/fine mechanics, a high-performance optical sensor, a new generation of tunable light sources, the AI and a content managed data.
- Results in the form of A4-sized scan with the complete recording of all traces including optical and spectroscopic properties in less than 5 hours.
- Standalone use of toolkit in connection with other proven tools, or fusion of information from persons on different sites for optimal decision-making.

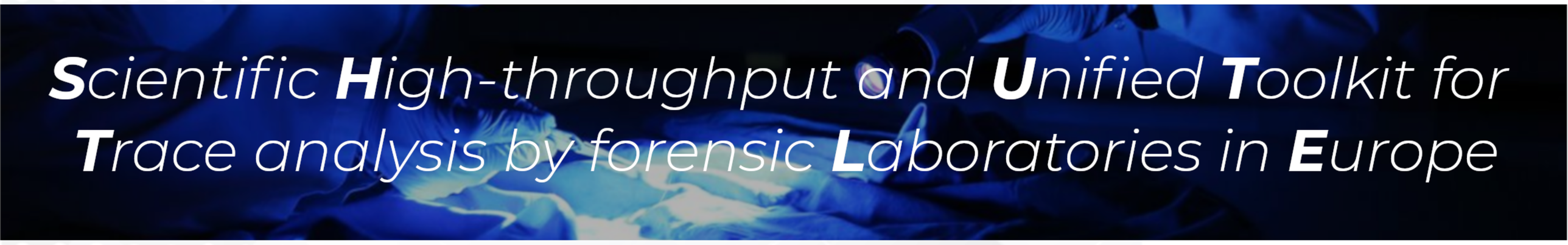
The AG SHUTTLE Toolkit Jena consortium: OPTIMAL SYSTEMS A KYOCERA GROUP COMPANY, aura optik, AIUI

SHUTTLE PARTNERS

Ministère de l'Intérieur, Netherlands Forensic Institute Ministry of Justice and Security, KEMEA, Lietuvos Teismo Ekspertizės Centras, Polícia Judiciária, ARTTIC a PNO international management services company, משטרת ישראל, Hogeschool van Amsterdam

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 786913

SHUTTLE



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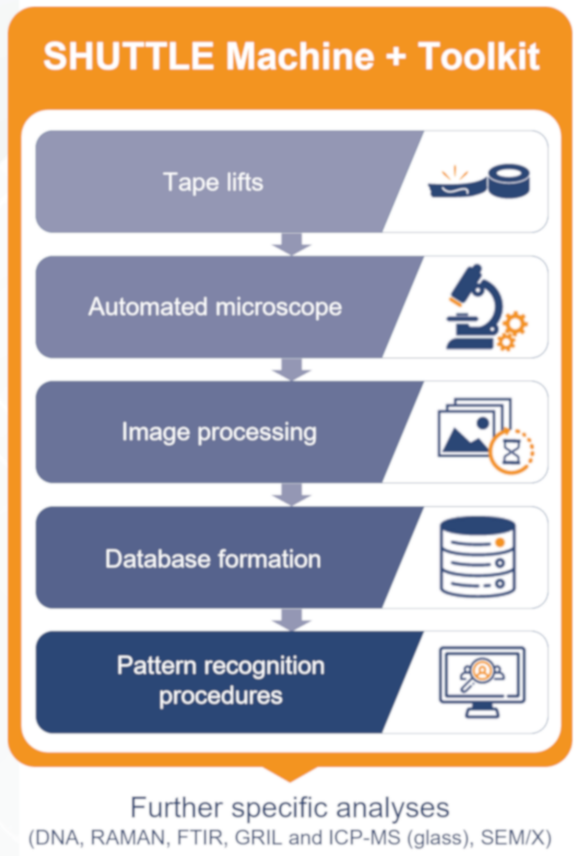

SHUTTLE PHASE 3 PROTOTYPE

TRACES Consortium

The Spectral Multimodal Microscope for the Automated Recognition of Traces (SMMART) forensics toolkit radically improves all aspects of trace collection and analysis:

- A novel thin recyclable lifting tape/backing system with special optical properties that does not influence collected samples.
- Automated high content screening corresponding to the surface of four A4 papers.
- Operation of multimodal image acquisition through a graphical user interface.
- Fully automated scanning requiring no human presence or intervention.
- Automated analysis and identification of traces using classification algorithms.
- Data storage and retrieval from remote locations as well as secure data handling.

The TRACES consortium: SPECTRICON, Zanasi & Partners – Security Research and Advisory

Contact: Spectricon - Igoumenou Gavriil 10, p.c. 73134 - Chania, Crete, Greece - T: +302821045517 - www.spectricon.com

SHUTTLE PARTNERS

Ministère de l'Intérieur (Liberté • Égalité • Fraternité, République Française) · Netherlands Forensic Institute, Ministry of Justice and Security · KEMEA · Lietuvos Teismo Ekspertizės Centras · Polícia Judiciária · ARTTIC, a PNO international management services company · משטרת ישראל · Hogeschool van Amsterdam

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