

# Be-ForIntel

## Building the foundations of a Forensic Intelligence tool in Belgium

**DURATION**  
01/09/2022 - 01/12/2025

**BUDGET**  
€ 485 989 (BELSPO) + € 54 000 (FPS Justice)

### PROJECT DESCRIPTION

Various forms of forensic data are well known and widespread within the Belgian criminal investigation. They have been used successfully to solve or prevent crimes and serious incidents. Forensic data is nowadays mainly used on a case-by-case basis as evidence in court. However, this information could be applied on a much wider scale through the use of forensic intelligence.

**Forensic intelligence** can be defined as the accurate, timely, and useful product of logical data processing of forensic case data through proactive information management. It is the additional level of consideration that is important, when collectively (across multiple investigations and disciplines) the results of forensic analysis become the source of intelligence (Ribaux et al., 2003). International research has shown that the forensic intelligence approach is very effective in contributing to better use of forensic science in many criminal investigations and holds great potential for improving the criminal analysis process.

**Objectives** - This project aims to examine under what conditions and how forensics intelligence can be implemented in Belgium. To this end, we identify three complementary objectives.

**1** - The first objective is to map the organisations and institutions that generate forensic data in Belgium. The researchers of the NICC will isolate precisely the fundamental conditions (in terms of rules, law, technique, etc.) for the implementation of a forensics intelligence tool in Belgium. Based upon these they will identify all the forensic data present in Belgium (who are their producers? What is the current nature of this data? Which actor possess them and in what format?). This will also include the determination of the different levels upon which these organisations are operating (local vs. federal, judicial districts, etc.).

This part of the research is practical and bottom-up to identify opportunities and challenges in building a forensic intelligence tool in Belgium.

The qualitative data will be obtained through a literature review, document analysis, legal analysis, interviews and focus groups with key actors. In contrast to studies related to forensic intelligence in other countries, which start from a particular phenomenon, e.g. burglaries, and link certain forms of forensic data, this research want to map all available forensic data independently of certain phenomena.

**2** - The second part of the project will assess the feasibility and added value of setting up a national forensic intelligence tool that connects all relevant forensic data available in Belgium. The researchers of the Ghent University will identify the different levels (national, regional, or local) to which data identified in objective 1 can be linked and to demonstrate the added value for law enforcement.

In order to make the evaluation of the added value of a forensic intelligence approach in crime analysis as tangible as possible for law enforcement on the one hand, and to ensure the overall feasibility of this work package on the other hand, they will focus on instances of serial offending and co-offending.

They will aggregate a bespoke set of forensic data, extracted from the National Genetic DNA Database (NGDB) and crime scene traces from the National Traces Database (NTD), that are readily available to police and combine those aggregated forensic data with police recorded crime data from the National Police Database (NPD). They will then extract and analyse the crime patterns in that combined dataset using statistical methods and social network analysis. And will compare the crime patterns obtained in this way with the crime patterns that would be obtained if only police recorded crime data were used. In a sense, the crime patterns extracted from police recorded crime data currently serve as the reference crime pattern within law enforcement.



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3 - The third and final part will translate the first two objectives into precise guidelines for the actors in the field (e.g., magistrates, police officers, forensic experts), so that they have a roadmap for the practical implementation of a forensic intelligence tool in Belgium. The researchers of the NICC will formulate recommendations (in terms of legislation, technical issues, information management, etc.) at a political level in order to inform the legislator and the government (Minister of Justice and Minister of the Interior) on the improvements to be adopted at the legal and structural level to enable the adaptation of a forensic intelligence tool. They will also formulate recommendations at a strategic level, to guide criminal policy decision-makers in the interest of integrating such a tool into their policies, at the tactical level to assist crime analysis services in building and using such a tool. And finally, at the operational level, to raise awareness among actors in the field (magistrates who conduct investigations and police investigators) to build their investigations taking into account the contribution of such a tool.

In general this project will develop a sound scientific knowledge to support the competencies, strategic orientations and policies of the FPS Justice. It will clearly improve the knowledge base on the integration of existing forensic investigation in Belgium into a forensic intelligence tool. It will shed a light on the possibilities of implementing such a tool both legally and practically, the contribution it can make to judicial investigations, the formulation of guidelines for stakeholders and recommendations for federal policy.

The research will produce different outcomes and deliverables (e.g., intermediary and final reports, papers in peer-reviewed scientific) contributing to a better understanding of forensic intelligence, as well as scientifically-based recommendations for the concerned judiciary players and for the judicial relevant actors.

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## LINKS

<https://nicc.fgov.be/be-forintel>