

# THE TERRORIST AND ORGANIZED CRIMINAL SEARCH DATABASE (TOC-SEARCH) – PROJECT No A15



In today's world almost every professional security organization has its internal database but they are not publicly available. The most well-known, publicly available databases have a number of disadvantages: they primarily deal with terrorist incidents, with basic information about the other categories that are descriptive type, they don't support update of the data, they support only textual data, users are only able to search but not to enter the data. This has highlighted the need for a unique database that would include all the information on terrorism and organized criminal from various open sources. Researchers from the University of Belgrade have created a unique and publicly available web service that allows users to check in only few steps whether a person is suspected to be linked with terrorist activities and organized criminal.

## The Invention

TOC-search is a dynamic database that offers comprehensive information on global terrorist network and organized criminal. The database is publicly available at [www.tocsearch.com](http://www.tocsearch.com). The idea is based on data integration from different open sources (news, reports, surveys etc) and confidential data about terrorism and organized criminal. These data is further classified to enable the simplest and the most relevant display. The data stored in the TOC database are classified into five main categories: terrorists, groups, organizations, supporters and actions. Links and relations between these terrorist-related categories are also stored and classified in the database.

Several search tools are implemented:

- Simple search
- Advanced search
- In-depth search
- Fast Multiple search

Additional features, useful for a database user, are also implemented, such as selection tool, short news in the form of flash points, the possibility to view and

download GMC reports, to send a feedback on data or the functionality of database, etc.



New features of the TOC search database are:

- Support for all terrorist-related categories;
- Detailed information stored for each category;
- Keeping connections (links) between subjects, as well as properties of these links;
- Fast-multiple search feature enabling simultaneous search of multiple individuals;
- Evolution and improvement of input data - the data is updated over time;
- Keeping and classifying data from open and confidential sources;
- Support for all types of data: text, images, sound and video recordings;
- Different roles of users in the database for viewing and managing data;
- Different data access levels.

Advantages compared to existing databases are:

- It includes all terrorist-related categories and their interrelationships;
- It is accessible anytime, anywhere and from any device without the need for any additional integration;
- It is easy to use with user-friendly interface.
- the database works under any operative system.

Demo video of the database and its tools may be found at the front page of the database at [www.tocsearch.com](http://www.tocsearch.com)

TOC-search database has two important aspects of its application. It may be used as an additional tool for preventing terrorism and organized criminal activities. Its practical usage includes:

- Public safety: The protection of state borders, airports (passport control),
- Control access to high-risk events (conferences, sports events, public meetings, ...);
- Control access to institutions such as banks, post offices, corporate office, ...
- The protection of state borders, airports (passport control);

TOC search has also educational function. The use of the database improves students' analytical approach and data exploration skills. It also helps students to gain valuable practical experience in methodology of data collection, classification and verification.

Up to now, TOC search database was successfully applied in securing several global events, such as 2008 Olympic Games in Beijing, China and the 2010 World Football Championship. It is currently being used by students and researchers at faculties, institutes and universities and also professionals and practitioners in security services in Serbia and several other countries.

Although the base is publicly available protection of personal data of users, protection of data in the database and application protection is provided.

As a future work, it is planned implementation of algorithms for the face detection and recognition, development of mobile applications for the Android platform, application of mathematical methods such as modeling events and statistical tests and prediction of trends in terrorism and organized crime at local and global level.

### Research Group

TOC search is the result of a joint project realized by the Faculty of Security Studies and Faculty of Mathematics, University of Belgrade, with the support of the George C. Marshall European Center for Security Studies.

### Commercial Status

We are looking for potential licensees and collaborators to develop and commercialize the invention.

For further information please contact:

Name: Nedeljko Milosavljevic

Email: [nedeljko.milosavljevic@rect.bg.ac.rs](mailto:nedeljko.milosavljevic@rect.bg.ac.rs)

Telephone: +381(0)11/3207-496

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### About Center for Technology Transfer

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