

# Real Time Identification System

## SONDA RTI

*Rapid identification on databases  
of many millions in just a few seconds*



## Speed and Reliability



Sonda RTI's searching speed is hundreds of times higher than the rate of traditional AFIS.

Such high speed of identification is achieved due to the unique algorithms developed by our company for accelerating the search process. Our algorithms significantly reduce the hardware requirements.

*Matching time on server with two 6-core processors and DB of one million ten-prints is about 1 - 5 seconds.*

# Universality

Sonda RTI is absolutely universal system. It can be used as traditional AFIS to operate with palm & fingerprints as well as latents collected from crime spots.



# Users of Sonda RTI

## State Structures

- Citizens registration in the process of issuing identity cards or passports.
- Elections control .
- De-duplication on databases of tens of millions of tenprints.
- Exception of recurring attempts to obtain identity documents or re-vote.

## Law Machinery

- Verification of persons detained at the scene by task force, patrol or road inspection service groups.
- Search in DB of wanted persons is available.
- Access control to public events or objects of special importance.

## Federal Law Enforcement Agency

Verification of persons during the transportation of prisoners.

# Users of Sonda RTI

## Border Guard Service

Checking the persons crossing the border, including the extended Black List.

## Migration Service

Verification of foreign citizens in places of illegal residence, proof of visas, national ID-cards and other documents.

## Emergency Service

Identification of persons who are unconscious or lost their memory.

## Transport Security Service

- Verification of suspicious characters on Black List.
- Passport or other travel documents verification.

## Simplicity and Convenience

1. No special software required!
2. All transactions are being executed on Server after fingerprint captured. Search results are displayed on a computer monitor.
3. No experts help required!

## Three ways to conduct inspections:

1. From any PC via the WEB interface using a fingerprint scanner.



*Internet*



2. From any mobile device via the WEB interface using a fingerprint scanner.



*3G / Wi-Fi*



3. From any mobile handheld identification terminal.



*Wi-Fi*

# Server Connection

*Real Time Identification*

*Server / Matchers Database*

*1 - 5 sec on DB of 1 000 000 ten-prints*



*No Special Software required!*

*No expert help required!*



## Types of verifications using the mobile terminal



- ✓ Verification 1:1 - comparison of an ID-card fingerprint template with a scanned fingerprint. The execution time: 2 - 3 seconds.
- ✓ Verification 1:N - fingerprint verification through the external DB via wireless communications.

# International Standards for Information Exchange



Database of Sonda RTI can be formed by importing any tenprints from foreign or domestic AFIS manufacturers.

The system supports both internal format and international information-sharing protocols ANSI / NIST of FBI and Interpol versions.

## Real Time Identification Projects

In African Guinea the system is used to prevent recurring attempts to vote in election campaigns.

In the Passport project of Ukraine the system prevents attempts to obtain a second ID-document.

Matching time when testing the system on database of 6 million citizens in the various modes was 0.5 - 2 seconds.



## Real Time Identification Projects

In the MIA Main Department of the Crimea the system is used for prompt verification of detained citizens on DB of involved in crime and wanted persons.

Every district police station of the Crimea has fingerprint scanners. The prompt verification of citizens is being carried out on the regional DB via the Internet department communication channel.



# Future of Real Time Identification

**1.**

It would significantly increase the security of mass sporting events: Olympic Games, Student Games, Football World Championships etc.

**2.**

It would allow to perform rapid verification of detained and suspicious individuals on DB of wanted persons, the same including the international Black List of fans-hooligans.

## Sonda Technologies

*Tier One Accuracy, Speed, Scalability*



Sonda Technology company since 1991 has been developing and implementing biometrics fingerprint identification systems.



- ✓ **61 patents** for Identification method and hardware solutions.
- ✓ **12 software products** registered in the Federal Service for Intellectual Property, Patents and Trademarks.
- ✓ **International awards, diplomas, certificates, patents.**

# International Testing of Biometric Algorithms

High quality of Sonda's biometric algorithms was many times confirmed by international testing and competitions carried out by the International Biometric Association and the USA National Institute of Standards and Technology - FVC, NIST, SlapSeg, MINEX, Evaluation of Latent Fingerprint Technologies (ELFT).

**NIST-2013** ongoing tests - Sonda is holding in the top five.



# Biometric Solutions For Your Protection and Convenience



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