Requirements Overview & Analysis Project

Next Generation Integrated Automated Fingerprint Identification System (NGI)

Criminal Justice Information Services Division
Federal Bureau of Investigation

Purpose

- This Requirements Overview & Analysis project is by direction of The Criminal Justice Information Services (CJIS) Division of the Federal Bureau of Investigation (FBI) in Clarksburg, West Virginia.

- IntelliDyne-LLC from Arlington, Virginia, is tasked by CJIS to review, analyze, validate and refine with you items that are needed (referred to as the "Requirements") for the Next Generation IAFIS (NGI).

CJIS Boards/Committees

Through the direction of the CJIS Advisory Policy Board's (APB) Executive Committee and with representation from the Compact Council, the IAFIS Interface Evaluation Task Force (IIETF) has been tasked with assessing the NGI user requirements collected to date.

The IIETF will provide direction to the CJIS Division regarding delivery of these user requirements to the CJIS APB's Identification Services Subcommittee, the APB and the Compact Council.

The first meeting with IIETF is February 14 – 16, 2006 at CJIS in Clarksburg, WV. The IIETF will be asked to review this initial analysis and provide guidance with respect of the gathered requirements.

NGI Initiatives

Initiative #1

Enhance the **AFIS** segment of IAFIS to better serve the customers' need for higher identification accuracy Automated Fingerprint Identification System and improved processing of ten print image submissions to include electronically scanned, rolled, and flat fingerprint images.

Initiative #2

Automate the IAFIS **Quality Check** function.

Initiative #3

Enhance the overall IAFIS **Interstate Photo System** functionality to increase the number of photos stored and provide external customers easier access to the photo data.

NGI Initiatives

Initiative #4

Create an enhanced criminal history **Disposition Reporting** function by using current technology to provide law enforcement improved reporting capability.

Initiative #5

Create a combined civil and criminal fingerprint repository (**Enhanced IAFIS Repository**) that will augment IAFIS criminal and civil criminal history search and response capability.

Initiative #6

Design a new **National Palm Print** biometric identification functionality in IAFIS.

NGI Initiatives

Significant Areas of Interest #1

A **Multi-modal Biometric** framework within the NGI Program was not identified as an individual initiative prior to this effort. However, after canvassing the IAFIS user community it was determined a staff paper should be written for IIETF review regarding this approach. The overall multi-modal biometric concept would be as follows:

- The ability to accept and store additional biometric information
- The ability to search additional biometric information independently by   modality
- The study of fusion within IAFIS to combine the results of various biometric modalities

NGI Initiatives

Significant Areas of Interest #2

Enhancements to **Latent** functionality within the NGI was not identified as an individual initiative prior to this effort. However, after canvassing the IAFIS user community it was determined that the requirements generated from the latent users were far too numerous to include the latent services within AFIT. Therefore a topic paper was written for IIETF review regarding latent functionality.

An area of concern identified through the NGI requirements canvass was the need for the FBI to develop a national latent strategy which would address issues such as the following:

- Training
- Integration of ULW and RFES software to leverage the best possible features and address new NGI latent functionality
- Reassess daily latent search capacity and current limitation policy
- Develop a national marketing plan for latent services