This refers to NGI copying data from its repositories to removable media.



## **Department of Justice**

## Federal Bureau of Investigation

# NEXT GENERATION IDENTIFICATION (NGI)

# SYSTEM REQUIREMENTS DOCUMENT VERSION 4.4

Ocotober 1, 2010

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Prepared By:

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# CHANGE HISTORY SECTION

Version/ Revision	Revision Date	Description of Change	QA Approved	Date
1	11/3/2006	Release for internal FBI review of legacy requirements.		
1.0b	11/9/2006	Baseline for IntelliDyne SRD DCN of legacy requirements.		
1.0d	12/20/2006	Updated to incorporate NGI Initiative Functional Requirement Documents (FRD).		
2	2/9/2007	Updated to incorporate NGI FRDs, Biometric Interoperability Program Office FRD Version 2.0, and International Terrorist File FRD.		
2.1	3/2/2007	Updated to incorporate SRD Version 2.0 formal comments.		
4	5/4/2007	Incorporated SRR changes (Version 3.0) with Biometric Interoperability Program Office FRD Version 3.1.		
4.1	2/13/2008	Updated to incorporate:  NPPR 6a - Requirements changes based on Due Diligence preparation and IV&V comments  NNPR 6b – IAFIS Build 8.2 SPCRS 26510z and 27815.  NPPR6d – Updates to NGI resulting from IAFIS SRD Updates for IAFIS Sys Spec Revision.		
4.2	7/7/2008	Updated to incorporate:  NPPR 38 – "Update NGI SRD with consistent verb usage"  NPPR 41 – "Update NGI SRD with findings from the RTIE team's use case creation"  NPPR 42 – "Additonal requirements for Verification Service in NGI SRD"		

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		NPPR 43 – "NGI SRD – Add new QuickWin requirements for Build 9.0 Expanded ULF Serach Phase 1"		
		NPPR 45 – " NGI SRD – Add new QuickWin requirements for additional biometrics storage"	·	
		NPPR 50 – "Update NGI SRD with "As Is" iDSM requirements."		
		NPPR 56 – "Update NGI SRD to change all "IAFIS shall" statements to "NGI shall"		
		NPPR 57 – "Update NGI SRD with "tenprint" and "palmprint"		
		NPPR 66 – "Update "IAFIS" to "NGI" in the NGI SRD supporting Text"		
		NPPR 86c – "NGI QuickWin - Receive and Store 1000ppi Tenprint Transactions"		
		NPPR 86d – "Verb Appendix F"		
		NPPR 86g – "NGI SRD Rqmt Updates/Changes per SCN (NGI-SCN- INC10001)"		
		NPPR 86h – "NGI SRD Text Updates/Changes per SCN (NGI-SCN- INC10001)"		
		NPPR 86j – "Update Bibliography Appendix C"		
	۴.,	NPPR 86k – "Workload Tables Updates"		
4.3		NPPR 86m – "Map Legacy Rqmts to NGI SRD"		
		NPPR 86v – "Change 3 security requirements from Functional (SFR) to Non-Functional (SNFR) based on Security Clarification reqmt review"		,
		NPPR 86w – "New iDSM NGI SRD subsections need to follow standardized naming conventions"		
		NPPR 86ab – "Update SRD PalmPrint and Supplemental Fingerprint and Palmprint Workload Assumptions regarding biometric updates"		

	NPPR 86ae – "NBRP Revised Workload Estimates"	
	NPPR 101c – "NGI SFR1586 & SFR461 Text" Correction"	
,	NPPR 101e – "Remove palmprint to palmprint search services from SRD 4.4 baseline - Text Updates/Deletes/Changes"	
	NPPR 101f – "Remove palmprint to palmprint search services from SRD 4.4 baseline - Requirement Updates/Deletes/Changes"	
	NPPR 101g – "Interoperability ICA Final with Signatures to be added to Interoperability Joint CIL - Requirement/Updates/Deletes/Changes"	
	NPPR 101i – "Modification to the NGI SRD for Fingerprint Image Replacement request - Text Updates/Deletes/Changes"	
4.4	NPPR 101j – "Modification to the NGI SRD for Fingerprint Image Replacement request - Requirement Updates/Deletes/Changes"	
	NPPR 101k – "CPI Message Processing Functionality - Requirement Updates/Deletes/Changes"	
:	NPPR 101I – "CPI Message Processing Functionality - Text Updates/Deletes/Changes"	
	NPPR 101m- "New Business Requirements - Notifications to U.S. Immigration and Customs Enforcement (ICE) Law Enforcement Support Center (LESC) Requirement Updates/Deletes/Changes"	
	NPPR 101n – "New Business Requirements - Notifications to U.S. Immigration and Customs Enforcement (ICE) Law Enforcement Support Center (LESC) Text/Deletes/Changes"	

NPPR1010 – "[LMCO PR 1044] IDFP RISC Response Time requirement not attainable, Requirement needs to be modified (IDFP 049 in MT SOW)"

NPPR101p – "Add IAFIS External Subject Search new capability to NGI requirements -Text Updates/Deletes/Changes"

NPPR101q – "Add IAFIS External Subject Search new capability to NGI requirements -Requirement Updates/Deletes/Changes"

NPPR101u – "Change Title of LFIS and LFFS to use Friction Ridge instead of Fingerprint"

NPPR101v – "Add cascaded searches and advise for the Supplementals in the Identification Threads"

NPPR101w – "Remove palmprint composite requirements related to the storage of palmprint composite images SRD"

NPPR101x – "Remove Palmprint and Supplemental Fingerprint and Palmprint Decisions from SRD 4.4 Baseline - Text Updates 4.4 baseline"

NPPR101y –"Remove Palmprint and Supplemental Fingerprint and Palmprint Decisions from SRD 4.4 Baseline - Requirement Updates"

NPPR101z –"Delete the Biometric Delete Notification Requirements – SRD"

NPPR101ab – "Add cascaded searches to the Verification Service thread"

NPPR101ac –" Update to SRD Workload Tables"NPPR101ad –" Interoperability 10 Second Search of the CMF"

NPPR101ae –" Interoperability 10 Second Search of the CMF - Text Updates/Deletes/Changes"

NPPR101af – "TCN to FNU Conversion for Interoperability"

NPPR101ag – "Update/delete all requirements related to returning a composite for either palmprints or supplemental fingerprints and palmprints.  NGI will return the most recent as the default."	
NPPR101ai – "Add EIHR requirements to the NGI SRD – review IAFIS SRD Functional Requirement FR667"	
NPPR101aj –"Updates to the NGI SRD as a result of the Latent Fingerprint / Palmprint Trade Study"	
NPPR101ak –"Remove cascaded searching of the ULF from the Latent threads"	

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# 1 INTRODUCTION

The FBI has a family of automated systems that support the capability to provide identification, verification, information, investigation, notification, and data management services to criminal justice and authorized non-criminal justice users. The Criminal Justice Information Services (CJIS) Division System of Services (SoS), located in Clarksburg, West Virginia, includes the National Crime Information Center (NCIC), the National Instant Criminal Background Check System (NICS), and the Integrated Automated Fingerprint Identification System (IAFIS). Together, these systems form an integrated approach to providing customer information and services that support the detection and reduction of domestic and international terrorist, and criminal related activities.

The NCIC system maintains a national index to document theft reports, warrants, and other criminal justice information submitted by law enforcement agencies from across the country. It provides law enforcement with access to criminal justice data pertaining to crimes and criminals of national interest.

The NICS system is a national system that provides authorized users with information about persons who may be prohibited by federal or state laws from owning or receiving a firearm. NICS ensures national security and public safety by providing the timely determination of a person's eligibility to possess firearms or explosives in accordance with federal law.

The IAFIS provides an up-to-date, integrated system to respond to the needs of the local, state, tribal, federal, and international criminal and authorized non-criminal justice agencies. It houses the largest collection of digital representations of fingerprint images, features from the digital fingerprint images, and associated criminal history information in the world. Collectively, this data comprises the biometrics, content, format, and units of measurement for the electronic exchange of information that may be used for the fingerprint identification of a subject. The current IAFIS, implemented in July 1999, allows the standard electronic submission of fingerprint identification data to the FBI.

The IAFIS provides automated fingerprint search capabilities, latent search capability, electronic image storage, and electronic exchange of fingerprints and responses 24 hours a day, 365 days a year, in support of thousands of law enforcement organizations and background checks for hundreds of civil agencies. The system, which contains more than 51 million criminal subjects, provides an "open-set" identification of submitted fingerprints, which are checked against all known criminals in relevant portions of the database, normally within two hours of an electronic criminal request and within 24 hours of an electronic civil fingerprint submission. Each day, approximately 7,000 new records are added to the database.

The mission of government in today's global society demands more robust identification solutions that can be deployed on an increasingly large scale. Systems such as the IAFIS are crucial for national security and homeland security in addition to supporting law enforcement agencies. The defense and intelligence communities require automated methods capable of rapidly determining an individual's true identity, as well as previously used identities and past activities. Fusion and distribution of MultiModal biometrics and other contextual information can augment human interaction when a confrontation

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occurs with an unknown individual in a hostile or controlled setting. Depth of knowledge and real-time access to these data sets make biometrics a significant force multiplier and precision weapon in U.S. national security operations. The defense and intelligence communities recognize the need to enable matching and searching capabilities for multiple biometric modalities. The use of multiple biometrics requires increases in capacity and throughput while maintaining data integrity and improvements in recognition algorithms.

Homeland security and law enforcement communities require technologies to secure the U.S. borders and to identify criminals in the civilian law enforcement environment. At the same time, any solution must also seek to maintain international relations, ensure smooth passage of legitimate visitors and commerce, and provide confidence in the identity and credentials of those given local or national trust.

The FBI continues to improve existing technology in order to provide the most reliable and accurate information possible. To remain responsive to law enforcement and other customer needs, and given the advances in fingerprint identification technology, it is essential that enhancements be made to the IAFIS.

The Next Generation Identification (NGI) Program introduces new capabilities to reduce terrorist and criminal activities by improving and expanding biometric services to its users, provides the infrastructure to support interoperability with authorized external agencies for external searches, and provides additional repositories for external searches.

The NGI Program incorporates into IAFIS the six core initiatives listed below:

- Advanced Fingerprint Identification Technology (AFIT)
- Quality Check Automation (QCA) Phase III
- Interstate Photo System (IPS) Enhancements
- Disposition Reporting Improvements (DRI)
- Enhanced IAFIS Repository (EIR)
- National Palmprint System (NPPS)

These six core initiatives in addition to the legacy IAFIS functionality will comprise the NGI System. Based on the long term vision of DOJ/FBI to make NGI fully interoperable with other biometric systems, the Biometric Interoperability Program incorporates enhancements to enable interoperability with the Department of Homeland Security (DHS).

Within DHS, the United States Visitor and Immigrant Status Indicator Technology (US-VISIT) program supports key immigration and border management processes across agencies. These processes include creating new capabilities to biometrically verify the identities and monitor border crossings of foreign visitors and immigrants. The Automated Biometric Identification System (IDENT) system, operated by US-VISIT, is the core technical component of this biometric capability.

Interoperability is being managed as two projects and deployed in three phases. The projects are Shared Services, which is fully described within this document, and Shared Data, which encompasses the first phase of interoperability. Phase one of deployment is the interim Data Sharing Model (iDSM), which was deployed on September 3, 2006 and provides a short-term interoperability solution with a reciprocal exchange of biometric data subsets between IDENT and IAFIS. Phase two is the Initial Operating

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Capability (IOC), which provides incremental enhancements for both projects. The third phase is the Full Operating Capability (FOC), which will deploy after IOC is completed (tentatively projected for FY 2010) and represents the final information sharing enhancements necessary to support interoperability.

Full information sharing between these two systems (and among other relevant systems) will offer a multitude of benefits to DHS, DOJ, and other stakeholder agencies. DHS access to criminal history files would facilitate improved decisions regarding an individual's admissibility, eligibility of immigration benefits, and deportability from the United States. Expanded DOJ access to DHS data will enhance the ability to develop comprehensive histories and threat profiles of individuals and to share immigration information with stakeholders. Access to systems will be governed by applicable laws and policy. Additionally, improved interoperability will enhance the mutual effort to identify and apprehend high-risk terrorist and wanted individuals.

Additionally, the CJIS Global Initiatives Unit (GIU) provided the vision for new NGI capabilities to support an International Terrorist File Shared Services and Data Exchange initiative that supports identification searches with multi-tiered responses.

### 1.1 Purpose of Document

This document, the NGI System Requirements Document (SRD), defines the user, functional, and operational requirements for the system identified as the Integrated Automated Fingerprint Identification System. These requirements will provide the core NGI User Services to the communities served by the FBI.

The requirements contained within this document are intended to be free from design considerations unless there are compelling reasons to constrain the design. Also included are workload and performance requirements for the overall system through the year 2012.

# 1.2 Background

The CJIS IAFIS, one of the largest fingerprint identification systems in the world, has been instrumental in meeting the fingerprint identification needs of the law enforcement and non-criminal justice communities. Since IAFIS FOC in July 1999, it has provided automated Tenprint and latent identification and criminal history data for both civil and criminal needs. Continuous improvements and upgrades since then have provided unprecedented increases in system performance, search reliability, throughput and response times.

The tragic events of September 11, 2001 transformed the direction of the FBI and the law enforcement community, and highlighted the need for reliable and rapid identification of individuals and the capability to provide and share criminal information across agencies. The adoption of Homeland Security legislation and other national security legislation has spawned the implementation of additional IAFIS services to improve homeland and border security, enhance transportation safety and security, and increase information sharing.

# 1.3 System Objectives

NGI objectives are as follows:

- Provide accurate and timely services to user agencies: The FBI provides vital services to support law enforcement agencies and other users nationwide. To accomplish this mission, the FBI's automated systems must supply critical information in a timely manner.
- Support a paperless environment: Transactions received from and sent to other organizations, as well as internal FBI transactions, will be electronic to the maximum extent feasible. Since not all external organizations will be fully automated, some paper will continue to be received. Incoming fingerprint cards and documents received in paper form will be converted to digital image form and processed electronically upon receipt.
- Enable the FBI to process a significant growing workload without increasing staff: The pressures on the federal budget dictate the use of high performance automation and work reengineering to cope with increasing workloads.
- Increase the number of crimes solved by providing enhanced identification and investigative services: The improvement of both the Tenprint and latent capabilities will assist law enforcement agencies in solving more crimes.
- Provide options for NGI participation to international, federal, state, tribal, and local
  agencies: Each option will provide users with access to a different predefined level of NGI
  technical capability, so that each agency can choose the option best suited to its needs.
  Agencies may continue to mail Tenprint cards and documents to the FBI for processing, or
  take full advantage of electronic data transmission and access a greater number of NGI
  capabilities.

# 1.4 Organization of Document

Following this introduction, Section 2 describes the core NGI user service requirements, Section 3 describes the functional requirements, and Section 4 contains a description of workload, performance, security, and other non-functional requirements. A bibliography is provided at the end of the document.

# 2 USER SERVICE REQUIREMENTS FOR NGI

The FBI provides user services to: (1) authorized customers located at law enforcement and criminal justice agencies, (2) others that have an authorized non-criminal justice purpose, and (3) FBI staff members who are identified as Authorized FBI Service Providers.

There are six core NGI services to be provided to these users. The NGI user requirements identified below have been listed by these six categories.

#### 2.1 Identification Services

The Identification Service provides a positive identification or non-identification of an individual based on a one-to-many biometric search. This includes Tenprint Fingerprint Identification Searches, Latent Identification Searches, Repository for Individuals of Special Concern (RISC) Rapid Searches, ITF Identification Searches, and Disposition Fingerprint Identification Searches. NGI may return a reject response if the submission fails to satisfy processing criteria.

Fingerprint Identification user requirements are defined as follows:

NGI shall support Tenprint Fingerprint Identification Search requests.

Tenprint searches may be submitted in hardcopy, or electronically in accordance with the latest Electronic Biometric Transmission Standard (EBTS). NGI processing of these searches includes system and service provider functionality such as Automated Quality Check (AQC), Fingerprint Sequence Check (FSC), Automated Sequence Check (ASC), Fingerprint Image Comparison (FIC), Latent Fingerprint Image Comparison (LFIC), and error conflict resolution. Fingerprint submissions may be processed by internal Tenprint or Latent Service Providers who may choose to manually generate an identification, non-identification, or rejection response in reply to the request.

NGI shall support Tenprint Fingerprint Identification Searches against designated NGI repositories.

NGI shall support Tenprint Fingerprint Identification Searches against designated external repositories (e.g., IDENT).

NGI shall support a Tenprint Fingerprint Identification Search from an Authorized External System (e.g., IDENT) against designated NGI repositories.

NGI shall support photos as part of a Tenprint Fingerprint Identification Search response from an External System (e.g., IDENT), when requested.

NGI shall support Tenprint Fingerprint Identification Search requests against shared data records.

Tenprint Fingerprint Identification Search requests against shared data records contained within iDSM may only be submitted by Authorized Participating Shared Data Agencies.

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NGI shall support prioritized Tenprint Fingerprint Identification Searches.

NGI shall support AQC for Tenprint Fingerprint Identification Searches.

NGI shall enroll fingerprints into designated repositories as part of Tenprint Fingerprint Identification Searches.

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NGI shall enroll an Identity as part of a retained Tenprint Fingerprint Identification Search.

NGI shall enroll photos as part of a Tenprint Fingerprint Identification Search.

NGI shall enroll palmprints as part of a Tenprint Fingerprint Identification Search.

NGI shall enroll iris data as part of a Tenprint Fingerprint Identification Search.

NGI shall enroll a Rap Back Subscription as part of a Tenprint Fingerprint Identification Search.

NGI shall enroll Identity Theft Victims as part of a Tenprint Fingerprint Identification Search.

NGI shall enroll supplemental fingerprint and palmprint information as part of a Tenprint Fingerprint Identification Search.

NGI shall support the linking of NGI and External System (e.g., IDENT) records as part of a search.

Linking of NGI and External System records will occur when NGI or the External System enrolls a new identity or receives higher quality fingerprints for an unlinked record.

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NGI shall support Identity maintenance as part of a Tenprint Fingerprint Identification Search.

NGI shall provide an appropriate response to a Tenprint Fingerprint Identification Search request.

A response may include Identity History (i.e., criminal, civil) relevant to the identified subject. NGI may provide an electronic or printed response, as requested by the submitter of the request.

NGI shall provide wanted person information with the Tenprint Fingerprint Identification Search response.

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NGI shall provide flash information with the Tenprint Fingerprint Identification Search response.

NGI shall provide sex offender registry information with the Tenprint Fingerprint Identification Search response.

NGI shall provide Identity Theft information with the Tenprint Fingerprint Identification Search response.

NGI shall provide a photo with the Tenprint Fingerprint Identification Search response, when requested.

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NGI shall support a Hot Check Name Search of the NCIC persons' files for Tenprint Fingerprint Identification Searches.

As part of a Hot Check Name Search, NCIC will compare the submitted Tenprint fingerprint search request biographic data to the NCIC Wanted Person File and the terrorists records contained within the NCIC Violent Gang and Terrorist Organization File (VGTOF). NCIC may provide notifications of hits to the NCIC record owner(s).

NGI shall support electronic disposition submissions using fingerprints.

NGI will allow authorized Contributors to submit disposition requests with fingerprints to identify the associated subject.

NGI shall support Latent Fingerprint Identification Search requests.

Latent Fingerprint Identification Search requests will be submitted electronically in accordance with the latest EBTS.

NGI shall support Latent Fingerprint Identification Searches against designated repositories.

NGI shall provide an appropriate response to a Latent Fingerprint Identification Search request.

Latent Fingerprint Identification Searches will be processed by FBI Latent Service Providers who will provide identification, non-identification, inconclusive, or rejection response in reply to the request.

NGI shall support RISC Rapid Searches.

The RISC Rapid Search functionality provides the capability to perform an identification search against a limited population with a significantly reduced response time.

NGI shall support International Terrorist Identification Searches.

NGI shall support enrollment into the ITF.

#### 2.2 Verification Services

The Verification Service provides a confirmation of an Identity based on a one-to-one comparison.

NGI shall verify the Identity of an individual using fingerprints.

NGI shall verify the Identity of an individual using fingerprints provided by an External System (e.g., IDENT).

#### 2.3 Information Services

The Information Service supports user requests for biographic and/or biometric information for a specific individual.

NGI shall support the retrieval of fingerprint and supplemental fingerprint and palmprint information associated with an Identity.

NGI shall support the retrieval of Identity History information.

NGI shall support the retrieval of a photo on an Identity History request.

NGI shall provide external system link identifiers as part of Identity History responses.

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Interstate Identification Index (III) participating states will submit all arrest fingerprints to the FBI for processing. The FBI will maintain a copy of the criminal history for III states, although the state may have a more complete history. For the purpose of criminal Tenprint Fingerprint Identification Search responses, the FBI will use its copy of a III state's criminal history.

When external criminal history requests (QR messages) are done for criminal or national security purposes, the FBI will notify all III states holding portions of the requested record. The III states will be responsible for disseminating their criminal histories to the requestor.

NGI shall support the retrieval of NFF Participant State Criminal Records on requests for criminal justice purposes.

National Fingerprint File (NFF) participating states will submit only the first arrest for an individual to the FBI. NGI will create a "stub" arrest that indicates that all criminal history from the NFF state is maintained at the state level. Subsequent arrests are not submitted to the FBI, but an electronic Criminal Print Ident (CPI) message is sent to inform the FBI when an individual is re-arrested.

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NGI shall support the retrieval of photo information.

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NGI shall support the retrieval of photo information from an External System (e.g., IDENT).

NGI shall provide photo images to External Systems.

NGI shall support the retrieval of palmprint information.

NGI shall support the retrieval of iris information.

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NGI shall support the retrieval of unsolved latent audit trail information.

NGI shall support Other Information requests.

NGI shall support the retrieval of Rap Back Subscription Status.

NGI shall support the retrieval of a Rap Back Identity History Summary.

### 2.4 Investigation Services

The Investigation Service provides a list of candidates based on a one-to-many biometric and/or biographic search. The result set may include an ordered listing of candidates and corresponding information to facilitate the investigative decision process.

NGI shall support enrollment of an Identity as part of an Investigative Search.

Identity enrollment as part of an Investigative Search will only occur when the contributor indicates that a biometric should be retained in an unsolved biometric file.

NGI shall provide external system link identifiers as part of an Investigative Search response.

NGI shall support Subject Search requests based on biographic information.

The search request may be submitted via NCIC, NICS or NGI workstations, or Machine Readable Data (MRD).

NGI shall provide a candidate list in response to a Subject Search request.

The response may contain additional biographical data for each subject, or pointers to other systems that may contain additional data.

NGI shall support Ad Hoc Subject Search requests of Identity History repositories.

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NGI shall support Latent Investigation Searches against designated NGI repository(ies).

NGI shall support Latent Investigation Searches of an external biometric repository.

NGI shall support Latent Investigation Searches from External Systems (e.g., IDENT).

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NGI shall support Latent Investigation Searches filtered by NCIC fingerprint classifications.

NGI shall support Latent Print Image Investigation Searches.

NGI shall support Latent Print Feature Investigation Searches.

NGI shall support Unsolved Latent Searches.

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NGI shall support Latent Penetration Searches against NGI repositories.

NGI shall support Latent Search Status and Modification requests.

NGI shall support Latent Repository Statistics Query requests.

NGI shall support Comparison Print Image Submission requests.

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NGI shall support Evaluation Latent Fingerprint Submission for investigation.

NGI shall support Fingerprint Image Search requests against NGI fingerprint repositories.

NGI shall provide a candidate list in response to a Fingerprint Image Search requests.

NGI shall support Fingerprint Feature Search requests against NGI fingerprint repositories.

NGI shall provide a candidate list in response to a Fingerprint Feature Search request.

NGI shall support Tenprint Fingerprint Rap Sheet Search requests of NGI repositories.

NGI shall provide a candidate list and corresponding Identity History Summaries in response to a Tenprint Fingerprint Rap Sheet Search request.

NGI shall support Text-Based Facial Photo Searches.

In addition to Text-Based Facial Photo searching, NGI will also support Text-Based Scars, Marks, and Tattoos (SMT) Photo searching.

NGI shall support Text-Based SMT Photo Searches.

NGI shall support Facial Recognition Searches.

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NGI shall support Iris Searches.

#### 2.5 Notification Services

The Notification Service provides event notification to users for their data contained within any of the NGI repositories [e.g., Criminal and Civil Files, Special Population Cognizant (SPC) Files, Unsolved

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Iris File (UIF), and Unsolved Photo File (UPF)]. With this service, a data owner will receive an unsolicited notification from the system based on event criteria (triggers). In addition, events that trigger a notification on Immigration Violator File (IVF) records will be provided to the Law Enforcement Support Center (LESC).

NGI shall provide notification of record activity on persons who are of special interest.

Special Interest Flags will include Flashes, Wanted Persons, Registered Sexual Offenders, and other persons of special interest.

NGI shall provide Authorized Contributors with notifications of external system activity on a linked record flagged as being of special interest.

NGI shall provide notification of file maintenance activities to criminal record owners.

NGI shall provide notifications of positive identifications against shared data records to the shared data owner (e.g., IDENT).

NGI shall provide an External System (e.g., IDENT) with notifications of activity on a linked record.

NGI shall send notifications to wanting agencies as the result of fingerprint verification activity.

NGI shall send IVF notifications to the LESC.

NGI shall provide a Rap Back Notification Service.

NGI shall provide the owner of an unsolved latent fingerprint with notification of potential fingerprint matches.

NGI shall provide the owner of an SPC File with notification of potential fingerprint matches.

NGI shall provide the owner of an unsolved latent fingerprint with notification of fingerprint decisions.

NGI shall provide the owner of an SPC File fingerprint with notification of fingerprint decisions.

NGI shall provide the owner of an unsolved latent with notification of latent decisions.

NGI shall provide the owner of an SPC File with notification of latent decisions.

NGI shall provide the owner of an unsolved Latent with notification of deletions due to ULF maximum capacity.

NGI shall provide the owner of an unsolved photo with notification of potential facial photo matches as a result of a cascaded search.

NGI shall provide the owner of an SPC File with notification of potential facial photo matches as a result of a cascaded search.

NGI shall provide the owner of an unsolved photo with notification of positive facial photo decisions.

NGI shall provide the owner of an SPC File photo with notification of a positive facial photo decision

NGI shall provide the owner of an unsolved latent with notification of potential palmprint matches as a result of a cascaded search.

NGI shall provide the owner of an SPC File with notification of potential palmprint matches as a result of a cascaded search.

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NGI shall provide the owner of an unsolved latent with notification of potential supplemental fingerprint and palmprint matches as a result of a cascaded search.

NGI shall provide the owner of an SPC File with notification of potential supplemental fingerprint and palmprint matches as a result of a cascaded search.

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NGI shall provide the owner of unsolved iris data with notification of potential iris matches as a result of a cascaded search.

NGI shall provide the owner of an SPC File with notification of potential iris matches as a result of a cascaded search.

NGI shall provide the owner of an unsolved iris with notification of iris decisions.

NGI shall provide the owner of an SPC File with notification of iris decisions.

NGI shall send notification to RISC record owner(s) as the result of a positive identification.

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NGI shall send Foreign or Unknown Place of Birth notifications to the LESC.

NGI shall send IDENT Hit notifications to the LESC.

# 2.6 Data Management Services

The Data Management Service supports data management by providing authorized users the capability to add, delete, or modify biographic and/or Identity History data.

NGI shall support the maintenance of fingerprints.

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NGI shall support the maintenance of supplemental fingerprint and palmprint information.

NGI shall support link maintenance between NGI and external repositories.

NGI shall support the maintenance of shared data records.

NGI shall support direct enrollment of fingerprints into an SPC File.

NGI shall support the direct enrollment of latent information into an SPC File.

NGI shall support fingerprint decisions for ULF records.

NGI shall support latent decisions.

NGI shall forward a latent decision on an external system's candidate to that External System.

NGI will accept and process latent decisions from authorized contributors and latent examiners resulting from an investigative search that returned latent candidates.

NGI shall support file maintenance of latent files.

NGI will have capabilities to modify and delete data within the SPC Files and ULF.

NGI shall support file maintenance of SPC Files.

NGI shall support file maintenance of contributor information.

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NGI will support the processing of information related to dispositions, expungements, consolidations, death notices, and want and flash notifications. NGI also supports the maintenance of specific biographic and criminal record data.

NGI shall support file maintenance requests for the synchronization of NCIC and NGI Wanted Person and Sexual Offender Registry information.

NGI shall support the maintenance of authorized statutes.

NGI will provide the capability to perform statute maintenance for the list of known state statutes used by AQC.

NGI shall support Unsolved Latent Add Confirm submissions.

NGI shall support the maintenance of the Computerized Records Sent File.

NGI shall support electronic disposition submissions without fingerprints.

NGI shall support electronic disposition maintenance requests.

NGI shall provide a conflict resolution capability in support of disposition processing.

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NGI shall support the maintenance of Identity History information.

NGI shall support restoration of Identity History information.

The following requirements are related to the direct enrollment and maintenance of biometrics. Direct biometric enrollment may be done with fingerprints for validation, or without fingerprints when a Memorandum of Understanding (MOU) is in place with the contributor.

NGI shall support direct enrollment of photos.

NGI shall support bulk enrollment of photos.

NGI shall support the maintenance of photos.

NGI shall support direct enrollment of supplemental fingerprint and palmprint information.

NGI shall support bulk enrollment of supplemental fingerprint and palmprint information.

NGI shall support direct enrollment of palmprints.

NGI shall support bulk enrollment of palmprints.

NGI shall support the maintenance of palmprints.

NGI shall support direct enrollment of iris data.

NGI shall support bulk enrollment of iris data.

NGI shall support the maintenance of iris data.

NGI shall support direct enrollment into Rap Back.

NGI shall support the maintenance of Rap Back Subscriptions.

NGI shall support Rap Back Subscription Renewal.

NGI shall support ITF record maintenance requests.

NGI shall support the maintenance of Special Interest records.

NGI shall support Death Notice submissions.

NGI shall support Flash Submissions.

NGI shall support the maintenance of IVF information.

NGI shall support NFF State CPI Notifications.

# **3 FUNCTIONAL REQUIREMENTS**

This section identifies the functional requirements derived from the user requirements described in the previous section. Pertinent workload, performance, availability, security, and other requirements that must be considered in conjunction with these functional requirements are identified in Section 4. References made to EBTS Types of Transactions (TOTs) indicate that the transaction is submitted by contributors external to CJIS. Likewise, references made to System Types of Transactions (STOTs) indicate that the transaction is submitted by an Authorized FBI Service Provider internal to CJIS.

## 3.1 Identification Services Functional Requirements

The following section contains the functional requirements supporting Identification user services.

#### 3.1.1 Tenprint Fingerprint Identification Services

The Tenprint Fingerprint Identification Services will provide the capability to match fingerprint information from criminal and civil Tenprint submissions to fingerprint information contained within the NGI repositories. This service results in an identification decision (i.e., positive identification, non-identification). If the submission does not meet minimum processing criteria (e.g., quality), the submission will be returned with a reason for rejection. Tenprint Fingerprint Identification Search requests submitted by participating shared data agencies will generate a search of the Shared Data independent of the NGI search.

#### 3.1.1.1 Tenprint Fingerprint Identification Inputs

NGI shall accept a Tenprint Fingerprint Identification Search request from an Authorized Contributor in accordance with the latest EBTS version.

NGI shall accept a Tenprint Fingerprint Identification Search request from an Authorized External System (e.g., IDENT) in accordance with the latest EBTS version.

The EBTS TOTs that support the Tenprint Fingerprint Identification Search are: AMN, CAR, CNA, CPDR, CPNU, DEK, DEU, DOCE, EMUF, FANC, FAUF, FIDO, FNDR, MAP, MPR, NFAP, NFUF, NFUE and NNDR. The following TOTs are considered Humanitarian Tenprint Identification searches: AMN, DEU, and MPR.

NGI also supports additional TOTs that are not defined, but are compliant with the EBTS. These TOTs are limited to use by the Card Scanning Service to support hardcopy submission of Tenprint Fingerprint Identification searches: CARC, CNAC, FUFC, MAPC, NFDP, and NFFC. The CSS TOTs are validated in the same manner as their corresponding EBTS TOTs which are: CAR, CNA, FAUF, MAP, NFAP, and NFUF, respectively.

NGI shall allow an Authorized FBI Service Provider to submit a Tenprint Fingerprint Identification Search request.

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The NGI STOTs that support the Tenprint Fingerprint Identification Search are: LCAR, IAMN, ICAR, ICNA, IDEK, IDEU, IFANC, IFAUF, FOID, IMAP, IMPR, and INFUF. The following STOTs are considered Humanitarian Tenprint Identification searches: IAMN, IDEU, and IMPR.

NGI shall accept flat fingerprint data as part of a Tenprint Fingerprint Identification Search request.

NGI shall accept rolled fingerprint data as part of a Tenprint Fingerprint Identification Search request.

NGI shall accept an external system link identifier and biographic data from an External System (e.g., IDENT) as part of a Tenprint Fingerprint Identification Search request.

NGI shall require a retention status indicator as part of a Tenprint Fingerprint Identification Search request.

NGI shall require a designation of the repository(ies) into which biometric data should be enrolled as part of a Tenprint Fingerprint Identification Search request.

The TOT/STOT may be used to determine designated repository.

NGI shall accept a designation of the NGI repository(ies) against which fingerprint data should be searched as part of a Tenprint Fingerprint Identification Search request.

NGI shall accept a designation of the external repository(ies) (e.g., IDENT) against which fingerprint data should be searched as part of a Tenprint Fingerprint Identification Search request.

NGI shall accept an indicator on a Tenprint Fingerprint Identification Search that specifies which dissemination tier to apply to a RISC enrolled Identity.

NGI shall accept an indicator on a retained Tenprint Identification Search request that specifies whether or not a RISC enrolled tier-1 or tier-2 Identity should be marked for hit notifications to the RISC record owner.

NGI provides a multi-tier dissemination structure that is defined as follows: tier 1 – Share All; tier 2 – Point of Contact Only; tier 3 – Silent Hit.

NGI shall accept a designation of transaction priority by which the Tenprint Fingerprint Identification Search request should be performed.

NGI shall accept supplemental fingerprint and palmprint information as part of a Tenprint Fingerprint Identification Search request.

NGI shall accept photo input from an Authorized Contributor as part of a Tenprint Fingerprint Identification Search request.

NGI shall allow photo input from an Authorized FBI Service Provider as part of a Tenprint Fingerprint Identification Search request.

NGI shall accept a multi-level SMT photo descriptor field as part of a Tenprint Fingerprint Identification Search request.

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NGI shall accept an indicator on a Tenprint Fingerprint Identification Search request that specifies if a photo should be included with the fingerprint search response.

The following requirement will support an Authorized Contributor request to search the LESC using an Immigration Alien Query (IAQ) as part of an identification search of the IDENT System. Responses to NGI will be provided as an Immigration Alien Response (IAR).

NGI shall accept an indicator on a Tenprint Fingerprint Identification Search request of the IDENT system that an IAQ be requested of the LESC.

NGI shall accept as part of a Tenprint Fingerprint Identification Search from an External System (e.g., IDENT) an indication of whether or not NGI should establish a link when the search results in a positive identification.

NGI shall accept palmprint images from an Authorized Contributor as part of a Tenprint Fingerprint Identification Search request.

NGI shall allow palmprint images from an Authorized FBI Service Provider as part of a Tenprint Fingerprint Identification Search request.

NGI shall accept iris data input from an Authorized Contributor as part of a Tenprint Fingerprint Identification Search request.

NGI shall allow iris data input from an Authorized FBI Service Provider as part of a Tenprint Fingerprint Identification Search request.

NGI shall accept a Rap Back Enrollment from an Authorized Contributor as part of a Tenprint Fingerprint Identification Search request.

NGI shall allow a Rap Back Enrollment from an Authorized FBI Service Provider as part of a Tenprint Fingerprint Identification Search request.

NGI shall require a designation of which event type(s) (e.g., civil, criminal, external system) will trigger Rap Back notifications for the associated Identity when Rap Back Enrollment is indicated as part of a Tenprint Fingerprint Identification Search request.

NGI shall accept a Rap Back subscription expiration date for the associated Identity, as part of a Tenprint Fingerprint Identification Search request.

NGI shall accept a designation of the Authorized Contributor(s) that should receive Rap Back Notifications for the associated Identity, as part of a Tenprint Fingerprint Identification Search request.

NGI shall accept a UCN(s) as part of a Tenprint Fingerprint Identification Search request.

NGI will optionally accept one or more quoted Universal Control Numbers (UCN) when a contributor has made an identification at the state level.

NGI shall accept an Identity History Summary indicator as part of a Tenprint Fingerprint Identification Search request.

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The Identity History Summary indicator will be used to determine if an Identity History Summary should be included as part of a Tenprint Fingerprint Identification response for a positive identification decision.

NGI shall allow an Authorized FBI Service Provider to input fingerprint images to initiate a Tenprint Fingerprint Identification Search request.

The NGI workstation will support multiple input methods for biometric images (scanning, CD-ROM, and other removable media). These methods will support the standards for output stated in ANSI/NIST image transmission standard for fingerprint data "American National Standards Institute/National Institute of Standards and Technology standard, Data Format for the Interchange of Fingerprint Information" and with the EBTS.

NGI shall accept an Identity Theft Victim File Enrollment indicator as part of a Tenprint Fingerprint Identification Search request.

#### 3.1.1.2 Tenprint Fingerprint Identification Processing

NGI shall initiate a Tenprint Fingerprint Identification Search against the Shared Data as a result of a Tenprint Fingerprint Identification Search request from an Authorized Contributor participating in Shared Data.

When an incoming Tenprint Fingerprint Identification Search request or CPI Notification is from an Authorized Shared Data Agency, NGI will not only search against the required repository but will also independently search and compare against the Shared Data.

NGI shall perform AQC of textual data (i.e., reason fingerprinted, arrest data) contained in a Tenprint Fingerprint Identification Search request against the AQC business rules.

NGI has the capability to make a pass or fail decision through a rule-based AQC process. Tenprint Fingerprint Identification Search requests that do not pass the automated process are forwarded to an Authorized FBI Service Provider for manual review. NGI will provide two options to validate the Reason Fingerprinted (RFP) field for Non-Federal User Fee applicant submissions. Option A will validate the RFP against a list of authorized statutes. Option B will validate the RFP against a list of standardized terms.

NGI shall reject a Tenprint Fingerprint Identification Search request when textual information is invalid based on AQC business rules.

NGI shall require an Authorized FBI Service Provider to perform Manual Quality Check on a Tenprint Fingerprint Identification Search request when AQC business rules determine manual review is necessary.

NGI shall allow an Authorized FBI Service Provider to reject a Tenprint Fingerprint Identification Search request when it is determined to be invalid as part of Manual Quality Check.

NGI shall perform ASC of the individual fingerprint impressions to the plain fingerprint impressions contained in a Tenprint Fingerprint Identification Search request to determine if the individual fingerprint impressions are correctly sequenced.

NGI shall reject a Tenprint Fingerprint Identification Search request as part of ASC when fingerprint data fails to meet processing criteria in accordance with ASC business rules.

NGI shall require an Authorized FBI Service Provider to perform manual FSC on a Tenprint Fingerprint Identification Search request when ASC determines that manual review is necessary.

NGI shall allow an Authorized FBI Service Provider to reject a Tenprint Fingerprint Identification Search request as part of manual FSC when fingerprint data fails to meet processing criteria.

Processing criteria is based on the Authorized FBI Service Providers' FSC Standard Operating Manual (SOM).

NGI shall extract fingerprint features from the fingerprint images provided in the Tenprint Fingerprint Identification Search request.

NGI shall perform an image quality check on a Tenprint Fingerprint Identification Search request based on image quality standards.

NGI shall reject a Tenprint Fingerprint Identification Search request when the fingerprint images fail to satisfy minimum fingerprint image quality standards.

NGI shall mark the Tenprint Fingerprint Identification Search request as SBDA when the submitted fingerprint data fails to satisfy fingerprint image quality for retention.

The Search But Don't Add (SBDA) indicator allows tenprint fingerprint data of a defined quality to be used in a search of the NGI repositories, but not allow the images and features to be added to the NGI repository(ies). Humanitarian prints will be added despite the SBDA indicator being set. If the search request results in a non-identification decision, NGI will respond with a quality reject message.

NGI shall perform a fingerprint search of the default repository when the repository is not specified in the Tenprint Fingerprint Identification Search request.

NGI shall perform a search of default internal repositories before sending a Tenprint Fingerprint Identification Search request to an External System.

The default NGI repositories will be searched first to determine if there is a link to the External System (e.g., IDENT). If a link exists, a search request will not be sent to the External System. Information will be retrieved from the system directly using the external system's link identifier.

NGI shall perform a rolled fingerprint search of the repositories designated in a Tenprint Fingerprint Identification Search request.

NGI shall perform a flat fingerprint search of the repositories designated in a Tenprint Fingerprint Identification Search request.

NGI shall perform all Tenprint Fingerprint Identification Search requests against composite fingerprints.

NGI shall prioritize a Tenprint Fingerprint Identification Search request using established and specified priority criteria.

NGI shall perform a rolled fingerprint search against the RISC for all Tenprint Fingerprint Identification Search requests.

NGI shall perform a flat fingerprint search against the RISC for all Tenprint Fingerprint Identification Search requests.

Fingerprint Search results of the RISC repository will be included in the Tenprint Fingerprint Identification Search response.

When an incoming submission references at least one UCN, a fingerprint comparison of each quoted UCN is made prior to a technical search and/or name search.

NGI shall perform a Subject Search of the designated NGI repository for candidates based on biographic data provided for all Tenprint Fingerprint Identification Search requests.

NGI shall perform III/Verify as part of a Tenprint Fingerprint Identification Search request for each quoted UCN and each Subject Search candidate.

NGI shall compare the fingerprint features extracted from the fingerprint images provided in the Tenprint Fingerprint Identification Search request against the fingerprint features of each candidate provided to III/Verify.

NGI shall calculate a match score for each candidate resulting from a Tenprint Identification Search request.

NGI will determine a match score for each quoted UCN, Subject Search candidate, or Feature Search candidate.

NGI shall require an Authorized FBI Service Provider to perform a manual special processing review when one or more candidates are marked with a special processing indicator (e.g., SPF) as part of a Tenprint Fingerprint Identification Search request.

NGI shall eliminate each candidate that has a match score below the minimum threshold for III/Verify as part of a Tenprint Fingerprint Identification Search request.

NGI shall perform a fingerprint feature search for all Tenprint Fingerprint Identification Searches.

NGI shall perform a subject search of the civil repository using biographic data provided as part of a Humanitarian Tenprint Fingerprint Identification Search request.

NGI shall perform a feature search of the civil repository using the fingerprint features extracted from the fingerprint images provided in the Humanitarian Tenprint Fingerprint Identification Search request.

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NGI shall perform a feature search of the Shared Data records as part of a Tenprint Fingerprint Identification Search request submitted by an Authorized Contributor participating in Shared Data.

NGI shall calculate a match score for each candidate resulting from a feature search of the Shared Data.

NGI shall determine a positive identification decision for each candidate that has a match score above the high confidence threshold as part of a Tenprint Fingerprint Identification Search request.

Identification decisions may require manual FIC, depending on the match score. If the match score is above the high confidence threshold ("Lights Out"), then no manual FIC is required. If the match score is below the high confidence threshold and above the low confidence threshold, then one manual FIC is required. If the match score is below the low confidence threshold, then two manual FICs are required.

NGI shall require an Authorized FBI Service Provider to perform a manual FIC for each candidate from a Tenprint Fingerprint Identification Search request that is below the high confidence threshold.

NGI shall require a second Authorized FBI Service Provider to perform a manual FIC to confirm a positive identification for each candidate from a Tenprint Fingerprint Identification Search request that is below the low confidence threshold.

The second manual FIC will be performed independent of the first FIC decision. The decision made by the first service provider will not be made known to the second service provider.

NGI shall reject any search request of the Shared Data that has been determined "Unable to Process" by three independent manual FIC service providers.

NGI shall allow an Authorized FBI Service Provider to reject a Tenprint Fingerprint Identification Search request as a result of the manual FIC.

NGI shall require an Authorized FBI Service Provider to perform a Post Process Review check on all positive identifications resulting from a Tenprint Fingerprint Identification Search of the Shared Data.

NGI shall retrieve the corresponding subject's Identity History information when requested and a positive identification decision results from a Tenprint Fingerprint Identification Search request.

NGI shall retrieve Identity History information from III/NFF State systems, when a positive identification decision is made to an Identity that contains an NFF indicator as part of a Tenprint Fingerprint Identification Search request.

For the purpose of criminal Fingerprint Identification Search responses, the FBI will solicit the III/NFF State for their portion of the criminal history. The response from the III/NFF State Participant will be merged or appended to the FBI's response and returned to the submitter of the Fingerprint Identification Search. These queries will be sent to states over the NCIC network. The responses will be sent to NGI over Nlets, assembled by NGI, and returned to the requester.

NGI shall create a unique Identity as a result of a retained Tenprint Fingerprint Identification Search request that results in a non-identification decision.

NGI shall enroll Identity information for the newly created Identity into the appropriate NGI repository as a result of a retained Tenprint Fingerprint Identification Search request that results in a non-identification decision.

NGI shall enroll the fingerprint data in the designated repository(ies) based on file maintenance rules as part of a retained Tenprint Fingerprint Identification Search request.

NGI shall provide the capability to uniquely identify fingerprint data enrolled as a result of a Tenprint Fingerprint Identification Search request.

NGI shall assign the multi-tier dissemination level indicated in a retained Tenprint Fingerprint Identification Search request designated for the RISC repository.

NGI shall assign the default multi-tier dissemination level, when the multi-tier dissemination level is not indicated in a retained Tenprint Fingerprint Identification Search request designated for the RISC repository.

NGI shall enroll the photos in the designated repository based on file maintenance rules as part of a Tenprint Fingerprint Identification Search request.

NGI shall provide the capability to uniquely identify photos enrolled as a result of a Tenprint Fingerprint Identification Search request.

NGI shall perform a validation to ensure that submitted palmprint images match the submitted fingerprints, when the distal segments of the palmprint images are included in the Tenprint Fingerprint Identification Search request.

Palmprints will not be enrolled if the validation of the Palmprints to the submitted fingerprints fails.

NGI shall enroll the palmprints in the designated repository based on file maintenance rules as part of a Tenprint Fingerprint Identification Search request.

NGI shall provide the capability to uniquely identify palmprints enrolled as a result of a Tenprint Fingerprint Identification Search request.

NGI shall enroll the iris data in the designated repository based on file maintenance rules as part of a Tenprint Fingerprint Identification Search request.

NGI shall provide the capability to uniquely identify iris data enrolled as a result of a Tenprint Fingerprint Identification Search request.

NGI shall perform a validation to ensure that submitted supplemental fingerprint and palmprint images match the submitted fingerprints, when the distal segments of the supplemental fingerprint and palmprint images are included in the Tenprint Fingerprint Identification Search request.

Supplemental fingerprint and palmprint images will not be enrolled if the validation of the supplemental fingerprint and palmprint images to the submitted fingerprints fails.

NGI shall enroll supplemental fingerprint and palmprint information into the designated repository(ies) based on file maintenance rules as part of a retained Tenprint Fingerprint Identification Search request.

NGI shall provide the capability to uniquely identify supplemental fingerprint and palmprint data enrolled as a result of a Tenprint Fingerprint Identification Search request.

NGI shall enroll an Identity into Rap Back, when indicated, as part of a retained Tenprint Fingerprint Identification Search request.

NGI shall assign a default Rap Back subscription expiration date when an expiration date is not specified as part of the Tenprint Fingerprint Identification Search request.

NGI shall assign the default Rap Back subscription expiration date when the expiration date specified, as part of the Tenprint Fingerprint Identification Search request, exceeds the maximum allowable Rap Back subscription period.

NGI shall reject the Tenprint Fingerprint Identification Search request when the search is marked as SBDA and results in a non-identification decision.

NGI shall reject a Rap Back enrollment when the associated Tenprint Fingerprint Identification Search request is rejected.

NGI shall reject a photo enrollment when the associated Tenprint Fingerprint Identification Search request is rejected.

NGI shall reject a palmprint enrollment when the associated Tenprint Fingerprint Identification Search request is rejected.

NGI shall reject an iris enrollment when the associated Tenprint Fingerprint Identification Search request is rejected.

NGI shall reject the supplemental fingerprint and palmprint information enrollment when the associated Tenprint Fingerprint Identification Search request is rejected.

NGI shall maintain an Identity based on file maintenance rules as a result of a Tenprint Fingerprint Identification Search request with a positive identification decision.

NGI shall update Identity History information with the link information contained in a Tenprint Fingerprint Identification Search request from an External System (e.g., IDENT), when indicated.

NGI shall update fingerprint information based on file maintenance rules as a result of a Tenprint Fingerprint Identification Search request with a positive identification decision.

NGI shall create a copy of the Tenprint Fingerprint Identification Search request for the NGI Certification File based on file maintenance rules.

NGI shall update the Identity History with an Identity Theft Victim indicator when provided as part of a Tenprint Fingerprint Identification Search request.

NGI shall send an External Tenprint Fingerprint Identification Search request to an External System (e.g., IDENT) when the designated repository is external and no record link exists to that External System.

NGI shall send an External Tenprint Fingerprint Identification Search request when a retained Tenprint Fingerprint Identification Search request results in a non-identification decision (i.e., new NGI enrollment) based on External System Search rules.

NGI shall send an External Tenprint Fingerprint Identification Search request to an External System, when the external system is not IDENT, in accordance with the latest EBTS version as part of a Tenprint Fingerprint Identification Search request.

The EBTS TOT that supports an External Tenprint Fingerprint Identification Search request will be developed in accordance with the ANSI/NIST-ITL Data Format for the Interchange of Fingerprint, Facial, and other Biometric Information.

NGI shall send an External Tenprint Fingerprint Identification Search request to IDENT in accordance with the latest DHS/US-VISIT and DOJ/FBI Interoperability Interface Control Agreement as part of a Tenprint Fingerprint Identification Search request.

NGI shall send an External Tenprint Fingerprint Identification Search request, when fingerprint image quality exceeds the quality improvement threshold and a link to the External System does not exist, as part of a Tenprint Fingerprint Identification Search request based on External System Search rules.

NGI shall indicate as part of an External Tenprint Fingerprint Identification Search request against an external repository whether or not the External System should establish a link when the external system search results in a positive identification, as part of a Tenprint Fingerprint Identification Search request.

NGI shall include biographic data in an External Tenprint Fingerprint Identification Search request, as part of a Tenprint Fingerprint Identification Search request. NGI shall include a unique transaction control number (TCN) in an External Tenprint Fingerprint Identification Search request, as part of a Tenprint Fingerprint Identification Search request.

NGI shall record the correlation between the identified UCN and the unique transaction control number (TCN) included in an External Tenprint Fingerprint Identification Search request when a Tenprint Fingerprint Identification Search request results in a positive identification.

NGI shall record the correlation between the UCN assigned to the newly enrolled identity and the unique transaction control number (TCN) included in an External Tenprint Fingerprint Identification Search request when a Tenprint Fingerprint Identification Search request results in a non-identification decision.

NGI shall send an External Information request to an External System (e.g., IDENT) when the designated repository is external and a record link exists to that External System as part of a Tenprint Fingerprint Identification Search request.

NGI shall send an External Information request in accordance with the latest EBTS version, when the external system is not IDENT.

The EBTS TOT that supports an External Information request will be developed in accordance with the ANSI/NIST-ITL Data Format for the Interchange of Fingerprint, Facial, and other Biometric Information.

An External Information request will be used to retrieve external record information when a Tenprint Fingerprint Identification Search request of NGI results in a positive identification against a record containing a linked identifier to an External System.

NGI shall send an External Information request to IDENT in accordance with the latest DHS/US-VISIT and DOJ/FBI Interoperability Interface Control Agreement.

NGI shall include the UCN and the external system link identifier in an External Information request.

NGI shall accept a response from an External System as a result of an External Tenprint Fingerprint Identification Search request of external repositories in accordance with the latest EBTS version when the external system is not IDENT, as part of a Tenprint Fingerprint Identification Search request.

The EBTS TOT that supports an External Tenprint Fingerprint Identification Search response will be developed in accordance with the ANSI/NIST-ITL Data Format for the Interchange of Fingerprint, Facial, and other Biometric Information.

NGI shall accept a response from an IDENT as a result of an External Tenprint Fingerprint Identification Search request of external repositories in accordance with the latest DHS/US-VISIT and DOJ/FBI Interoperability Interface Control Agreement, as part of a Tenprint Fingerprint Identification Search request.

NGI shall accept a response from an External System as a result of an External Information request in accordance with the latest EBTS version when the external system is not IDENT.

The EBTS TOT that supports an External Information response will be developed in accordance with the ANSI/NIST-ITL Data Format for the Interchange of Fingerprint, Facial, and other Biometric Information.

NGI shall accept a response from IDENT as a result of an External Information request in accordance with the latest DHS/US-VISIT and DOJ/FBI Interoperability Interface Control Agreement.

NGI shall accept an external system link identifier and biographic data from an External System (e.g., IDENT) in a response to an External Tenprint Fingerprint Identification Search request.

NGI shall accept a unique transaction control number (TCN) from an External System (e.g., IDENT) in a response to an External Tenprint Fingerprint Identification Search request as part of a Tenprint Fingerprint Identification Search request.

NGI shall determine the UCN using the unique transaction control number (TCN) returned in an External Tenprint Fingerprint Identification Search response, and the previously recorded UCN/TCN correlation when an External Tenprint Fingerprint Identification Search results in a positive identification as part of a Tenprint Fingerprint Identification Search request.

NGI shall send a TCN/UCN correlation message to an External System (e.g., IDENT), providing the Identified UCN when an External Tenprint Fingerprint Identification Search results in a positive identification as part of a Tenprint Fingerprint Identification Search request.

NGI shall send a TCN/UCN correlation message to an External System in accordance with the latest EBTS version when the external system is not IDENT as part of a Tenprint Fingerprint Identification Search request.

NGI shall send a TCN/UCN correlation message to IDENT in accordance with the latest DHS/US-VISIT and DOJ/FBI Interoperability Interface Control Agreement as part of a Tenprint Fingerprint Identification Search request.

NGI shall update an Identity with the information contained in an External Tenprint Fingerprint Identification Search response from an External System (e.g., IDENT).

NGI shall accept a photo(s) as part of an External Tenprint Fingerprint Identification Search response.

NGI shall accept a photo(s) as part of an External Information response.

NGI shall send an IAQ to the LESC as part of a Tenprint Identification Search request when an IDENT record exists, the LESC information has been requested, and the Daily IAQ Search Limit has not been reached.

NGI shall send an IAQ to LESC, when the daily configured limit is not exceeded, for any positive identification resulting from a Tenprint Fingerprint Identification Search of the Shared Data.

NGI shall send an IAQ to LESC in accordance with the Nlets User and Technical Guide.

NGI shall accept an IAR from the LESC in accordance with the Nlets User and Technical Guide.

NGI shall accept an IAR from LESC that contains biographic information for a positive identification resulting from a Tenprint Fingerprint Identification Search of the shared data records.

The biographic data will consist of DOB, Gender, the IDENT unique identifier (EID), the A-number, FNU, and Subject Name.

NGI shall perform a cascaded fingerprint search of the ULF, in accordance with cascaded search business rules, as a result of Tenprint Fingerprint Identification Search requests.

NGI shall send an External Unsolved Latent Search request when a retained Tenprint Fingerprint Identification Search request results in a non-identification decision (i.e., new NGI enrollment) based on External System Search rules.

NGI shall send an External Unsolved Latent Search request when fingerprint image quality exceeds the quality improvement threshold as part of a Tenprint Fingerprint Identification Search request based on External System Search rules.

NGI shall send an External Unsolved Latent Search request in accordance with the latest version of the EBTS.

The EBTS TOT that supports an External Unsolved Latent Search request will be developed in accordance with the ANSI/NIST-ITL Data Format for the Interchange of Fingerprint, Facial, and other Biometric Information.

NGI will not receive a response to this unsolved latent search of an External System.

NGI shall perform a cascaded fingerprint search of the marked SPC Files, in accordance with cascaded search business rules, as a result of Tenprint Fingerprint Identification Search requests.

NGI shall perform a cascaded facial recognition search of the UPF when the photo submitted with a Tenprint Fingerprint Identification Search request meets the minimum quality standard for facial recognition in accordance with cascaded search business rules.

NGI shall perform a cascaded facial recognition search of marked SPC Files when the photo submitted with a Tenprint Fingerprint Identification Search request meets the minimum quality standard for facial recognition in accordance with cascaded search business rules.

NGI shall perform a cascaded palmprint search of the ULF when the palmprint submitted with a Tenprint Fingerprint Identification Search request meets the minimum quality standard for palmprints in accordance with cascaded search business rules.

NGI shall perform a cascaded palmprint search of the marked SPC Files, if the palmprint submitted with a Tenprint Fingerprint Identification Search request meets the minimum quality standard for palmprints in accordance with cascaded search business rules.

NGI shall perform a cascaded supplemental fingerprint and palmprint search of the ULF when the supplemental fingerprint and palmprint submitted with a Tenprint Fingerprint Identification Search request meets the minimum quality standard for supplemental fingerprint and palmprints in accordance with cascaded search business rules.

NGI shall perform a cascaded supplemental fingerprint and palmprint search of the marked SPC Files, if the supplemental fingerprint and palmprint submitted with a

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Tenprint Fingerprint Identification Search request meets the minimum quality standard for supplemental fingerprint and palmprints in accordance with cascaded search business rules.

NGI shall perform a cascaded search of the UIF when the iris data submitted with a Tenprint Fingerprint Identification Search request meets the minimum quality standard for iris searches in accordance with cascaded search business rules.

NGI shall perform a cascaded search of marked SPC File(s) when the iris data submitted with a Tenprint Fingerprint Identification Search request meets the minimum quality standard for iris searches in accordance with cascaded search business rules.

NGI shall send a Hot Check Name Search request to NCIC for all Tenprint Fingerprint Identification Search requests.

NGI shall determine the response distribution method (i.e., electronic or hardcopy) for a Tenprint Fingerprint Identification Search response.

## 3.1.1.3 Tenprint Fingerprint Identification Outputs

NGI shall provide an Authorized Contributor with an identification decision as part of a Tenprint Fingerprint Identification Search response.

An identification decision will be either a positive identification or a non-identification. If the contributor is identified as not being capable of receiving electronic response, a hardcopy response will be generated and sent to the contributor. Otherwise, an electronic EBTS compliant response will be sent.

NGI shall provide the Identity History Summary for a positive identification candidate in the Tenprint Fingerprint Identification Search response, when requested.

NGI shall provide an Identity History Summary in response to a Tenprint Fingerprint Identification Search request of the RISC repository that results in an identification against a tier-1 RISC record.

NGI shall provide contact information in response to a Tenprint Fingerprint Identification Search request of the RISC repository that results in an identification against a tier-2 RISC record.

NGI shall provide a non-identification response in response to a Tenprint Fingerprint Identification Search request of the RISC repository that results in an identification against a tier-3 RISC record.

NGI shall optionally include, on a Tenprint Fingerprint Identification Search response, the most recently taken frontal facial photo for the identified subject.

NGI shall optionally include, on a Tenprint Fingerprint Identification Search response, the most recently taken facial photo for the identified subject, when no frontal facial photo is available.

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NGI shall optionally include, on a Tenprint Fingerprint Identification Search response, the external system photo for the identified subject.

NGI shall provide a reject response, as appropriate, for a Tenprint Fingerprint Identification Search request.

NGI shall provide Authorized Contributors with an electronic response to a Tenprint Fingerprint Identification Search request in accordance with the latest EBTS version.

NGI shall provide a Tenprint Fingerprint Identification Search response to an External System in accordance with the latest version of the EBTS.

The EBTS TOT that supports a Tenprint Fingerprint Identification Search response is SRE.

NGI shall provide the appropriate Tenprint Fingerprint Identification Search response to an Authorized FBI Service Provider.

NGI shall provide a hardcopy response to a Tenprint Fingerprint Identification Search request, as appropriate.

NGI shall provide an initial partial response when a Tenprint Fingerprint Identification Search request results in a positive identification to a manual record.

NGI shall combine the NGI Tenprint Fingerprint Identification Search request results with the response(s) from external system(s) (e.g., IDENT) into a single Tenprint Fingerprint Identification Search response, when all search results are available within the response time threshold required to create a combined response.

NGI shall combine the NGI Tenprint Fingerprint Identification Search request results with the Identity History information retrieved from III/NFF State systems, when all III/NFF Identity History information is available within the response time threshold required to create a combined response.

NGI shall provide partial Tenprint Fingerprint Identification Search request results as part of a Tenprint Fingerprint Identification Search response when External System(s) do not meet the response time threshold required to create a combined response.

A partial response will include information to indicate that the external system designated to search did not respond to the search within the NGI response time. The status of the external system may be included if provided.

NGI shall provide partial Tenprint Fingerprint Identification Search request results as part of a Tenprint Fingerprint Identification Search response when III/NFF State systems do not meet the response time threshold required to create a combined response.

A partial response will include information to indicate that the III/NFF State system did not provide Identity History information within the NGI response time.

NGI shall forward External System Tenprint Fingerprint Identification Search request results independently from an NGI Tenprint Fingerprint Identification Search response

when the External System does not meet the response time threshold required to create a combined response.

For IDENT linked records, the combined Tenprint Fingerprint Identification Search response will not include the supplemental data obtained from the LESC.

NGI shall indicate the source repository (e.g., IDENT) of all external repository information returned in a Tenprint Fingerprint Identification Search response.

NGI shall forward the LESC IAR responses to an Authorized Contributor independent of the Tenprint Fingerprint Identification Search responses.

The IAR responses forwarded to Authorized Contributors include those contributors participating in Shared Data.

NGI shall forward the LESC IAR responses to an Authorized Contributor in accordance with the latest EBTS version.

The EBTS TOT that supports notification of the LESC IAR responses will be developed in accordance with the ANSI/NIST-ITL Data Format for the Interchange of Fingerprint, Facial, and other Biometric Information.

NGI shall provide the LESC IAR responses to an Authorized FBI Service Provider independent of the Tenprint Fingerprint Identification Search responses.

NGI shall advise the Authorized Contributor when a photo is enrolled as a result of a Tenprint Fingerprint Identification Search request, but fails to meet minimum quality standards for facial recognition.

NGI shall advise the Authorized FBI Service Provider when a photo is enrolled as a result of a Tenprint Fingerprint Identification Search request, but fails to meet minimum quality standards for facial recognition.

NGI shall advise the Authorized Contributor when a palmprint is enrolled as a result of a Tenprint Fingerprint Identification Search request, but fails to meet minimum quality standards for palmprint searching.

NGI shall advise the Authorized FBI Service Provider when a palmprint is enrolled as a result of a Tenprint Fingerprint Identification Search request, but fails to meet minimum quality standards for palmprint searching.

NGI shall advise the Authorized Contributor when a palmprint is not enrolled due to a failed validation of fingerprints to palmprints when processing a Tenprint Fingerprint Identification Search request.

NGI shall advise the Authorized FBI Service Provider when a palmprint is not enrolled due to a failed validation of fingerprints to palmprints when processing a Tenprint Fingerprint Identification Search request.

NGI shall advise the Authorized Contributor when a supplemental fingerprint and palmprint is enrolled as a result of a Tenprint Fingerprint Identification Search request, but fails to meet minimum quality standards for supplemental fingerprint and palmprint searching.

NGI shall advise the Authorized FBI Service Provider when a supplemental fingerprint and palmprint is enrolled as a result of a Tenprint Fingerprint Identification Search request, but fails to meet minimum quality standards for supplemental fingerprint and palmprint searching.

NGI shall advise the Authorized Contributor when a supplemental fingerprint and palmprint is not enrolled due to a failed validation of fingerprints to supplemental fingerprint and palmprints when processing a Tenprint Fingerprint Identification Search request.

NGI shall advise the Authorized FBI Service Provider when a supplemental fingerprint and palmprint is not enrolled due to a failed validation of fingerprints to supplemental fingerprint and palmprints when processing a Tenprint Fingerprint Identification Search request.

NGI shall advise the Authorized Contributor when iris data is enrolled as a result of a Tenprint Fingerprint Identification Search request, but fails to meet minimum quality standards for iris searches.

NGI shall advise the Authorized FBI Service Provider when iris data is enrolled as a result of a Tenprint Fingerprint Identification Search request, but fails to meet minimum quality standards for iris searches.

NGI shall advise the Authorized Contributor of the Rap Back Enrollment status as part of a Tenprint Fingerprint Identification Search response.

NGI shall advise the Authorized FBI Service Provider of the Rap Back Enrollment status as part of a Tenprint Fingerprint Identification Search response.

# 3.1.2 Latent Fingerprint Identification Services

The Latent Fingerprint Identification Services will provide the capability to match fingerprint data from Latent Fingerprint Identification Search requests to fingerprint data contained within the NGI fingerprint repositories. Latent Fingerprint Identification Search requests can only be submitted by FBI Field Offices or Authorized FBI Service Providers. Following receipt of the submission by NGI, these transactions will be manually processed by an Authorized FBI Service Provider (Latent Examiner). This service results in an identification decision (i.e., positive identification, non-identification or inconclusive). If the submission does not meet minimum processing criteria (e.g., quality), the submission will be returned with reason for rejection.

The following functional requirements relate to a fingerprint identification search for latent purposes using ten or less fingerprints resulting in an identification decision.

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## 3.1.2.1 Latent Fingerprint Identification Inputs

NGI shall accept fingerprint data from an Authorized Contributor as part of a Latent Fingerprint Identification Search request in accordance with the latest EBTS version.

The EBTS TOT that supports a Latent Fingerprint Identification Search request is LFS.

NGI shall allow an Authorized FBI Service Provider to submit a Latent Fingerprint Identification Search request.

The NGI STOT that supports Latent Fingerprint Identification Search is ILFS.

NGI shall allow an Authorized FBI Service Provider to input fingerprint images to initiate a Latent Fingerprint Identification Search request.

The NGI workstation will support multiple input methods for biometric images (scanning, CD-ROM, and other removable media). These methods will support the standards for output stated in ANSI/NIST image transmission standard for fingerprint data "American National Standards Institute/National Institute of Standards and Technology standard, Data Format for the Interchange of Fingerprint Information" and with the EBTS.

NGI shall accept a designation of the internal repository(ies) against which fingerprint data should be searched as part of a Latent Fingerprint Identification Search request.

NGI shall accept an indicator for enrollment into the ULF as part of the Latent Fingerprint Identification Search request.

NGI shall accept a fingerprint position(s) indicator when a single fingerprint is submitted in a Latent Fingerprint Identification Search request.

An Authorized FBI Service Provider can indicate which finger position to search against in the NGI repository. If the Latent Fingerprint Identification Search request contains a single fingerprint image, the Authorized FBI Service Provider can indicate multiple finger positions to be searched. If no finger position is indicated, then all finger positions will be searched.

NGI shall require a finger position indicator for each fingerprint when multiple fingerprints are submitted as part of a Latent Fingerprint Identification Search request.

On a multiple finger submission, NGI will accept only one position for each finger submitted within the request. Each indicator must be unique and may not be the same as any other finger position indicator.

NGI shall accept specified pattern classification(s) for each finger to be used as a filter for a Latent Fingerprint Identification Search request.

NGI shall accept an Identity History Summary indicator as part of a Latent Fingerprint Identification Search request.

# 3.1.2.2 Latent Fingerprint Identification Processing

NGI shall allow an Authorized FBI Service Provider to manually extract fingerprint features from the fingerprint images provided in the Latent Fingerprint Identification Search request.

NGI shall allow an Authorized FBI Service Provider to initiate automated fingerprint feature extraction to process a Latent Fingerprint Identification Search request.

The fingerprint features extracted include information such as pattern class, ridge counts, minutiae, core/delta locations, and quality metrics.

NGI shall require an Authorized FBI Service Provider to extract (i.e., automated or manual) fingerprint features prior to processing a Latent Fingerprint Identification Search request.

NGI shall search using the finger position(s) and fingerprint features extracted from the fingerprint images provided in the Latent Fingerprint Identification Search request.

NGI shall search all finger positions for a Latent Fingerprint Identification Search request containing a single fingerprint when no finger position is indicated.

NGI shall perform a fingerprint feature search for all Latent Fingerprint Identification Search requests.

NGI shall perform a fingerprint search of the default repository, when the repository is not specified in the Latent Fingerprint Identification Search request.

NGI shall perform a rolled fingerprint search of the repository(ies) designated in the Latent Fingerprint Identification Search request.

NGI shall perform a flat fingerprint search of the repository(ies) designated in the Latent Fingerprint Identification Search request.

Latent Fingerprint Identification Search requests will be searched against both flat and rolled NGI fingerprint records.

NGI shall perform the Latent Fingerprint Identification Search requests against all individual event fingerprint features (non-composite), including plain impressions.

NGI shall perform a fingerprint search against the RISC for all Latent Fingerprint Identification Search requests.

NGI shall calculate a match score for each candidate resulting from a Latent Fingerprint Identification Search Request.

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NGI shall perform a cascaded fingerprint search of the marked SPC Files as a result of all Latent Fingerprint Identification Search requests in accordance with cascaded search business rules.

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NGI shall require an Authorized FBI Service Provider to perform a manual special processing review when one or more candidates are marked with a special processing indicator (e.g., SPF) as part of a Latent Fingerprint Identification Search request.

NGI shall allow an Authorized FBI Service Provider to perform a manual LFIC for each candidate for a Latent Fingerprint Identification Search request.

NGI shall allow an Authorized FBI Service Provider to reject a Latent Fingerprint Identification Search request.

NGI shall enroll Identity information into the ULF when indicated as part of a Latent Fingerprint Identification Search request that results in a non-identification decision.

NGI shall reject a Latent Fingerprint Identification Search request when the fingerprint images fail to satisfy minimum image quality standards.

NGI shall determine the response distribution method (i.e., electronic or hardcopy) for a Latent Fingerprint Identification Search response.

# 3.1.2.3 Latent Fingerprint Identification Outputs

NGI shall provide an Authorized Contributor with an identification decision, when applicable, as part of a Latent Fingerprint Identification Search response.

An identification decision will be a positive identification, non-identification, or inconclusive decision.

NGI shall provide the Identity History Summary for a positive identification in the Latent Fingerprint Identification Search response when requested.

NGI shall provide a reject response, as appropriate, for a Latent Fingerprint Identification Search request.

NGI shall provide a response to a Latent Fingerprint Identification Search request from an Authorized Contributor in accordance with the latest EBTS version.

The EBTS TOT that supports a Latent Fingerprint Identification Search response is LSR.

NGI shall provide the appropriate Latent Fingerprint Identification Search response to an Authorized FBI Service Provider.

NGI shall provide a hardcopy response to a Latent Fingerprint Identification Search request, as appropriate.

# 3.1.3 Rapid Fingerprint Identification Services

The RISC Rapid Search functionality provides the capability to perform an identification search against a limited population with a significantly reduced response time in comparison to Tenprint Fingerprint Identification Search response times. These Rapid Fingerprint Identification Searches are directed against the RISC, which is anticipated to contain records for Wanted Persons, Known or Suspected Terrorists, and other persons of special interest. This rapid search functionality also includes cascading

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searches of the ULF and marked SPC Files after a Rapid Search response has been provided to the Authorized Contributor.

# 3.1.3.1 Rapid Fingerprint Identification Inputs

NGI shall accept a RISC Rapid Search request from an Authorized Contributor in accordance with the latest EBTS version.

The EBTS TOT that supports RISC Rapid Search request is RPIS.

NGI shall accept a RISC Rapid Search request from an Authorized Contributor in accordance with the latest III/NFF Operational and Technical Manual.

The NGI STOT that supports the NCIC Message Key (MKE) for a RISC Rapid Search request will be developed in accordance with the NGI Message Definition Database (MDD).

These RISC Rapid Searches may be submitted via the NCIC communications network.

NGI shall accept ten or fewer flat fingerprints as part of a RISC Rapid Search request.

NGI shall accept ten or fewer rolled fingerprints as part of a RISC Rapid Search request.

NGI shall accept an indicator on a RISC Rapid Search request that specifies if the most recent frontal facial photo should be included as part of the RISC Rapid Search response if available.

NGI shall accept an indicator on a RISC Rapid Search request that specifies if an Identity History Summary should be returned as part of the RISC Rapid Search response.

#### 3.1.3.2 Rapid Fingerprint Identification Processing

NGI shall extract fingerprint features from the fingerprint images provided in the RISC Rapid Search request.

NGI shall perform an automated fingerprint image quality check on a RISC Rapid Search request based on image quality standards.

NGI shall reject a RISC Rapid Search request when the fingerprint images fail to satisfy minimum fingerprint image quality standards.

NGI shall perform a rolled fingerprint search of the RISC repository as part of a RISC Rapid Search request.

NGI shall perform a flat fingerprint search of the RISC repository as part of a RISC Rapid Search request.

RISC Rapid Search requests will be searched against both flat and rolled NGI fingerprint records.

NGI shall perform all RISC Rapid Search requests against composite fingerprints.

NGI shall perform a fingerprint feature search of the RISC repository for all RISC Rapid Search requests.

NGI shall calculate a match score for each candidate resulting from a RISC Rapid Search request.

NGI shall determine a positive identification decision for each candidate that has a match score above the high confidence threshold as part of a RISC Rapid Search request.

NGI shall perform a cascaded fingerprint search of the ULF, in accordance with cascaded search business rules, if the fingerprints submitted with the RISC Rapid Search request meet the minimum quality standards in accordance with cascaded search business rules.

NGI shall perform a cascaded fingerprint search of the marked SPC Files designated for cascaded searches, in accordance with cascaded search business rules, if the fingerprints submitted with the RISC Rapid Search request meet the minimum quality standards in accordance with cascaded search business rules.

## 3.1.3.3 Rapid Fingerprint Identification Outputs

NGI shall provide a response to a RISC Rapid Search request based on multi-tiered dissemination rules.

NGI shall provide a "Red Light" indicator as part of a RISC Rapid Search response for a positive identification resulting from a RISC Rapid Search request.

NGI shall provide a "Green Light" indicator as part of a RISC Rapid Search response, when the match scores for all candidate(s) resulting from a RISC Rapid Search request are below the low confidence threshold.

NGI shall provide a "Green Light" indicator as part of a RISC Rapid Search response, when no candidates result from a RISC Rapid Search request.

NGI shall provide a "Yellow Light" indicator as part of a RISC Rapid Search response, when a candidate(s) resulting from a RISC Rapid Search request is found whose match score is above the low confidence threshold and below the high confidence threshold.

See Appendix E RISC Candidate Evaluation for a table clarifying the distinction between green, red and vellow indicators.

NGI shall optionally include, on a RISC Rapid Search response, an Identity History Summary.

NGI will not retrieve Identity History information from III/NFF States for Identity History Summaries that are included in RISC Rapid Search Responses. The Identity History Summaries will indicate that additional Identity History information is available from III/NFF States.

NGI shall provide a RISC record type indicator (e.g., Wanted Person, KST) for each candidate returned as part of a RISC Rapid Search response.

NGI shall optionally include, on a RİSC Rapid Search response, the most recently taken frontal facial photo.

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NGI shall optionally include, on a RISC Rapid Search response, the most recently taken facial photo when no frontal facial photo is available.

NGI shall provide a reject response for a RISC Rapid Search request when the associated fingerprints fail to satisfy minimum fingerprint image quality standards.

NGI shall provide a response to a RISC Rapid Search request from an Authorized Contributor in accordance with the latest EBTS version.

The EBTS TOT that supports a RISC Rapid Search response is RPISR.

NGI shall provide a response to a RISC Rapid Search request received via NCIC in accordance with the latest III/NFF Operational and Technical Manual.

The NGI STOT that supports the NCIC MKE for a RISC Rapid Search response will be developed in accordance with the NGI Message Definition Database (MDD).

#### 3.1.4 International Terrorist Identification Services

The International Terrorist Identification Searches will be performed against the RISC Repository.

#### 3.1.4.1 International Terrorist Identification Inputs

NGI shall accept an International Terrorist Identification Search request from an Authorized Domestic Contributor in accordance with the latest EBTS version.

The EBTS TOT that supports an International Terrorist Identification Search request from an Authorized Domestic Contributor will be developed in accordance with the ANSI/NIST-ITL Data Format for the Interchange of Fingerprint, Facial, and other Biometric Information.

NGI shall accept an International Terrorist Identification Search request from an Authorized International Contributor in accordance with the latest EBTS version.

The EBTS TOT that supports an International Terrorist Identification Search request from an Authorized International Contributor will be developed in accordance with the ANSI/NIST-ITL Data Format for the Interchange of Fingerprint, Facial, and other Biometric Information.

NGI shall accept an International Terrorist Identification Search request from an Authorized International Contributor in accordance with the latest ANSI/NIST-ITL Data Format for the Interchange of Fingerprint, Facial, and other Biometric Information.

The ANSI/NIST-ITL TOT that supports an International Terrorist Identification Search will be developed in accordance with the ANSI/NIST-ITL Data Format for the Interchange of Fingerprint, Facial, and other Biometric Information.

NGI shall allow an Authorized FBI Service Provider to submit an International Terrorist Identification Search request.

The NGI STOT that supports an International Terrorist Identification Search will be developed in accordance with the NGI Message Definition Database (MDD).

NGI shall allow an Authorized FBI Service Provider to input fingerprint images to initiate an International Terrorist Identification Search request.

The NGI workstation will support multiple input methods for biometric images (scanning, CD-ROM, and other removable media). These methods will support the standards for output stated in ANSI/NIST image transmission standard for fingerprint data "American National Standards Institute/National Institute of Standards and Technology standard, Data Format for the Interchange of Fingerprint Information" and with the EBTS.

NGI shall accept ten or fewer flat fingerprints as part of an International Terrorist Identification Search request.

NGI shall accept ten or fewer rolled fingerprints as part of an International Terrorist Identification Search request.

NGI shall accept palmprints as part of an International Terrorist Identification Search request.

NGI shall accept photos as part of an International Terrorist Identification Search request.

NGI shall accept iris data as part of an International Terrorist Identification Search request.

NGI shall accept supplemental fingerprint and palmprint information as part of an International Terrorist Identification Search request.

NGI shall accept an indicator on an International Terrorist Identification Search request that specifies if the most recent facial photo should be included as part of the response.

NGI shall accept an indicator on an International Terrorist Identification Search request that specifies whether or not the Identity should be enrolled into the ITF subset of the RISC repository.

NGI shall require an indicator on a retained International Terrorist Identification Search request that specifies which dissemination tier to apply to the enrolled Identity.

NGI shall accept an indicator on a retained International Terrorist Identification Search request that specifies whether or not an enrolled tier-1 or tier-2 Identity should be marked for hit notifications to the ITF record owner.

Multiple agencies can mark the same NGI Identity within the RISC repository with dissemination levels unique for their agency. Each agency will be able to set a dissemination tier level and indicate whether they will be notified upon a positive identification. NGI provides a multi-tier dissemination structure that is defined as follows: tier 1 – Share All; tier 2 – Point of Contact Only; tier 3 – Silent Hit.

#### 3.1.4.2 International Terrorist Identification Processing

NGI shall perform ASC of the individual fingerprint impressions to the plain fingerprint impressions contained in an International Terrorist Identification Search request to determine if the individual fingerprint impressions are correctly sequenced.

NGI shall reject an International Terrorist Identification Search request as part of ASC when fingerprint data fails to meet processing criteria in accordance with ASC business rules.

NGI shall require an Authorized FBI Service Provider to perform manual FSC on an International Terrorist Identification Search request when ASC determines that manual review is necessary.

NGI shall allow an Authorized FBI Service Provider to reject an International Terrorist Identification Search request as part of manual FSC when fingerprint data fails to meet processing criteria.

Processing criteria is based on the Authorized FBI Service Providers' FSC Standard Operating Manual (SOM).

NGI shall extract fingerprint features from the fingerprint images provided in an International Terrorist Identification Search request.

NGI shall perform an automated image quality check on an International Terrorist Identification Search request based on image quality standards.

NGI shall reject an International Terrorist Identification Search request when the associated fingerprints do not meet minimum fingerprint image quality standards.

The reject will provide contact information to the Contributor indicating that they may submit a Tenprint card to the FBI for manual processing.

NGI shall perform an International Terrorist Identification Search request against composite fingerprints.

NGI shall perform a rolled fingerprint search of the RISC repository as part of an International Terrorist Identification Search request.

NGI shall perform a flat fingerprint search of the RISC repository as part of an International Terrorist Identification Search request.

International Terrorist Identification Search requests will be searched against both flat and rolled NGI fingerprint records.

NGI shall perform a fingerprint feature search for all International Terrorist Identification Search requests.

NGI shall calculate a match score for each candidate resulting from an International Terrorist Identification Search request.

NGI shall determine a positive identification decision for each candidate that has a match score above the high confidence threshold as part of an International Terrorist Identification Search request.

NGI shall require an Authorized FBI Service Provider to perform a manual FIC for each candidate with a match score that is below the high confidence threshold as part of an International Terrorist Identification Search request.

NGI shall allow an Authorized FBI Service Provider to reject an International Terrorist Identification Search request as a result of the manual FIC.

NGI shall require a second Authorized FBI Service Provider to perform a manual FIC to confirm a positive identification for each candidate with a match score that is below the low confidence threshold as part of an International Terrorist Identification Search request.

The second manual FIC will be performed independent of the first FIC decision. The decision made by the first service provider will not be made known to the second service provider.

NGI shall retrieve the corresponding subject's Identity history information when a tier-1 candidate results in a positive identification decision as part of an International Terrorist Identification Search request.

NGI shall retrieve Identity history information from III/NFF State systems, when a tier-1 candidate results in a positive Identification decision and the Identity contains an NFF Indicator, as part of an International Terrorist Identification Search request.

NGI will solicit the III/NFF State for its portion of the criminal history. The response from the III/NFF State Participant will be merged or appended to the NGI response and returned to the submitter of the search. These queries will be sent to states over the NCIC network. The responses will be sent to NGI over Nlets, assembled by NGI, and returned to the requester.

NGI shall forward an International Terrorist Identification Search request to an ITF participating International organization in accordance with the latest EBTS version.

The EBTS TOT that supports an International Terrorist Identification Search request will be developed in accordance with the ANSI/NIST-ITL Data Format for the Interchange of Fingerprint, Facial, and other Biometric Information.

NGI shall forward an International Terrorist Identification Search request to an ITF participating International organization in accordance with the latest ANSI/NIST-ITL Data Format for the Interchange of Fingerprint, Facial, and other Biometric Information.

The ANSI/NIST-ITL TOT that supports an International Terrorist Identification Search request will be developed in accordance with the ANSI/NIST-ITL Data Format for the Interchange of Fingerprint, Facial, and other Biometric Information.

NGI shall accept an International Terrorist Identification Search response from an International organization in accordance with the latest EBTS version.

The EBTS TOT that supports an International Terrorist Identification Search response will be developed in accordance with the ANSI/NIST-ITL Data Format for the Interchange of Fingerprint, Facial, and other Biometric Information.

NGI shall accept an International Terrorist Identification Search response from an International organization in accordance with the latest ANSI/NIST-ITL Data Format for the Interchange of Fingerprint, Facial, and other Biometric Information.

The ANSI/NIST-ITL TOT that supports an International Terrorist Identification Search response will be developed in accordance with the ANSI/NIST-ITL Data Format for the Interchange of Fingerprint, Facial, and other Biometric Information.

NGI shall enroll an Identity into the ITF subset of the RISC repository as part of a retained International Terrorist Identification Search request that results in a non-identification decision.

NGI shall update Identity history information based on file maintenance rules as a result of an International Terrorist Identification Search request with a positive identification decision.

NGI shall update fingerprint information based on file maintenance rules as a result of an International Terrorist Identification Search request with a positive identification decision.

NGI shall update a fingerprint composite as part of a retained International Terrorist Identification Search request, when the quality of the submitted fingerprints is better.

NGI shall assign the multi-tier dissemination level specified in the International Terrorist Identification Search request to the Identity when enrolling fingerprint data into the RISC repository.

NGI shall enroll palmprints in the ITF subset of the RISC repository based on file maintenance rules as part of an International Terrorist Identification Search request.

NGI shall enroll photos in the ITF subset of the RISC repository based on file maintenance rules as part of an International Terrorist Identification Search request.

NGI shall enroll iris data in the ITF subset of the RISC repository based on file maintenance rules as part of an International Terrorist Identification Search request.

NGI shall enroll supplemental fingerprint and palmprint information in the ITF subset of the RISC repository based on file maintenance rules as part of an International Terrorist Identification Search request.

NGI shall reject palmprint enrollment when the associated International Terrorist Identification Search request is rejected.

NGI shall reject photo enrollment when the associated International Terrorist Identification Search request is rejected.

NGI shall reject iris data enrollment when the associated International Terrorist Identification Search request is rejected.

NGI shall reject supplemental fingerprint and palmprint information enrollment when the associated International Terrorist Identification Search request is rejected.

NGI shall create a copy of the International Terrorist Identification Search request for the NGI Certification File based on file maintenance rules.

NGI shall perform a cascaded fingerprint search of the ULF, in accordance with cascaded search business rules, when the fingerprints submitted with an International Terrorist Identification Search request meet the minimum quality standards.

NGI shall perform a cascaded fingerprint search of marked SPC Files, in accordance with cascaded search business rules, when the fingerprints submitted with an International Terrorist Identification Search request meet the minimum quality standards.

NGI shall determine the response distribution method (i.e., electronic or hardcopy) for an International Terrorist Identification Search response.

NGI shall perform a cascaded facial recognition search of the UPF, in accordance with cascaded search business rules, when the photo submitted with a International Terrorist Identification Search request meets the minimum quality standard for facial recognition.

NGI shall perform a cascaded facial recognition search of marked SPC Files, in accordance with cascaded search business rules, when the photo submitted with an International Terrorist Identification Search request meets the minimum quality standard for facial recognition.

NGI shall perform a cascaded palmprint search of the ULF, in accordance with cascaded search business rules, when the palmprint submitted with an International Terrorist Identification Search request meets the minimum quality standard for palmprints.

NGI shall perform a cascaded palmprint search of the marked SPC Files, in accordance with cascaded search business rules, if the palmprint submitted with an International Terrorist Identification Search request meets the minimum quality standard for palmprints.

NGI shall perform a cascaded supplemental fingerprint and palmprint search of the ULF, in accordance with cascaded search business rules, when the supplemental fingerprint and palmprint submitted with an International Terrorist Identification Search request meets the minimum quality standard for supplemental fingerprint and palmprints.

NGI shall perform a cascaded supplemental fingerprint and palmprint search of the marked SPC Files, in accordance with cascaded search business rules, if the supplemental fingerprint and palmprint submitted with an International Terrorist Identification Search request meets the minimum quality standard for supplemental fingerprint and palmprints.

NGI shall perform a cascaded search of the UIF, in accordance with cascaded search business rules, when the iris data submitted with an International Terrorist Identification Search request meets the minimum quality standard for iris searches.

NGI shall perform a cascaded search of marked SPC File(s), in accordance with cascaded search business rules, when the iris data submitted with an International Terrorist Identification Search request meets the minimum quality standard for iris searches.

# 3.1.4.3 International Terrorist Identification Outputs

NGI shall provide an Authorized Domestic Contributor with an identification decision as part of an International Terrorist Identification Search response.

NGI shall provide an Authorized International Contributor with an identification decision as part of an International Terrorist Identification Search response.

An identification decision will be either a positive identification or a non-identification.

NGI shall provide a response to an International Terrorist Identification Search request, when appropriate, in accordance with the latest EBTS version.

The EBTS TOT that supports an International Terrorist Identification Search response will be developed in accordance with the ANSI/NIST-ITL Data Format for the Interchange of Fingerprint, Facial, and other Biometric Information.

NGI shall provide a response to an International Terrorist Identification Search request, when appropriate, in accordance with the latest ANSI/NIST-ITL Data Format for the Interchange of Fingerprint, Facial, and other Biometric Information.

The ANSI/NIST-ITL TOT that supports an International Terrorist Identification Search response will be developed in accordance with the ANSI/NIST-ITL Data Format for the Interchange of Fingerprint, Facial, and other Biometric Information.

NGI shall provide the appropriate International Terrorist Identification Search response to an Authorized FBI Service Provider.

NGI shall provide a response to an International Terrorist Identification Search request based on multi-tiered dissemination rules.

NGI shall provide the NGI portion of an International Terrorist Identification Search response upon completion of the NGI search.

NGI shall provide an Identity History Summary in response to an International Terrorist Identification Search request that results in a positive identification to a tier-1 Identity.

NGI shall provide contact information in response to an International Terrorist Identification Search request that results in a positive identification to a tier-2 Identity.

NGI shall provide a non-identification response to an International Terrorist Identification Search request that results in a positive identification to a tier-3 Identity.

NGI shall optionally include, on a tier-1 International Terrorist Identification Search response, the most recently taken frontal facial photo.

NGI shall optionally include, on a tier-1 International Terrorist Identification Search response, the most recently taken facial photo when no frontal facial photo is available.

NGI shall combine the NGI International Terrorist Identification Search request results with the Identity History information retrieved from III/NFF State systems, when all III/NFF Identity History information is available within the response time threshold required to create a combined response.

NGI shall provide partial International Terrorist Identification Search request results as part of an International Terrorist Identification Search response when III/NFF State systems do not meet the response time threshold required to create a combined response.

A partial response will include information to indicate that the III/NFF State system did not provide Identity History information within the NGI response time.

NGI shall forward International Terrorist Identification Search responses from International organizations back to the original requestor independent from the NGI response.

NGI shall provide a reject response, as appropriate, for an International Terrorist Identification Search request.

NGI shall advise the Record Owner when the palmprint data is enrolled as a result of an International Terrorist Identification Search, but fails to meet minimum quality standards for searches.

NGI shall advise the Record Owner when a photo is enrolled as a result of an International Terrorist Identification Search, but fails to meet minimum quality standards for searches.

NGI shall advise the Record Owner when iris data is enrolled as a result of an International Terrorist Identification Search, but fails to meet minimum quality standards for searches.

NGI shall advise the Record Owner when the supplemental fingerprint and palmprint information is enrolled as a result of an International Terrorist Identification Search, but fails to meet minimum quality standards for searches.

# 3.1.5 Disposition Fingerprint Submissions

The Disposition Fingerprint Submission Service will allow an Authorized Contributor to submit a disposition request with fingerprints. The fingerprints will be used to identify the subject in NGI that is associated with the disposition information. If no subject can be identified using the fingerprints, a new Identity will be created for the disposition information.

## 3.1.5.1 Disposition Fingerprint Submission Inputs

NGI shall accept Disposition Fingerprint Search requests from an Authorized Contributor in accordance with the latest EBTS version.

The EBTS TOT that supports Disposition Fingerprint Search requests is FDSP.

NGI shall accept rolled fingerprint images as part of the Disposition Fingerprint Search request.

NGI shall accept flat fingerprint images as part of the Disposition Fingerprint Search request.

NGI shall require the designated repository to be criminal as part of a Disposition Fingerprint Search request.

NGI shall accept a designation of transaction priority by which the Disposition Fingerprint Search request should be performed.

NGI shall accept supplemental fingerprint and palmprint information as part of a Disposition Fingerprint Search request.

NGI shall accept photo input from an Authorized Contributor as part of a Disposition Fingerprint Search request.

NGI shall accept a multi-level SMT photo descriptor field as part of a Disposition Fingerprint Search request.

NGI shall accept an indicator on a Disposition Fingerprint Search request that specifies if a photo should be included with the fingerprint search response.

NGI shall accept palmprint images from an Authorized Contributor as part of a Disposition Fingerprint Search request.

NGI shall accept iris data input from an Authorized Contributor as part of a Disposition Fingerprint Search request.

NGI shall accept a UCN as part of a Disposition Fingerprint Search request.

NGI will optionally accept one or more quoted UCNs when a contributor has made an identification at the state level.

NGI shall accept an Identity History Summary indicator as part of a Disposition Fingerprint Search request.

The Identity History Summary indicator will be used to determine if an Identity History Summary should be included as part of a Disposition Fingerprint Search response for a positive identification decision.

## 3.1.5.2 Disposition Fingerprint Submission Processing

NGI shall perform AQC of textual data contained in a Disposition Fingerprint Search request against the AQC business rules.

NGI has the capability to make a pass or fail decision through a rule-based AQC process. Disposition Submission requests that are rejected from Manual Quality Check are forwarded to conflict resolution.

NGI shall require an Authorized FBI Service Provider to perform Manual Quality Check on a Disposition Fingerprint Search request when AQC business rules determine manual review is necessary.

NGI shall reject a Disposition Fingerprint Search request when textual information is invalid based on AQC business rules.

NGI shall provide Conflict Resolution for a Disposition Fingerprint Search request when AQC business rules determine manual review is necessary.

NGI shall perform ASC of the individual fingerprint impressions to the plain fingerprint impressions contained in a Disposition Fingerprint Search request to determine if the individual fingerprint impressions are correctly sequenced.

NGI shall reject a Disposition Fingerprint Search request as part of ASC when fingerprint data fails to meet processing criteria in accordance with ASC business rules.

NGI shall require an Authorized FBI Service Provider to perform manual FSC on a Disposition Fingerprint Search request when ASC determines that manual review is necessary.

NGI shall allow an Authorized FBI Service Provider to reject a Disposition Fingerprint Search request as part of manual FSC when fingerprint data fails to meet processing criteria.

Processing criteria is based on the Authorized FBI Service Providers' FSC SOM.

NGI shall provide Conflict Resolution for a Disposition Fingerprint Search request that is rejected from manual FSC.

NGI shall extract fingerprint features from the fingerprint images provided in a Disposition Fingerprint Search request.

NGI shall perform an image quality check on a Disposition Fingerprint Search request based on image quality standards.

NGI shall reject a Disposition Fingerprint Search request when the fingerprint images fail to satisfy minimum fingerprint image quality standards.

NGI shall provide Conflict Resolution for a Disposition Fingerprint Search request that is rejected as a result of fingerprint images that fail to satisfy minimum fingerprint image quality standards.

NGI shall mark the Disposition Fingerprint Search request as SBDA when the submitted fingerprint data fails to satisfy fingerprint image quality for retention.

The SBDA indicator allows tenprint fingerprint data of a defined quality to be used in a search of the NGI repositories, but not allow the images and features to be added to the NGI repository(ies).

NGI shall provide Conflict Resolution for a Disposition Fingerprint Search request when the search is marked as SBDA and results in a non-identification decision.

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NGI shall perform all Disposition Fingerprint Search requests against composite fingerprints.

NGI shall prioritize a Disposition Fingerprint Search request using established and specified priority criteria.

NGI shall perform a rolled fingerprint search against the RISC for all Disposition Fingerprint Search requests.

NGI shall perform a flat fingerprint search against the RISC for all Disposition Fingerprint Search requests.

Fingerprint Search results of the RISC repository will be included in the Disposition Fingerprint Search response.

When an incoming submission references at least one UCN, a fingerprint comparison of each quoted UCN is made prior to a biometric search and/or name search.

Disposition Fingerprint Search requests will be searched against both flat and rolled NGI fingerprint records.

NGI shall perform a Subject Search of the designated NGI repository for candidates based on biographic data provided for all Disposition Fingerprint Search requests.

NGI shall perform III/Verify as part of a Disposition Fingerprint Search request for each quoted UCN and each Subject Search candidate.

NGI shall compare the fingerprint features extracted from the fingerprint images provided in the Disposition Fingerprint Search request against the fingerprint features of each candidate provided to III/Verify.

NGI shall calculate a match score for each candidate resulting from a Disposition Fingerprint Search request.

NGI will determine a match score for each quoted UCN, Subject Search candidate or Feature Search candidate.

NGI shall require an Authorized FBI Service Provider to perform a manual special processing review when one or more candidates are marked with a special processing indicator (e.g., SPF) as part of a Disposition Fingerprint Search request.

NGI shall eliminate each candidate that has a match score below the minimum threshold for III/Verify as part of a Disposition Fingerprint Search request.

NGI shall perform a fingerprint feature search for all Disposition Fingerprint Search requests.

NGI shall determine a positive identification decision for each candidate that has a match score above the high confidence threshold as part of a Disposition Fingerprint Search request.

Identification decisions may require manual FIC, depending on the match score. If the match score is above the high confidence threshold ("Lights Out"), then no manual FIC is required. If the match score is below the high confidence threshold, and above the low confidence threshold, then one manual FIC is required. If the match score is below the low confidence threshold, then two manual FICs are required.

NGI shall require an Authorized FBI Service Provider to perform a manual FIC for each candidate with a match score that is below the high confidence threshold as part of a Disposition Fingerprint Search request.

NGI shall require a second Authorized FBI Service Provider to perform a manual FIC to confirm a positive identification for each candidate with a match score that is below the low confidence threshold as part of a Disposition Fingerprint Search request.

The second manual FIC will be performed independent of the first FIC decision. The decision made by the first service provider will not be made known to the second service provider.

NGI shall allow an Authorized FBI Service Provider to reject a Disposition Fingerprint Search request as a result of the manual FIC.

NGI shall provide Conflict Resolution for a Disposition Fingerprint Search request that is rejected as a result of the manual FIC.

NGI shall retrieve the corresponding subject's Identity History information when requested and a positive identification decision results from a Disposition Fingerprint Search request.

NGI shall retrieve Identity History information from III/NFF State systems when a positive identification decision is made to an Identity that contains an NFF indicator as part of a Disposition Fingerprint Search request.

The FBI will solicit the III/NFF State for their portion of the criminal history. The response from the III/NFF State Participant will be merged or appended to the FBI's response and returned to the submitter of the search. These queries will be sent to states over the NCIC network. The responses will be sent to NGI over Nlets, assembled by NGI, and returned to the requester.

NGI shall perform a fingerprint search of the criminal repository to determine the Identity associated with the Disposition Fingerprint Search request.

NGI shall create a new Identity with a default arrest cycle and submitted disposition data when the Disposition Fingerprint Search request results in a non identification decision.

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NGI shall enroll Identity information for the newly created Identity into the appropriate NGI repository as a result of a retained Disposition Fingerprint Search request that results in a non-identification decision.

NGI shall enroll the fingerprint data in the designated repository(ies) based on file maintenance rules as part of a retained Disposition Fingerprint Search request.

NGI shall provide the capability to uniquely identify fingerprint data enrolled as a result of a Disposition Fingerprint Search request.

NGI shall perform a validation to ensure that submitted palmprint images match the submitted fingerprints, when the distal segments of the palmprint images are included in the Disposition Fingerprint Search request.

NGI shall enroll the photos in the designated repository based on file maintenance rules as part of a Disposition Fingerprint Search request.

NGI shall provide the capability to uniquely identify photos enrolled as a result of Disposition Fingerprint Search request.

NGI shall enroll the palmprints in the designated repository based on file maintenance rules as part of a Disposition Fingerprint Search request.

NGI shall provide the capability to uniquely identify palmprints enrolled as a result of a Disposition Fingerprint Search request.

NGI shall enroll the iris data in the designated repository based on file maintenance rules as part of a Disposition Fingerprint Search request.

NGI shall provide the capability to uniquely identify iris data enrolled as a result of a Disposition Fingerprint Search request.

NGI shall enroll supplemental fingerprint and palmprint information into the designated repository based on file maintenance rules as part of a Disposition Fingerprint Search request.

NGI shall perform a validation to ensure that submitted supplemental fingerprint and palmprint images match the submitted fingerprints, when the distal segments of the supplemental fingerprint and palmprint images are included in the Disposition Fingerprint Search request.

NGI shall provide the capability to uniquely identify supplemental fingerprint and palmprint data enrolled as a result of a Disposition Fingerprint Search request.

NGI shall reject a photo enrollment when the associated Disposition Fingerprint Search request is rejected.

NGI shall reject a palmprint enrollment when the associated Disposition Fingerprint Search request is rejected.

NGI shall reject an iris enrollment when the associated Disposition Fingerprint Search request is rejected.

NGI shall reject the supplemental fingerprint and palmprint information enrollment when the associated Disposition Fingerprint Search request is rejected.

NGI shall maintain an Identity based on file maintenance rules as a result of a Disposition Fingerprint Search request with a positive identification decision.

NGI shall update the identified subject with disposition data from a Disposition Fingerprint Search request when a unique arrest cycle exists on the identified subject that matches the submitted Date of Arrest (DOA) and Originating Agency Identifier (ORI), and a disposition for that DOA does not already exist.

NGI shall require an Authorized FBI Service Provider to perform conflict resolution for a Disposition Fingerprint Search request when submitted disposition data cannot be automatically applied to an Identity.

NGI shall update fingerprint information based on file maintenance rules as a result of a Disposition Fingerprint Search request with a positive identification decision.

NGI shall create a copy of the Disposition Fingerprint Search request for the NGI Certification File based on file maintenance rules.

NGI shall send an External Tenprint Fingerprint Identification Search request when a retained Disposition Fingerprint Search request results in a non-identification decision (i.e., new NGI enrollment) based on External System Search rules.

NGI shall send an External Tenprint Fingerprint Identification Search request to an External System, when the external system is not IDENT, in accordance with the latest EBTS version as part of a Disposition Fingerprint Search request.

The EBTS TOT that supports an External Tenprint Fingerprint Identification Search request will be developed in accordance with the ANSI/NIST-ITL Data Format for the Interchange of Fingerprint, Facial, and other Biometric Information.

NGI shall send an External Tenprint Fingerprint Identification Search request to IDENT in accordance with the latest DHS/US-VISIT and DOJ/FBI Interoperability Interface Control Agreement as part of a Disposition Fingerprint Search request.

NGI shall send an External Tenprint Fingerprint Identification Search request, based on External System Search rules, when fingerprint image quality exceeds the quality improvement threshold and a link to the External System does not exist, as part of a Disposition Fingerprint Search request.

NGI shall indicate in an External Tenprint Fingerprint Identification Search request against an external repository whether or not the External System should establish a link when the external system search results in a positive identification, as part of a Disposition Fingerprint Search request.

NGI shall include biographic data in an External Tenprint Fingerprint Identification Search request, as part of a Disposition Fingerprint Search request.

NGI shall include a unique transaction control number (TCN) in an External Tenprint Fingerprint Identification Search request, as part of a Disposition Fingerprint Search request.

NGI shall record the correlation between the identified UCN and the unique transaction control number (TCN) included in an External Tenprint Fingerprint Identification Search request when a Disposition Fingerprint Search request results in a positive identification.

NGI shall record the correlation between the UCN assigned to the newly enrolled identity and the unique transaction control number (TCN) included in an External Tenprint Fingerprint Identification Search request when a Disposition Fingerprint Search request results in a non-identification decision.

NGI shall accept a response from an External System, when the external system is not IDENT, as a result of an External Tenprint Fingerprint Identification Search request of external repositories in accordance with the latest EBTS version, as part of a Disposition Fingerprint Search request.

The EBTS TOT that supports an External Tenprint Fingerprint Identification Search response will be developed in accordance with the ANSI/NIST-ITL Data Format for the Interchange of Fingerprint, Facial, and other Biometric Information.

NGI shall accept a unique transaction control number (TCN) from an External System (e.g., IDENT) in a response to an External Tenprint Fingerprint Identification Search request as part of a Disposition Fingerprint Search request.

NGI shall determine the UCN using the unique transaction control number (TCN) returned in an External Tenprint Fingerprint Identification Search response, and the previously recorded UCN/TCN correlation when an External Tenprint Fingerprint Identification Search results in a positive identification as part of a Disposition Fingerprint Search request.

NGI shall send a TCN/UCN correlation message to an External System (e.g., IDENT), providing the Identified UCN when an External Tenprint Fingerprint Identification Search results in a positive identification as part of a Disposition Fingerprint Search request.

NGI shall send a TCN/UCN correlation message to an External System in accordance with the latest EBTS version when the external system is not IDENT as part of a Disposition Fingerprint Search request.

NGI shall send a TCN/UCN correlation message to IDENT in accordance with the latest DHS/US-VISIT and DOJ/FBI Interoperability Interface Control Agreement as part of a Disposition Fingerprint Search request.

NGI shall accept a response from an External IDENT as a result of an External Tenprint Fingerprint Identification Search request of external repositories in accordance with the latest DHS/US-VISIT and DOJ/FBI Interoperability Interface Control Agreement, as part of a Disposition Fingerprint Search request.

NGI shall update an Identity with the information contained in an External Tenprint Fingerprint Identification Search response from an External System (e.g., IDENT) as a result of a Disposition Fingerprint Search request.

NGI shall send an External Unsolved Latent Search request when a retained Disposition Fingerprint Search request results in a non-identification decision (i.e., new NGI enrollment) based on External System Search rules.

NGI shall send an External Unsolved Latent Search request when fingerprint image quality exceeds the quality improvement threshold as part of a Disposition Fingerprint Search request based on External System Search rules.

NGI shall perform a cascaded fingerprint search of the ULF, in accordance with cascaded search business rules, as a result of Disposition Fingerprint Search requests.

NGI shall perform a cascaded fingerprint search of the marked SPC Files, in accordance with cascaded search business rules, as a result of Disposition Fingerprint Search requests.

NGI shall perform a cascaded facial recognition search of the UPF when the photo submitted with a Disposition Fingerprint Search request meets the minimum quality standard for facial recognition in accordance with cascaded search business rules.

NGI shall perform a cascaded facial recognition search of marked SPC Files when the photo submitted with a Disposition Fingerprint Search request meets the minimum quality standard for facial recognition in accordance with cascaded search business rules.

NGI shall perform a cascaded palmprint search of the ULF when the palmprint submitted with a Disposition Fingerprint Search request meets the minimum quality standard for palmprints in accordance with cascaded search business rules.

NGI shall perform a cascaded palmprint search of the marked SPC Files designated for cascaded searches, if the palmprint submitted with a Disposition Fingerprint Search request meets the minimum quality standard for palmprints in accordance with cascaded search business rules.

NGI shall perform a cascaded supplemental fingerprint and palmprint search of the ULF when the supplemental fingerprint and palmprint submitted with a Disposition Fingerprint Search request meets the minimum quality standard for supplemental fingerprint and palmprints in accordance with cascaded search business rules.

NGI shall perform a cascaded supplemental fingerprint and palmprint search of the marked SPC Files designated for cascaded searches, if the supplemental fingerprint and palmprint submitted with a Disposition Fingerprint Search request meets the minimum quality standard for supplemental fingerprint and palmprints in accordance with cascaded search business rules.

NGI shall perform a cascaded search of the UIF when the iris data submitted with a Disposition Fingerprint Search request meets the minimum quality standard for iris searches in accordance with cascaded search business rules.

NGI shall perform a cascaded search of marked SPC File(s) when the iris data submitted with a Disposition Fingerprint Search request meets the minimum quality standard for iris searches in accordance with cascaded search business rules.

NGI shall send a Hot Check Name Search request to NCIC for all Disposition Fingerprint Search requests.

NGI shall determine the response distribution method (i.e., electronic or hardcopy) for a Disposition Fingerprint Search response.

## 3.1.5.3 Disposition Fingerprint Submission Outputs

NGI shall provide a response to a Disposition Fingerprint Search request in accordance with the latest EBTS version.

The EBTS TOT that supports a Disposition Fingerprint Search response is DSPR.

NGI shall provide the Identity History Summary for a positive identification candidate in the Disposition Fingerprint Search response, when requested.

NGI shall optionally include, on a Disposition Fingerprint Search response, the most recently taken frontal facial photo for the identified subject.

NGI shall optionally include, on a Disposition Fingerprint Search response, the most recently taken facial photo for the identified subject, when no frontal facial photo is available.

NGI shall combine the NGI Disposition Fingerprint Search request results with the Identity History information retrieved from III/NFF State systems, when all III/NFF Identity History information is available within the response time threshold required to create a combined response.

NGI shall provide partial Disposition Fingerprint Search request results as part of a Disposition Fingerprint Search response when III/NFF State systems do not meet the response time threshold required to create a combined response.

A partial response will include information to indicate that the III/NFF State system did not provide Identity History information within the NGI response time.

NGI shall provide a reject response, as appropriate, for a Disposition Fingerprint Search response.

NGI shall provide Authorized Contributors with an electronic response to a Disposition Fingerprint Search request in accordance with the latest EBTS version.

NGI shall provide a hardcopy response to a Disposition Fingerprint Search request, as appropriate.

NGI shall provide an initial partial response when a Disposition Fingerprint Search request results in a positive identification to a manual record.

NGI shall advise the Authorized Contributor when a photo is enrolled as a result of a Disposition Fingerprint Search request, but fails to meet minimum quality standards for facial recognition.

NGI shall advise the Authorized Contributor when a palmprint is enrolled as a result of a Disposition Fingerprint Search request, but fails to meet minimum quality standards for palmprint searching.

NGI shall advise the Authorized Contributor when a supplemental fingerprint and palmprint is enrolled as a result of a Disposition Fingerprint Search request, but fails to meet minimum quality standards for supplemental fingerprint and palmprint searching.

NGI shall advise the Authorized Contributor when a supplemental fingerprint and palmprint is not enrolled due to a failed validation of fingerprints to supplemental fingerprint and palmprints when processing a Disposition Fingerprint Search request.

NGI shall advise the Authorized Contributor when a palmprint is not enrolled due to a failed validation of fingerprints to palmprints when processing a Disposition Fingerprint Search request.

NGI shall advise the Authorized Contributor when iris data is enrolled as a result of a Disposition Fingerprint Search request, but fails to meet minimum quality standards for iris searches.

# 3.1.6 Rapid Tenprint Fingerprint Identification Services

The Rapid Tenprint Fingerprint Identification Service provides the capability to perform an identification type search with a significantly reduced response time in comparison to Tenprint Fingerprint Identification Search response times. These rapid responses will not include identity history information, photos or any other additional information. Only the criminal repository will be searched and no file maintenance activities will take place.

# 3.1.6.1 Rapid Tenprint Fingerprint Identification Inputs

NGI shall accept a Rapid Tenprint Fingerprint Identification Search request from an Authorized Contributor in accordance with the latest EBTS version.

NGI shall accept a Rapid Tenprint Fingerprint Identification Search request from an Authorized External System (e.g., IDENT) in accordance with the latest EBTS version.

The EBTS TOT that supports Rapid Tenprint Fingerprint Identification Search request is TBD. The RPIS TOT could be used with an NDR field indicator of "CMF".

NGI shall accept flat fingerprints as part of a Rapid Tenprint Fingerprint Identification Search request.

NGI shall require a designation of the NGI repository(ies) against which fingerprint data should be searched as part of a Rapid Tenprint Fingerprint Identification Search request.

## 3.1.6.2 Rapid Tenprint Fingerprint Identification Processing

NGI shall extract fingerprint features from the fingerprint images provided in the Rapid Tenprint Fingerprint Identification Search request.

NGI shall perform an automated fingerprint image quality check on a Rapid Tenprint Fingerprint Identification Search request based on image quality standards.

NGI shall reject a Rapid Tenprint Fingerprint Identification Search request when the fingerprint images fail to satisfy minimum fingerprint image quality standards.

NGI shall perform a flat fingerprint search of the repository(ies) designated in a Rapid Tenprint Fingerprint Identification Search request.

NGI shall perform all Rapid Tenprint Fingerprint Identification Search requests against composite fingerprints.

NGI shall search the designated repository(ies) using the extracted fingerprint features from the Rapid Tenprint Fingerprint Identification Search request.

NGI shall calculate a match score for each candidate resulting from a Rapid Tenprint Fingerprint Identification Search request.

#### 3.1.6.3 Rapid Tenprint Fingerprint Identification Outputs

NGI shall provide a response to a Rapid Tenprint Fingerprint Identification Search request based on special processing indicator dissemination rules.

NGI shall provide a "Red Light" indicator as part of a Rapid Tenprint Fingerprint Identification Search response, when the match score for any candidate resulting from a Rapid Tenprint Fingerprint Identification Search request is above the high confidence threshold.

NGI shall provide a "Green Light" indicator as part of a Rapid Tenprint Fingerprint Identification Search response, when the match scores for all candidate(s) resulting from a Rapid Tenprint Fingerprint Identification Search request is equal to or below the high confidence threshold.

NGI shall provide a "Green Light" indicator as part of a Rapid Tenprint Fingerprint Identification Search response, when no candidates result from a Rapid Tenprint Fingerprint Identification Search request.

NGI shall provide a reject response for a Rapid Tenprint Fingerprint Identification Search request when the associated fingerprints fail to satisfy minimum fingerprint image quality standards.

NGI shall provide a response to a Rapid Tenprint Fingerprint Identification Search request from an Authorized Contributor in accordance with the latest EBTS version.

NGI shall provide a response to a Rapid Tenprint Fingerprint Identification Search request from an External System in accordance with the latest EBTS version.

The EBTS TOT that supports a Rapid Tenprint Fingerprint Identification Search response is TBD.

# 3.2 Verification Services Functional Requirements

This functionality provides services to users in support of biometric verification. It addresses Fingerprint Verification Searches that result in the confirmation of an individual's Identity based on a one-to-one comparison.

# 3.2.1 Fingerprint Verification Services

## 3.2.1.1 Fingerprint Verification Inputs

NGI shall accept a Fingerprint Verification request from an Authorized Contributor in accordance with the latest EBTS version.

NGI shall accept a Fingerprint Verification request from an Authorized External System (e.g., IDENT) in accordance with the latest EBTS version.

The EBTS TOT that supports Fingerprint Verification requests is FVR.

NGI shall accept a Fingerprint Verification request with ten or fewer rolled fingerprints.

NGI shall accept a Fingerprint Verification request with ten or fewer flat fingerprints.

NGI shall accept an indicator on a Fingerprint Verification request that specifies if an Identity History Summary should be included with the Fingerprint Verification response.

NGI shall require that a Fingerprint Verification request contains a UCN and fingerprint data.

#### 3.2.1.2 Fingerprint Verification Processing

NGI shall perform AQC of textual data contained in a Fingerprint Verification request against the AQC business rules.

NGI shall reject a Fingerprint Verification request when textual information is invalid based on AQC business rules.

NGI shall require an Authorized FBI Service Provider to perform Manual Quality Check on a Fingerprint Verification request when AQC business rules determine manual review is necessary.

NGI shall allow an Authorized FBI Service Provider to reject a Fingerprint Verification request when it is determined to be invalid as part of Manual Quality Check.

NGI shall perform III/Verify as part of a Fingerprint Verification request for the UCN.

NGI shall extract fingerprint features from the fingerprint images provided in the Fingerprint Verification request.

NGI shall perform an image quality check on a Fingerprint Verification request based on image quality standards.NGI shall compare the fingerprint features extracted from the fingerprint images provided in the Fingerprint Verification request against the fingerprint features of the candidate provided to III/Verify.

NGI shall calculate a match score for the candidate resulting from a Fingerprint Verification request.

NGI shall determine a non-identification decision for a candidate that has a match score below the minimum threshold for III/Verify as part of a Fingerprint Verification request.

NGI shall determine a positive identification decision for a candidate that has a match score above the high confidence threshold as part of a Fingerprint Verification request.

NGI shall require an Authorized FBI Service Provider to perform a manual FIC when the candidate returned as part of the Fingerprint Verification request is below the high confidence threshold.

NGI shall require a second Authorized FBI Service Provider to perform a manual FIC to confirm a positive identification when the candidate returned as part of a Fingerprint Verification request is below the low confidence threshold.

The second manual FIC will be performed independent of the first FIC decision. The decision made by the first service provider will not be made known to the second service provider.

NGI shall allow an Authorized FBI Service Provider to reject a Fingerprint Verification request as a result of the manual FIC.

NGI shall retrieve the corresponding subject's Identity History information when requested and a positive identification decision results from a Fingerprint Verification request.

NGI shall reject a Fingerprint Verification request when a specified UCN does not exist.

NGI shall reject a Fingerprint Verification request when the submitted fingerprints fail to meet minimum quality standards.

NGI shall maintain an Identity based on file maintenance rules as a result of a Fingerprint Verification request with a positive identification decision.

NGI shall update fingerprint information based on file maintenance rules as a result of a Fingerprint Verification request with a positive identification decision.

NGI shall create a copy of the Fingerprint Verification request for the NGI Certification File based on file maintenance rules.

NGI shall perform a cascaded fingerprint search of the ULF, in accordance with cascaded search business rules, as a result of Fingerprint Verification requests.

NGI shall perform a cascaded fingerprint search of the marked SPC Files, in accordance with cascaded search business rules, as a result of Fingerprint Verification requests.

## 3.2.1.3 Fingerprint Verification Outputs

NGI shall provide a response to a Fingerprint Verification request in accordance with the latest EBTS version.

The EBTS TOT that supports a Fingerprint Verification response is SRE.

NGI shall provide an Identity History Summary in response to a Fingerprint Verification request resulting in a positive verification, when indicated.

NGI shall provide a positive verification response to a Fingerprint Verification request when submitted fingerprints and fingerprints associated with the specified UCN result in a positive identification.

NGI shall provide a negative verification response to a Fingerprint Verification request when submitted fingerprints and fingerprints associated with the specified UCN do not result in a positive identification.

NGI shall provide a reject response, as appropriate, for a Fingerprint Verification request.

NGI shall provide contact information in response to a Fingerprint Verification request resulting in a positive verification against a tier-2 RISC record.

NGI shall provide a negative verification response to a Fingerprint Verification request resulting in a positive verification against a tier-3 RISC record.

# 3.3 Information Services Functional Requirements

The following section contains the functional requirements supporting Information user services.

# 3.3.1 Fingerprint Image Retrieval Request

Fingerprint Image Retrieval requests allow Authorized Contributors to request fingerprint images for specific Identities and events. Authorized FBI Service Provider functionality for these requests is defined under the more general Fingerprint Information Retrieval request.

#### 3.3.1.1 Fingerprint Image Retrieval Request Inputs

NGI shall accept a Fingerprint Image Retrieval request from an Authorized Contributor in accordance with the latest EBTS version.

The EBTS TOT that supports the Fingerprint Image Retrieval requests is IRQ.

NGI shall require one or more UCNs up to a maximum number as part of a Fingerprint Image Retrieval request.

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NGI shall accept an indicator on a Fingerprint Image Retrieval request that specifies if supplemental fingerprint and palmprint information should be provided in the response if available.

NGI shall accept fingerprint specific information as part of a Fingerprint Image Retrieval.

#### 3.3.1.2 Fingerprint Image Retrieval Request Processing

NGI shall retrieve the composite fingerprint image for each specified UCN when fingerprint specific data is not provided as part of a Fingerprint Image Retrieval request.

NGI shall retrieve the fingerprint images associated with the fingerprint specific information provided in the Fingerprint Image Retrieval request.

NGI shall retrieve supplemental fingerprint and palm images associated with the fingerprint specific information, when indicated, as part of the Fingerprint Image Retrieval request.

NGI shall retrieve the most recent supplemental fingerprint and palm images for each specified UCN when fingerprint specific data is not provided as part of a Fingerprint Image Retrieval request.

NGI shall reject a Fingerprint Image Retrieval request when the specified UCN or specific fingerprint does not exist.

## 3.3.1.3 Fingerprint Image Retrieval Request Outputs

NGI shall provide a response to a Fingerprint Image Retrieval request in accordance with the latest EBTS version.

The EBTS TOT that supports a Fingerprint Image Retrieval request is IRR, ISR.

#### 3.3.2 Fingerprint Features Retrieval Request

Fingerprint Features Retrieval requests allow Authorized Contributors to request fingerprint features for specific fingerprints or the composite fingerprints for an Identity. Authorized FBI Service Provider functionality for these requests is defined under the more general Fingerprint Information Retrieval request.

#### 3.3.2.1 Fingerprint Features Retrieval Request Inputs

NGI shall accept a Fingerprint Features Retrieval request from an Authorized Contributor in accordance with the latest EBTS version.

The EBTS TOT that supports the Fingerprint Features Retrieval requests is IRQ.

NGI shall require one or more UCNs up to a maximum number as part of a Fingerprint Features Retrieval request.

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NGI shall accept an indicator on a Fingerprint Features Retrieval request that specifies if supplemental fingerprint and palmprint information should be provided in the response, if available.

NGI shall accept fingerprint specific information as part of a Fingerprint Features Retrieval.

## 3.3.2.2 Fingerprint Features Retrieval Request Processing

NGI shall retrieve the composite fingerprint images and features for each specified UCN when fingerprint specific data is not provided as part of a Fingerprint Features Retrieval request.

NGI shall retrieve the fingerprint images associated with the fingerprint specific information provided in the Fingerprint Features Retrieval request.

NGI shall retrieve the fingerprint features associated with the fingerprint specific information provided in the Fingerprint Features Retrieval request.

NGI shall retrieve supplemental fingerprint and palm images, when indicated, as part of the Fingerprint Features Retrieval request.

NGI shall retrieve supplemental fingerprint and palm features, when indicated, as part of the Fingerprint Features Retrieval request.

NGI shall reject a Fingerprint Features Retrieval request when specified UCN or specific fingerprint does not exist.

#### 3.3.2.3 Fingerprint Features Retrieval Request Outputs

NGI shall provide a response to a Fingerprint Features Retrieval request in accordance with the latest EBTS version.

The EBTS TOT that supports a Fingerprint Features Retrieval response is IRR, ISR.

# 3.3.3 Fingerprint Audit Trail Retrieval Request

Fingerprint Audit Trail Retrieval requests allow Authorized Contributors to request the audit trail history for specific fingerprints. Authorized FBI Service Provider functionality for these requests is defined under the more general Fingerprint Information Retrieval request.

#### 3.3.3.1 Fingerprint Audit Trail Retrieval Request Inputs

NGI shall accept a Fingerprint Audit Trail Retrieval request from an Authorized Contributor in accordance with the latest EBTS version.

The EBTS TOT that supports the Fingerprint Audit Trail Retrieval requests will be developed in accordance with the ANSI/NIST-ITL Data Format for the Interchange of Fingerprint, Facial, and other Biometric Information.

NGI shall accept a Fingerprint Audit Trail Retrieval request with a specified UCN and fingerprint specific information.

NGI shall accept an indicator on a Fingerprint Audit Trail Retrieval request that specifies if supplemental fingerprint and palmprint audit trail information should be provided in the response if available.

# 3.3.3.2 Fingerprint Audit Trail Retrieval Request Processing

NGI shall retrieve the fingerprint audit trail for the fingerprint specified in the Fingerprint Audit Trail Retrieval request.

NGI shall retrieve the audit trails for the supplemental fingerprints and palmprints when specified in the Fingerprint Audit Trail Retrieval request.

NGI shall reject a Fingerprint Audit Trail Retrieval request when a specified UCN or fingerprint does not exist.

NGI shall reject a Fingerprint Audit Trail Retrieval request when the Authorized Contributor is not the fingerprint owner.

## 3.3.3.3 Fingerprint Audit Trail Retrieval Request Outputs

NGI shall provide a response to a Fingerprint Audit Trail Retrieval request in accordance with the latest EBTS version.

NGI shall indicate on a Fingerprint Audit Trail Retrieval response whether the specified fingerprint was disseminated as part of the fingerprint composite.

The EBTS TOT that supports a Fingerprint Audit Trail Retrieval response will be developed in accordance with the ANSI/NIST-ITL Data Format for the Interchange of Fingerprint, Facial, and other Biometric Information.

# 3.3.4 Fingerprint Information Retrieval Request

The following functional requirements are specific to Fingerprint Information Retrieval requests unique to Authorized FBI Service Providers. The Authorized FBI Service Providers need additional functionality since they may need to access all fingerprints and all fingerprint information. A Fingerprint Information Retrieval request is a request for any or all fingerprint images, fingerprint features, or fingerprint audit trails.

## 3.3.4.1 Fingerprint Information Retrieval Request Inputs

NGI shall allow an Authorized FBI Service Provider to submit Fingerprint Information Retrieval requests.

The NGI STOT that supports the Fingerprint Information Retrieval request will be developed in accordance with the NGI Message Definition Database (MDD).

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NGI shall allow an Authorized FBI Service Provider to retrieve any or all fingerprint information for a specified UCN as part of a Fingerprint Information Retrieval request.

NGI shall allow an Authorized FBI Service Provider to retrieve any or all supplemental fingerprint and palmprint information for a specified UCN as part of a Fingerprint Information Retrieval request.

NGI shall allow an Authorized FBI Service Provider to designate from which repository fingerprint information will be retrieved as part of a Fingerprint Information Retrieval request.

NGI shall accept a Fingerprint Information Retrieval request with a UCN and fingerprint specific information.

## 3.3.4.2 Fingerprint Information Retrieval Request Processing

NGI shall retrieve the fingerprint information associated with the fingerprint specific information provided in the Fingerprint Information Retrieval request.

NGI shall retrieve supplemental fingerprint and palm images associated with the fingerprint specific information, when indicated, as part of the Fingerprint Information Retrieval request.

NGI shall retrieve the fingerprint information for the UCN designated in the Fingerprint Information Retrieval request.

NGI shall retrieve the fingerprint information from the default NGI repository, when no repository or fingerprint is designated in the Fingerprint Information Retrieval request.

NGI shall reject a Fingerprint Information Retrieval request when specified UCN or specific fingerprint does not exist.

#### 3.3.4.3 Fingerprint Information Retrieval Request Outputs

NGI shall allow an Authorized FBI Service Provider to view the information returned from the Fingerprint Information Retrieval request.

NGI shall allow an Authorized FBI Service Provider to print the information returned from the Fingerprint Information Retrieval request.

NGI shall allow an Authorized FBI Service Provider to save the Fingerprint Information Retrieval response onto removable media in a digital format.

# 3.3.5 Photo Image Retrieval Request

Photo Image Retrieval requests allow Authorized Contributors to request photo images for specific Identities and events. Authorized FBI Service Provider functionality for these requests is defined under the more general Photo Information Retrieval request.

#### 3.3.5.1 Photo Image Retrieval Request Inputs

NGI shall accept a Photo Image Retrieval request from an Authorized Contributor in accordance with the latest EBTS version.

NGI shall accept a Photo Image Retrieval request from an Authorized External System in accordance with the latest EBTS version.

The NGI Legacy EBTS TOT that supports the Photo Image Retrieval request is CPR.

The EBTS TOT that supports a Photo Image Retrieval request is IRQ.

NGI shall accept a Photo Image Retrieval request from an Authorized Contributor in accordance with the latest III/NFF Operational and Technical Manual.

The NGI STOT that supports the NCIC MKE Photo Image Retrieval request will be developed in accordance with the NGI Message Definition Database (MDD).

NGI shall accept a Photo Image Retrieval request with a UCN or SID.

Deleted.

NGI shall accept a Photo Image Retrieval request with a UCN and photo specific information.

NGI shall allow the Authorized Contributor to specify which photo type (i.e., facial, SMT) to retrieve in a Photo Image Retrieval request.

NGI shall allow the Authorized Contributor to specify the number of photos to return in a Photo Image Retrieval request.

NGI shall provide the capability to designate the NGI repository from which photos should be retrieved as part of a Photo Image Retrieval request.

NGI shall provide the capability to designate an external repository(ies) (e.g., IDENT) from which photos should be retrieved as part of the Photo Image Retrieval request.

## 3.3.5.2 Photo Image Retrieval Request Processing

NGI shall retrieve photo(s) from the NGI repository designated in the Photo Image Retrieval request.

NGI shall retrieve up to the requested number of photos for the Identity, photo specific information, and photo type specified from the repository designated in the Photo Image Retrieval request.

NGI shall retrieve the photo image for the Identity and photo specific information specified in the Photo Image Retrieval request.

NGI shall retrieve the most recently taken photos for the Identity as a default, when no photo specific information is specified in the Photo Image Retrieval request.

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NGI shall retrieve facial photos as a default, when no photo type is specified in the Photo Image Retrieval request.

NGI shall retrieve a single photo as a default, when the number of photos to retrieve is not specified in the Photo Image Retrieval request.

NGI shall retrieve from the default photo repository, when no repository is designated in the Photo Image Retrieval request.

NGI shall determine the external system's link identifier when an external repository is indicated as part of a Photo Image Retrieval request.

NGI shall include the external system's link identifier in an External Photo Image Retrieval request as part of a Photo Image Retrieval request.

NGI shall send an External Photo Image Retrieval request to the designated External System in accordance with the latest EBTS version when an external repository is specified in a Photo Image Retrieval request and the external system is not IDENT.

The EBTS TOT that supports an External System Photo Image Retrieval request will be developed in accordance with the ANSI/NIST-ITL Data Format for the Interchange of Fingerprint, Facial, and other Biometric Information.

NGI shall send an External Photo Image Retrieval request to IDENT in accordance with the latest DHS/US-VISIT and DOJ/FBI Interoperability Interface Control Agreement when IDENT is specified in a Photo Image Retrieval request.

NGI shall accept a response from an External Photo Image Retrieval request from an External System in accordance with the latest EBTS version when the external system is not IDENT.

The EBTS TOT that supports an External System Photo Image Retrieval response will be developed in accordance with the ANSI/NIST-ITL Data Format for the Interchange of Fingerprint, Facial, and other Biometric Information.

NGI shall accept a response from an External Photo Image Retrieval request from IDENT in accordance with the latest DHS/US-VISIT and DOJ/FBI Interoperability Interface Control Agreement.

NGI shall reject a Photo Image Retrieval request when a specified Identity or photo specific information does not exist.

NGI shall reject a Photo Image Retrieval request when a specified photo does not exist.

#### 3.3.5.3 Photo Image Retrieval Request Outputs

NGI shall provide a response to a Photo Image Retrieval request in accordance with the latest EBTS version.

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The EBTS TOT that supports a Photo Image Retrieval request is IRR, ISR.

NGI shall provide a response to a Photo Image Retrieval request received via NCIC in accordance with the latest III/NFF Operational and Technical Manual.

The NGI STOT that supports the NCIC MKE Photo Image Retrieval response will be developed in accordance with the NGI Message Definition Database (MDD).

NGI shall provide zero or more photos as part of the Photo Image Retrieval response.

NGI shall indicate the source repository (e.g., criminal, civil, IDENT) of the photo image(s) returned in a Photo Image Retrieval response.

NGI shall combine the NGI Photo Image Retrieval results with the response(s) from external system(s) (e.g., IDENT) into a single Photo Image Retrieval response, when all search results are available.

When photos are requested from both an external repository and NGI, the requested number of photos will be retrieved by each system and all photos will be included in the combined response.

NGI shall provide partial Photo Image Retrieval results as part of a Photo Image Retrieval response when an External System does not meet the response time threshold required to create a combined response.

A partial response will include information to indicate that the external system designated to search did not respond to the search within the NGI response time. The status of the external system may be included if provided.

# 3.3.6 Photo Features Retrieval Request

Photo Features Retrieval requests allow Authorized Contributors to request photo features for specific photos. Authorized FBI Service Provider functionality for these requests is defined under the more general Photo Information Retrieval request.

#### 3.3.6.1 Photo Features Retrieval Request Inputs

NGI shall accept a Photo Features Retrieval request from an Authorized Contributor in accordance with the latest EBTS version.

The EBTS TOT that supports the Photo Features Retrieval requests is IRQ.

NGI shall accept a Photo Features Retrieval request with a UCN and photo specific information.

#### 3.3.6.2 Photo Features Retrieval Request Processing

NGI shall retrieve the photo images for the specified Identity and photo included in the Photo Features Retrieval request.

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NGI shall retrieve the photo features for the specified Identity and photo included in the Photo Features Retrieval request.

NGI shall reject a Photo Features Retrieval request when a specified UCN or photo does not exist.

#### 3.3.6.3 Photo Features Retrieval Request Outputs

NGI shall provide a response to a Photo Features Retrieval request in accordance with the latest EBTS version.

The EBTS TOT that supports a Photo Image Retrieval response is IRR, ISR.

## 3.3.7 Photo Audit Trail Retrieval Request

Photo Audit Trail Retrieval requests allow Authorized Contributors to request audit trail history for specific photos. Authorized FBI Service Provider functionality for these requests is defined under the more general Photo Information Retrieval request.

## 3.3.7.1 Photo Audit Trail Retrieval Request Inputs

NGI shall accept a Photo Audit Trail Retrieval request from an Authorized Contributor in accordance with the latest EBTS version.

The EBTS TOT that supports the Photo Audit Trail Retrieval requests will be developed in accordance with the ANSI/NIST-ITL Data Format for the Interchange of Fingerprint, Facial, and other Biometric Information.

NGI shall accept a Photo Audit Trail Retrieval request with a UCN and photo specific information.

#### 3.3.7.2 Photo Audit Trail Retrieval Request Processing

NGI shall retrieve the photo audit trail for the specified Identity and photo in the Photo Audit Trail Retrieval request.

NGI shall reject a Photo Audit Trail Retrieval request when a specified UCN or photo does not exist.

NGI shall reject a Photo Audit Trail Retrieval request when the Authorized Contributor is not the photo owner.

#### 3.3.7.3 Photo Audit Trail Retrieval Request Outputs

NGI shall provide a response to a Photo Audit Trail Retrieval request in accordance with the latest EBTS version.

The EBTS TOT that supports a Photo Audit Trail Retrieval response will be developed in accordance with the ANSI/NIST-ITL Data Format for the Interchange of Fingerprint, Facial, and other Biometric Information.

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# 3.3.8 Photo Information Retrieval Request

The following functional requirements are specific to Photo Information Retrieval requests unique to Authorized FBI Service Providers. The Authorized FBI Service Providers need additional functionality since they may need to access all photos and all photo information. A Photo Information Retrieval request is a request for any or all photo images, photo features, or photo audit trails.

## 3.3.8.1 Photo Information Retrieval Request Inputs

NGI shall allow an Authorized FBI Service Provider to retrieve any or all photo information for a specified UCN as part of a Photo Information Retrieval request.

The NGI STOT that supports the Photo Information Retrieval requests will be developed in accordance with the NGI Message Definition Database (MDD).

NGI shall allow an Authorized FBI Service Provider to retrieve any or all photo information for a specified UCN and photo specific information, as part of a Photo Information Retrieval request.

NGI shall allow an Authorized FBI Service Provider to designate from which NGI repository photo information will be retrieved, as part of a Photo Information Retrieval request.

NGI shall allow an Authorized FBI Service Provider to designate from which external repository(ies) (e.g., IDENT) photo information will be retrieved, as part of a Photo Information Retrieval request.

# 3.3.8.2 Photo Information Retrieval Request Processing

NGI shall retrieve the photo information for the UCN specified from the repository designated in the Photo Information Retrieval request.

NGI shall retrieve the photo information for the specified UCN and photo specific information designated in the Photo Information Retrieval request.

NGI shall retrieve from the default NGI repository, when no repository or photo is designated in the Photo Information Retrieval request.

NGI shall reject a Photo Information Retrieval request when a specified Identity or photo does not exist.

NGI shall determine the external system's link identifier based on the UCN contained in a Photo Information Retrieval request, when external repository indicated.

NGI shall include the external system's link identifier in an External Photo Image Retrieval request as part of a Photo Information Retrieval request.

NGI shall send an External Photo Image Retrieval request to the designated External System in accordance with the latest EBTS version when an external repository is specified in a Photo Information Retrieval request and the external system is not IDENT.