



June 20, 2016

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**ELECTRONIC BIOMETRIC TRANSMISSION**  
**SPECIFICATION (EBTS)**

**TECHNICAL AND OPERATIONAL UPDATE (TOU) 10.0.6**

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**SECTION 1 – MESSAGE TO CJIS SYSTEMS OFFICERS**

The purpose of this TOU is to document all functional changes to the most recent version of the EBTS, as an interim solution (until the release of the next version), to enable FBI/CJIS system user compliance. Functional changes documented by this TOU are located at the front, followed by all functional changes documented by previous TOUs, in reverse chronological order since the release of the most recent version of the EBTS. In addition, a comprehensive list of all TOU functional changes since the release of the most recent version of the EBTS is located at the end and sorted by section. Please note that the functional changes documented by this TOU are cumulative such that user compliance requires adherence to the most recent version of the EBTS and incorporation of all functional changes documented by this and all prior TOUs since the release of the most recent version of the EBTS.

\* \* \* \* \*

Users are reminded that any questions concerning the distribution of TOUs should be directed to the Biometric Center of Excellence.

TOUs are also available via the Internet on the FBI Biospecs website at <<http://www.fbibiospecs.cjis.gov>>.

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**SECTION 2 – FUNCTIONAL CHANGES FOR 10.0.6**

Section 2 contains information concerning the modifications constituting EBTS 10.0.6. The following table is an overview of the modifications for this TOU version.

<b>Section</b>	<b>Change</b>
<b>3.4.4.3 FRS</b>	Added text to end of first paragraph
<b>3.6.13 FIS</b>	Updated first paragraph
<b>3.6.14 FISR</b>	Updated first paragraph
<b>Appendix C</b>	Updated 2.046 DOS definition Corrected IDENT description in Table 23: NDR Values Table
<b>Appendix D</b>	Added field 2.046 DOS to CPNU and FIDR
<b>Appendix E</b>	Updated 2.073 CRI for FRS
<b>Appendix F</b>	Updated Table F-2 for minimum modulation for 500 ppi scanner to 2 cy/mm
<b>Appendix O</b>	Corrected CTZ value for four codes in POB Code Table Corrected FR code description
<b>Appendix AC</b>	Corrected description for IIIS

### 3.4.4.3 Facial Recognition Search Request (FRS)

The Facial Recognition Search (FRS) transaction allows the user to submit an investigative search of a frontal (both eyes visible) facial photo. The face image and optional demographic filtering information is searched against photos in the NGI repositories for possible candidates. It is important to note that if demographic fields are provided, then the search results will only contain candidates that match the entire set of demographics provided. Although Name of Designated Repository (2.098 NDR) is included as an optional field in FRS, requests to search face photos from the civil repository will be ignored, and a corresponding permission error will be included in the response. The returned Candidate Investigative List (2.2033 CNL) will contain a ranked list of possible candidates. The user may add the probe photo to the Unsolved Photo File (UPF) by setting the Unsolved Biometric File (2.083 ULF) field to “Y”. **FRS transactions are limited to Law Enforcement Agencies. To ensure that only the approved agencies are using the facial recognition search capabilities, the first occurrence of the Contributing Agency Identifier (CRI) 2.073 field of an FRS transaction will be a required field and validated. If the CRI fails to pass the validation, the transaction will be rejected with a Biometric Search Error Response (ERRB) value of “A0004 – Requester is not authorized for transaction type FRS”.**

### 3.6.13 Biometric Image Submission (FIS)

The Biometric Image Submission Request (FIS) supports the enrollment of additional biometric imagery (fingerprints, palm prints, supplemental prints, facial photos, SMT photos and iris images) for an existing identity, when a search is not necessary. As has always been done in FIS processing, the quality and characteristics of tenprint fingerprint images will be evaluated against the existing composite fingerprint set for the Identity, and updates to the composite will be made appropriately. This is existing functionality used to support NFF ~~states’ submission of fingerprints for all second and/or subsequent criminal criterion offenses when it is determined that a subsequent arrest provides fingerprints of significantly better quality than those previously submitted to the FBI/CJIS, or when it is determined there are new fingerprint characteristics such as scars or amputations.~~ However, this processing will apply to all submitters, whether NFF or not.

The submitted images will be stored in the NGI database for identification or investigative searching and will be associated with the provided Identity (UCN). Submitted imagery will also be cascaded against the appropriate unsolved file to support investigative services. When possible, users should include the Event Identifier (2.2035 EVI) from the associated original response (SRE), so that the additional biometric images may be associated with the existing EVI.

### 3.6.14 Biometric Image Submission Response (FISR)

The Biometric Image Submission Response (FISR) will provide details on each biometric type enrolled by a FIS. The Biometric Image Enrollment (2.2061 BIE) field will provide the Biometric Set Identifier (2.2061A BSI) and Image Type (2.2061B IMT) of each biometric set or photo that was enrolled. Where photos are enrolled, the Subject Pose (2.2061C POS) is populated for facial

photos, and the Scars, Marks, and Tattoos (2.2061D SMT) information item is populated for SMT photos. The Fingerprint Images Updated (2.072 FIU) field indicates which fingers (if any) were replaced in the composite fingerprint set for the contributor-provided FBI Number/UCN (2.014 FBI). **An ERRI will be returned to the user when submitted tenprints do not match the provided FBI Number/UCN (2014 FBI).** If fingerprints accompanying the FIS **with a palm print submission** do not match the provided FBI Number/UCN (2.014 FBI), an error response (ERRA) will be returned to the user. The Controlling Agency Identifier (2.073 CRI) is an optional field in a FIS transaction. If a CRI is not included in the FIS, the Originating Agency Identifier (ORI) will be inserted into the CRI field of the FISR.

## Appendix C: Descriptors and Field Edit Specifications for Type-2 Logical Records

### DOS 2.046 Date of Arrest - Suffix

This field contains a code representing the sequence of the subject's **fingerprint submissions arrests** within a given date. The code also indicates the type of fingerprint submission on which **either** the Date of Arrest (DOA) or Date Print Received (DPR) was contained. This field is **generally** for internal use within the FBI **only**; however, **authorized external contributors may use DOS codes for Date Fingerprinted, Date Print Received, Date of Offense, and Date of Application. In some instances, this field may be blank.**

**Table 23: NDR Values Table**

NDR Value	File Name
1	Criminal Master File Records
2	Civil Records
3	Unsolved Biometric File
4	Reserved for FBI use
5	Reserved for FBI use
6	Repository for Individuals of Special Concern (RISC)
7	Canada Real Time Identification (RTID)
8	DoD Automated Biometric Identification System (ABIS)
9	DHS IDENT/ <del>US-VISIT</del>
10	DHS IDENT/ <del>US-VISIT</del> and LESC

## Appendix D: Summary of Logical Record Layouts for Type-2 Identification and Verification Transactions

**Table D-1 Summary of Field Lists for Identification and Verification Transactions**

Tag Element	CPNU	FIDR
<b>2.046 DOS</b>	<b>0..1</b>	<b>0..1</b>

**Appendix E: Summary of Logical Record Layouts for Type-2 Investigation, Information, and Notification Transactions**

**Table E-1 Summary of Field Lists for Investigation, Information, and Notification Transactions**

Tag Element	FRS
2.073 CRI	<del>0..3</del> 1..3

**Appendix F: FBI/CJIS Image Quality Specifications**

**Table F-2: MTF Requirement Using Sine Wave Target**

Frequency (cy/mm)	Minimum Modulation for 500 ppi Scanner	Minimum Modulation for 1000 ppi Scanner	Maximum Modulation
1	0.905	0.925	1.05 at all frequencies
2	<del>0.767</del> 0.797	0.856	
3	0.694	0.791	
4	0.598	0.732	
5	0.513	0.677	
6	0.437	0.626	
7	0.371	0.579	
8	0.312	0.536	
9	0.255	0.495	
10	0.200	0.458	
12		0.392	
14		0.336	
16		0.287	
18		0.246	
20		0.210	

**Appendix O: POB Code Table**

**Table O-1: POB Code Table**

Code	CTZ	Description	Date Ahead Flag
FP	*	French Polynesia	
FR	*	<del>FR French Southern/Antarctic</del> Southern and Antarctic Lands	
PR	*	Puerto Rico	*
TR	*	Turks and Caicos Islands	

**Appendix AC: ACRONYMS**

Acronym	Description
IIS	Iris Image <del>Investigative</del> Investigation Search

**SECTION 3 – FUNCTIONAL CHANGES FOR 10.0.5**

Section 3 contains information concerning the modifications constituting EBTS 10.0.5. The following table is an overview of the modifications for this TOU version.

<b>Section</b>	<b>Change</b>
<b>3.3.1</b>	Updated Response TOT list for CPR
<b>3.3.1.1 IRQ</b>	Updated third paragraph
<b>3.4.2</b>	Updated third paragraph
<b>3.4.4.3 FRS</b>	Updated first paragraph
<b>3.4.6.4 EQRR</b>	Updated first paragraph
<b>3.4.6.5 ERRR</b>	Updated first paragraph and added second paragraph
<b>3.5.6 ULM</b>	Updated third paragraph
<b>Appendix C</b>	Updated 2.083 ULF name and definition Updated Table C-1 for 2.2064A RBRN and 2.2064B RBFT Updated Table C-1 for 2.071 ACN example Updated Table C-1 for 2.083 ULF
<b>Appendix L</b>	Updated Table L-1 for 2.083 ULF Updated Table L-4 for CPR
<b>Appendix AC</b>	Updated acronym for ULF

### 3.3.1 Biometric Image Retrieval Submission

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The following TOTs are applicable only for request for legacy requests for Criminal Subject Photo Images:

<b>TOT</b>	<b>TRANSACTION</b>
CPR	Subject Photo Request

The FBI/CJIS response to requests for Criminal Subject Photo set images is:

<b>TOT</b>	<b>RESPONSE TRANSACTION</b>
PRR	Photo Request Response
<b>ERRI</b>	<b>Information Transaction Error</b>

Error messages are described in Section 3.7

#### 3.3.1.1 Biometric Image/Feature Retrieval Request (IRQ)

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If the request contains any invalid field values or is missing any required fields, an Information Error Response (ERRI) will be returned, including the reason for the return in the Status/Error Message (2.060 MSG) field. Errors associated with individual subject identifier numbers, such as an image set not being on file, will be reported in the MSG field of the **Fingerprint** Image Summary Response (ISR).

### 3.4.2 Latent Friction Ridge Investigation Submission

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By default, these images and/or features will not be stored in the Unsolved Latent File (ULF). If the Criminal Master File (CMF) was included in the Name of Designated Repository (2.098 NDR) field, the user may override this behavior by setting the Unsolved **Latent Biometric File Flag** (2.083 ULF) field to “Y”.

#### 3.4.4.3 Facial Recognition Search Request (FRS)

The Facial Recognition Search (FRS) transaction allows the user to submit an investigative search of a frontal (both eyes visible) facial photo. The face image and optional demographic filtering information is searched against photos in the NGI repositories for possible candidates. It is important to note that if demographic fields are provided, then the search results will only contain candidates that match the entire set of demographics provided. Although Name of Designated Repository (2.098 NDR) is included as an optional field in FRS, requests to search face photos from the civil repository will be ignored, and a corresponding permission error will be included in the response. The returned Candidate Investigative List (2.2033 CNL) will contain a ranked list of possible candidates. The user may add the probe photo to the Unsolved Photo File (UPF) by setting the Unsolved **Latent Biometric File** (2.083 ULF) **flag field** to “Y”.

#### 3.4.6.4 External Query History Request Response - Summary (EQRR)

An External Query Request Response (EQRR) will be returned as a summary report of the number of candidates returned from the search and the UCN of each candidate. The number of EHRR and ERRR messages returned for the search, up to 20, will be equal to the number of candidates stated in the EQRR message. ~~containing the summary list of 0-20 candidates that were found as result of the External Query History search.~~

### 3.4.6.5 Transaction Error (Electronic Response) (ERRR)

When the result of the External Query History Request contains candidate(s) where the Identity History Summary is not available, the Transaction Error (Electronic Response) (ERRR) will be returned to the contributor. As a **large** number of records for persons born before 1956 have not been automated, those Identity History Summaries will not be available. The ERRR will include a Status/Error Message (2.060 MSG) field indicating the status of the record. The record will be converted. In three to four business days, the contributor may submit a follow-on EQHR request to receive the Identity History Summary electronically.

If the DOB in the EQHR is omitted or invalid, an ERRR indicating the error (in the Status/Error Message (2.060 MSG) field) will be the only response.

### 3.5.6 Unsolved Latent Match (ULM)

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The ULM will return the complete image set that was matched against the Unsolved Latent File, whether retained by NGI or not. ULMs for non-retain submissions will include the slap fingerprint images (up to 14 total); ~~otherwise, only the ten rolled prints are returned~~. In addition, the ULF image, if available, will be returned as the last image returned in the file.

## Appendix C: Descriptors and Field Edit Specifications for Type-2 Logical Records

### ULF 2.083 Unsolved ~~Latent~~ Biometric File

This field is used to designate whether a latent image, features record, or unsolved facial photo in a search should be added to the **respective** unsolved **biometric ~~Latent~~** file. Submit a 'Y' for yes. If negative, submit 'N'. If the field is omitted, the default behavior will be 'N'.

Table C-1 Field Edit Specifications for Type-2 Elements

Field Number	Identifier	Field Name	Character	Field Size		Occurrences		Example	Comments/ Special Characters
				(not including Character Separators)		Min	Max		
				Min	Max				
2.2064	RBUD	RAP BACK USER DEFINED	SET				10	2.2064: PAROLE OFFICER {US}DOE, JOHN{GS}	
A	RBFN	RAP BACK FIELD NAME	ANS	10	50	10	1		
B	RBFT	RAP BACK FIELD TEXT	ANS	10	100	10	1		

Field Number	Identifier	Field Name	Character	Field Size		Occurrences		Example	Comments/ Special Characters
				(not including Character Separators)		Min	Max		
				Min	Max				
2.071	ACN	ACTION TO BE TAKEN	ANS	0	300		1	2.071:IF NON-IDENT, SUBMIT TO UNSOLVED LATENT BIOMETRIC FILE{GS}	Commas, hyphens, ampersands, slashes, number signs, and blanks are all allowed as special characters

Field Number	Identifier	Field Name	Character	Field Size		Occurrences		Example	Comments/ Special Characters
				(not including Character Separators)		Min	Max		
				Min	Max				
2.083	ULF	UNSOLVED LATENT BIOMETRIC FILE	A	1	1		1	2.083:Y{FS}	

**Appendix L: SUMMARY TABLES**

**Table L-1 Complete Element Cross-Reference List by Tag Number**

EBTS Tag Number	Element ID	Element Name
2.083	ULF	UNSOLVED <del>LATENT</del> BIOMETRIC FILE

**Table L-4 Transaction/Response/Error TOT Correspondence**

Transaction	TOT	Response TOTs	Error TOTs
SUBJECT PHOTO REQUEST	CPR	PRR	PRR, <del>ERRI</del>

**Appendix AC ACRONYMS**

Acronym	Description
ULF	Unsolved <del>Latent</del> Biometric File

**SECTION 4 – FUNCTIONAL CHANGES FOR 10.0.4**

Section 4 contains information concerning the modifications constituting EBTS 10.0.4. The following table is an overview of the modifications for this TOU version.

<b>Section</b>	<b>Change</b>
<b>1.8</b>	Added new compression references
<b>3.4.5.1 IIS</b>	Updated sentence
<b>3.8.2</b>	Updated first and second paragraph
<b>Appendix A</b>	Updated Table A-1
<b>Appendix C</b>	Updated section 1.1 Updated 2.051 CSL definition Updated 2.2063 RBOO definition
<b>Appendix F</b>	Update note under Table F-5 Update web site reference under Table F-5
<b>Appendix L</b>	Corrected transaction name for EHRR Updated IIDS for T10 and T17 Updated IRR for T17 Updated SRB for T17
<b>Appendix M</b>	Added L0174 and L0179 to Message Table
<b>Appendix O</b>	Updated appendix introduction
<b>Appendix P</b>	Updated section introduction text, sixth paragraph Updated web address for Palm Print Capture Guide Added note to Table P-2 Friction Ridge
<b>Appendix AC</b>	Removed acronyms IID, IIE, IIER, IIR and IRD Corrected EHRR

## 1.8 Reference Documents

- American National Standards Institute/National Institute of Standards and Technology (ANSI/NIST) – Information Technology Laboratory (ITL) 1-2011 American National Standard, November 2011, [http://www.nist.gov/itl/iad/ig/ansi\\_standard.cfm](http://www.nist.gov/itl/iad/ig/ansi_standard.cfm)  
[http://biometrics.nist.gov/cs\\_links/standard/AN\\_ANSI\\_1-2011\\_standard.pdf](http://biometrics.nist.gov/cs_links/standard/AN_ANSI_1-2011_standard.pdf)
- For Information Systems – Data Format for the Interchange of Fingerprint, Facial, and Other Biometric Information, November 2011.
- IAFIS-IC-00110(V3.1), Criminal Justice Information Services (CJIS) Wavelet Scalar Quantization (WSQ) Grayscale Fingerprint Image Compression Specification, dated October 4, 2010, provides the definitions, requirements, and guidelines for specifying the FBI/CJIS’s WSQ compression algorithm. The document specifies the class of encoders required, decoder process, and coded representations for compressed image data. Latent images are not compressed. Fingerprint Image Compression Specification, dated October 4, 2010, [http://www.fbibiospecs.cjis.gov/Document/Get?fileName=WSQ\\_Gray-scale\\_Specification\\_Version\\_3\\_1\\_Final.pdf](http://www.fbibiospecs.cjis.gov/Document/Get?fileName=WSQ_Gray-scale_Specification_Version_3_1_Final.pdf)  
[https://www.fbibiospecs.org/docs/WSQ\\_Gray-scale\\_Specification\\_Version\\_3\\_1\\_Final.pdf](https://www.fbibiospecs.org/docs/WSQ_Gray-scale_Specification_Version_3_1_Final.pdf)
- Examination of Downsampling Strategies for Converting 1000 ppi Fingerprint Imagery to 500 ppi, dated January 22, 2013, [http://www.nist.gov/customcf/get\\_pdf.cfm?pub\\_id=912779](http://www.nist.gov/customcf/get_pdf.cfm?pub_id=912779)
- NIST Special Publication 500-289, dated August 2013, <http://nvlpubs.nist.gov/nistpubs/specialpublications/NIST.SP.500-289.pdf>

### 3.4.5.1 *Iris Image Investigation Search (IIS) (Future Capability)*

The Iris Image Investigation Search (IIS) transaction allows the user to submit the right or left iris image for a given individual to be used for searching against the IIF for possible investigative leads. Such iris images may be extracted from a visible light facial photo obtained under less than ideal conditions, such as iris images from photos extracted from video surveillance footage. Subsequently, images submitted with an IIS transaction are likely to be of relatively poor quality. All IIS searches of the IIF will be one-to-many investigative type searches. An IIS transaction will result in up to the ~~50~~ 20 best scoring candidates returned in an SRB transaction. The enrolled iris image associated with each matched candidate will be returned. If the IIS contains any errors, an ERB will be returned.

### 3.8.2 Fingerprint Image Compression/Decompression Algorithm

IAFIS-IC-00110 (V3.1), Criminal Justice Information Services (CJIS) Wavelet Scalar Quantization (WSQ) Grayscale Fingerprint Image Compression Specification, dated October 4, 2010, provides the definitions, requirements, and guidelines for specifying the FBI/CJIS WSQ compression algorithm. The document specifies the class of encoders required, decoder process, and coded representations for compressed image data. ~~Latent images are not compressed.~~ Refer to this specification for an informative overview of the elements of the algorithm. ~~Latent images are not to be lossy compressed.~~

The FBI/CJIS is responsible for maintaining a registry of approved compression algorithms and assigning a value to each, as shown in the Compression Algorithm Values table below. This value is to be used in the Type 4 or Type-14 Logical Record so the receiving agency can use the appropriate decompression algorithm to decode the image data. The Color and Grayscale Compression Algorithm (CGA) field is ~~a mandatory one-byte binary field~~ used to specify the compression algorithm used (if any). ~~A binary zero denotes no-compression.~~ The following table indicates the acceptable values for this field, ~~although not all values apply to all record types.~~ The FBI/CJIS expects 500 ppi scanned Type-4 or Type-14 tenprint images, as well as 500 ppi Type-15 palm print images, to be compressed with ~~the WSQ compression algorithm~~ ~~WSQ-20 using a bit rate set to 0.75 (resulting in with~~ a nominal compression ratio of 15-to-1). The FBI/CJIS expects ~~1000 ppi scanned Type-14 and Type-15 images to be compressed with the JP2L algorithm and~~ Type-10 photo images to be compressed with the JPEGB algorithm. FBI/CJIS will accept fingerprint and palm print images scanned at 500 and 1000 ppi. ~~Per NIST Special Publication 500-289 guidance, the FBI/CJIS expects that Type-14 and Type-15 1000 ppi exemplar friction ridge imagery will be compressed using the JPEG-2000 lossy compression (JP2) at a target ratio of 10:1. If required, latent friction ridge imagery at 1000 ppi will be compressed using the JPEG-2000 lossless compression filter according to the guidance in SP500-289. Exemplar friction ridge imagery at 1000 ppi may be converted to 500 ppi for the purposes of backwards compatibility using the Gaussian downsampling strategy provided in SP500-289. No downsampling or transeoding of 1000 ppi images is to be performed prior to transmission to the FBI/CJIS.~~ The table will be updated when new algorithms are approved by the FBI/CJIS.

## Appendix A: TRANSACTION RESPONSE TIMES

**Table A-1 NGI Maximum Transaction Response Times**

Transaction	Priority	10 sec	20 sec	30 sec	2 min	5 min	10 min	15 min	30 min	1 hour	2 hours	4 hours	24 hours	48 hours	15 days
Cascaded Fingerprint Search													*		
Cascaded Iris Search (Future Capability)													*		

## APPENDIX C: DESCRIPTORS AND FIELD EDIT SPECIFICATIONS FOR TYPE-2 LOGICAL RECORDS

### 1.1 Date Fields

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For example 19921201 represents December 1, 1992.

Partial dates, where allowed, are represented by inserting zeroes into the unknown positions. For example 20010000 represents the year 2001.

Since dates find a variety of uses in EBTS transactions, each use may have specific format restrictions or special edits. For specific format restrictions or special edits, see the individual date field entries

### **CSL 2.051 Court Segment Literal**

The CSL field is made up of the following information items:

- A. The Court Disposition Date (CDD) is the date a court count was disposed of by the court. The CDD shall appear as specified in Section 1.1 of this appendix. This date field shall contain the local date for the region submitting the request, which shall not exceed the current date except when the submission originates from an international contributor located in a time zone **ahead of the earlier than** the Eastern Time Zone.

### **RBOO 2.2063 Rap Back Opt Out In-State Indicator**

This field is set by the Submitter, to indicate NGI should not send the Submitter notifications of **Criminal Retain Submission** events originating from within the Submitter's own state. The default value is 'N', NGI sending **all** notifications **of all Criminal Retain Submissions**. A value of 'Y' must be provided on all subscriptions for which Submitter wishes to opt-out of in-state notifications **of Criminal Retain Submissions**.

## **Appendix F: FBI/CJIS Image Quality Specifications**

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### **Table F-5 Mobile ID IQS Requirements**

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NOTE: Although the RISC will accept submissions from Mobile Fingerprint Scanners that do not meet these requirements, the FBI/CJIS Division reserves the right to enforce these, or any other, scanner requirements deemed necessary to meet accuracy levels established by the FBI/CJIS Division's Advisory Policy Board. NGI RISC participants should refer to the FBI/CJIS Biometric Specification (<http://www.fbibiospecs.cjis.gov> [www.fbibiospecs.org](http://www.fbibiospecs.org)) IAFIS Certified Products List/Mobile ID Category for a list of mobile identification devices which have been certified by the FBI/CJIS as tested and in compliance with the FBI/CJIS's Next Generation Identification (NGI) initiatives and Integrated Automated Fingerprint Identification System (IAFIS) Image Quality Specifications (IQS). The certification process is not intended to endorse one product over a competitor's product but merely to certify that the product meets FBI/CJIS standards and that, between two products that meet FBI/CJIS standards, the FBI/CJIS does not recommend one over the other.

## **Appendix F - References**

*Mobile ID Device Best Practice Recommendation and Specification*, Aug 2009, National Institute of Standards and Technology (NIST), available at <http://fingerprint.nist.gov/mobileid>

*Personal Identity Verification (PIV) Image Quality Specifications for Single Finger Capture Devices*, FBI/CJIS Biometric Specifications, 10 July 2006, available at <http://www.fbibiospecs.org/fbibometric/docs/pivspee.pdf>  
<http://www.fbibiospecs.cjis.gov/Document/Get?fileName=pivspeg.pdf>

## APPENDIX L: SUMMARY TABLES

Table L-2 Record Set Requirements Summary by Type of Transaction

Transaction	Enrollment TOT	T1	T2	T10	T17 <sup>2</sup>
IRIS IMAGE IDENTIFICATION SUBMISSION (Future Capability)	IIDS	1	1	0-1	2 1-2

Table L-3 Record Set Requirements Summary by Type of Response

Transaction	Enrollment TOT
EXTERNAL ELECTRONIC HISTORY REQUEST RESPONSE	EHRR

Table L-3 Record Set Requirements Summary by Type of Response

Transaction	Enrollment TOT	T17 <sup>**</sup>
IMAGE REQUEST RESPONSE	IRR	0-2

Table L-3 Record Set Requirements Summary by Type of Response

Transaction	Enrollment TOT	T17 <sup>**</sup>
SEARCH RESULTS – BIOMETRIC	SRB	0-51 0-20

## APPENDIX M: TRANSACTION MESSAGES

Table M-1 Transaction Messages

Code	Condition for Message	Description	Count	Insert #1	Insert #2	Insert #3
L0170	Photo Image Delete Error	No Photo images were deleted, the DOA %1 has multiple events. Please contact CJIS customer service.	1	DOA		
L0174	Subjects first arrest record is automated, but subsequent arrests have not been.	FBI %1 NOT ON FILE. NOTICE -- A LARGE NUMBER OF RECORDS FOR PERSONS BORN PRIOR TO 1956 ARE NOT AUTOMATED AT THE FBI	1	UCN		
L0179	Must submit through contracting criminal justice agency	Must submit through contracting criminal justice agency	0			

**APPENDIX O: POB CODE TABLE**

Appendix O contains the codes for Place of Birth (POB 2.020), ~~and~~ Citizenship (CTZ 2.021) ~~and~~ **Geographic Area of Search (GEO 2.044)** fields. The ‘CTZ’ contains an asterisk (\*) for those codes that are valid for usage in the CTZ 2.021 field. All codes are valid for usage in the POB 2.020 field ~~and the GEO 2.044 field~~. The “DATE AHEAD FLAG” indicates those codes where the local date may be a day ahead of North American time zones.

**APPENDIX P: SPECIFICATIONS FOR TRANSMITTING PALM PRINTS AND SUPPLEMENTAL FINGERPRINTS**

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The entire area of the full palm is defined as that area extending from the wrist bracelet area to the tips of the fingers and can be represented as one or two scanned images. If two images are used to represent the full palm, the lower image shall extend from the wrist bracelet area to the top of the interdigital area (third finger joint) and shall include the thenar, and hypothenar areas of the palm. The upper image shall extend from the bottom of the interdigital area to the upper tips of the fingers. This provides an adequate amount of overlap between the two images to facilitate subject verification. By matching the ridge structure and details contained in the common interdigital area, an examiner can confidently state that both images came from the same palm. **Because neither plain impressions nor identification flat impressions include this common overlapping interdigital area, they should never be submitted as upper palm images.** All friction ridge prints should be captured in as closely as possible to an upright position. Please see the NGI publication, “A Practical Guide for Palm Print Capture”, available for download at <http://www.fbibiospecs.cjis.gov/Document/Get?fileName=PalmGuidance%20v2.0%20LFSU.pdf> <https://www.fbibiospecs.org/docs/PalmGuidance%20v1.0.pdf>, for additional guidance.

**Table P-2 Friction Ridge Generalized Position Codes**

Position/Portion	Type	Record Type	Code	Max Width		Max Length	
				(mm)	(in)	(mm)	(in)
EJI or Tip (see Note)	S	9, 13, 14	19	114	4.5	127	5

Key: F – Fingerprint, M – Mobile ID, P – Palm Print, S – Supplemental Print, U – Unknown Print

**Note: Recommended maximum size for TIP images is 1 x 1.6 inches.**

**APPENDIX AC: ACRONYMS**

Acronym	Description
IHS	Identity History Summary
<del>IID</del>	<del>Iris Image Data</del>
IIDS	Iris Image Identification Submission
<del>IIE</del>	<del>Iris Image Enrollment</del>
<del>IIEER</del>	<del>Iris Image Enrollment Request Response</del>
III	Interstate Identification Index
IIIS	Iris Image Investigative Search
<del>IIR</del>	<del>Iris Images Requested</del>

Acronym	Description
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SECTION 4 – EBTS FUNCTIONAL CHANGES

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IQS	Image Quality Score
<del>IRD</del>	<del>Iris Capture Date</del>

Acronym	Description
EHR	<del>External Electronic</del> History Request Response – Individual Identity History Subject Sheets

**SECTION 5 – FUNCTIONAL CHANGES FOR 10.0.3**

Section 5 contains information concerning the modifications constituting EBTS 10.0.3. The following table is an overview of the modifications for this TOU version.

<b>Section</b>	<b>Change</b>
<b>3.3.2</b>	Updated Response Transaction list
<b>3.3.2.1 BATQ</b>	Updated section
<b>3.3.2.2 BATR</b>	Updated section title
<b>3.4.6</b>	Reordered sections to conform with Response Transaction list Corrected TOT name for EQHR and EQRR
<b>3.4.6.3 EQER</b>	Restored EQER section
<b>3.6.3 BDEC</b>	Updated second paragraph
<b>3.6.23 RBMNTR</b>	Updated first paragraph
<b>Appendix A</b>	Restored Friction Ridge Investigation Search – Latent rows
<b>Appendix B</b>	Updated 1.013 DOM
<b>Appendix C</b>	Updated 2.098 NDR Values Table Updated 2.2020 RBSL
<b>Appendix M</b>	Added footnote

**3.3.2 Biometric Audit Trail Retrieval Submission**

...

**TOT RESONSE TRANSACTION**  
**BATR** **Biometric** Audit Trail Response  
**ERRI** Information Transaction Error

**3.3.2.1 Biometric Audit Trail Query (BATQ)**

....

The response to this request will be **Biometric** Audit Trail Response (**BATR**).

**3.3.2.2 Biometric Audit Trail Response (BATR)****3.4.6 Biographic Investigation Submission**

....

**TOT RESONSE TRANSACTION**  
**EHRR** External History Request Response  
**EQER** External Query History Error Response  
**EQRR** External Query History Request Response -  
 Summary  
**ERRR** Transaction Error (Electronic Response)

.....

**3.4.6.1 External Query History Request (EQHR)**

....

**3.4.6.2 External Query History Request Response (EHRR)**

....

**3.4.6.3 External Query History Error Response (EQER)**

When the External Query History Request contains errors, such as missing mandatory information or invalid contents, the External Query Error Response (EQER) will be returned to the contributor. The response will include the Status/Error Message (2.060 MSG) field indicating the type(s) of error(s) encountered. See the Error Message Format Section for more detail on how this response is formatted (Appendix M).

**3.4.6.4 External Query History Request Response – Summary (EQRR)**

....

**3.4.6.5 Transaction Error (Electronic Response) (ERRR)**

....

### 3.6.3 Biometric Decision Submission (BDEC)

....

The candidate record is identified through the **FBI Number/UCN (2.014 FBI) field**. For latent and tenprint investigative search decisions, the Biometric Set Identifier (2.2029 BSI) can optionally be provided to explicitly designate the image set used for the decision. The FGP (2.074) field also may optionally be used to specify the position code of the friction ridge record that resulted in the decision. For facial photo decisions, the BSI is required.

### 3.6.23 Rap Back Maintenance Response (RBMNTR)

The Rap Back Maintenance Response (RBMNTR) is returned by the FBI/CJIS in response to a Rap Back Maintenance Request. Responses will ~~return the submitted fields~~, contain all **Rap Back Subscription Data Fields** and indicate if the transaction completed successfully, failed, or completed with modifications. Appendix M contains further details on contents of the Status/Error Message (2.060 MSG) field for error conditions.

**Appendix A: TRANSACTION RESPONSE TIMES**

**Table A-1 NGI Maximum Transaction Response Times**

Transaction	Priority	10 sec	20 sec	30 sec	2 min	5 min	10 min	15 min	30 min	1 hour	2 hours	4 hours	24 hours	48 hours	15 days
Friction Ridge Investigation Search – <b>Tenprint</b>	High (1)			*											
	Routine (5)				*										
	Low (7)							*							
Friction Ridge Investigation Search – <b>Latent</b>	High (1)									*					
	Routine (5)											*			
	Low (7)												*		

## Appendix B: DESCRIPTORS AND FIELD EDIT SPECIFICATIONS FOR TYPE-1 LOGICAL RECORDS

### Type-1 Data Dictionary

**DOM 1.013 Domain Name**

....

A ~~mandatory~~ **optional** second information item will contain the unique version of the particular implementation.

## Appendix C: DESCRIPTORS AND FIELD EDIT SPECIFICATIONS FOR TYPE-2 LOGICAL RECORDS

### Type-2 Data Dictionary

**NDR 2.098 Name of Designated Repository**

.....

**Table 23 NDR Values Table**

NDR Values	File Name
1	Criminal Master File Records
2	Civil Records
3	<del>Unsolved Latent File</del> <b>Unsolved Biometric File</b>
4	Reserved for FBI use
5	Reserved for FBI use
6	Repository for Individuals of Special Concern (RISC)
7	Canada Real Time Identification (RTID)
8	DoD Automated Biometric Identification System (ABIS)
9	DHS IDENT/US-VISIT
10	DHS IDENT/US-VISIT and LESC
11	RISC Wants and Warrants (W&W)
12	RISC Sexual Offender Registry (SOR)
13	RISC Known and Suspected Terrorist (KST)
14	RISC Foreign Subjects of Interest (FSI)
15	RISC Persons of Special Interest (Other)
16	Internal Use Only
17-19	Reserved for FBI Future Use
20 - 50	Reserved for Department of Defense
51 - 100	Reserved for FBI Future Use
101-199	FBI or Other Federal Organization Special Population Cognizant Files
200-399	Reserved for State/Local System
400-699	Reserved for External FBI Use
700-999	Reserved for FBI Future Use

**RBSL 2.2050 Rap Back Subscription List**

A comma-separated values (CSV) file, ~~named 'results.csv'. This file~~ is used to return Subscription Lists to Subscribers. See the EBTS description of Rap Back Subscription List Response (RBRPTR) for more information.

Please note that double quotes are used in two different ways within this CSV file:

1. To distinguish between a comma delimiter and a comma used within a field

For example, the name John Doe would be represented in the CSV file as “Doe, John”

If the double quotes were not used, then ‘Doe’ and ‘John’ would be considered two separate field values.

2. To distinguish between subfields (Triggers, User Defined Field Name, User Defined Field Content)

For example, there may be multiple triggers associated with one subscription, and all of those triggers would be ‘listed’ under the column heading of ‘Trigger Event(s)’

A Carriage Return Line Feed (CRLF) is used to separate them. For example:

“Criminal Retain Submissions

Want Addition

Want Deletion”

**Appendix M: TRANSACTION MESSAGES**

**Table M-1 Transaction Messages**

Code	Condition for Message	Description	Count	Insert #1	Insert #2	Insert #3
.....						

Note: For legacy purposes, this table uses UCN and FBI as interchangeable terms for the FBI Number/UCN.

**SECTION 6 – FUNCTIONAL CHANGES FOR 10.0.2**

Section 6 contains information concerning the modifications constituting EBTS 10.0.2. The following table is an overview of the modifications for this TOU version.

<b>Section</b>	<b>Change</b>
<b>3.6.3 BDEC</b>	Updated section
<b>Appendix C</b>	Updated 2.019 AKA Data Dictionary definition Updated 2.038 DPR Data Dictionary definition Added 2.046 DOS to Data Dictionary Added 2.046 DOS to Table C-1 Updated 2.088 NOT Data Dictionary definition Updated the data type for fields 2.2028G SMT, 2.2032I SMT, 2.2033M SMT and 2.2061D SMT
<b>Appendix D</b>	Removed 2.096 RPR, 2.098 NDR, 2.2037 ESI from DOCE Removed 2.096 RPR, 2.098 NDR, 2.2015 RBXD, 2.2020 RBR, 2.2037 ESI, 2.2040 RBT, 2.2062 RBNF, 2.2063 RBOO, 2.2064 RBUD, 2.2065 RBC, 2.2067 RBDI, 2.2070 RBATN, 2.2071 RBST from EMUF Removed 2.2007 SDOB and 2.2008 SNAM from ERRT Updated section introduction
<b>Appendix E</b>	Added 2.046 DOS to CPR and PRR Removed 2.079 NCR from TPRR Updated section introduction
<b>Appendix I</b>	Added 2.046 DOS to PDR and CPD Updated section introduction
<b>Appendix L</b>	Added 2.046 DOS to Table L-1
<b>Appendix M</b>	Added A0015 to Message Table Added L0031 to Message Table Added M0033 to Message Table Added M0051 to Message Table Added M0052 to Message Table
<b>Appendix N</b>	Updated 14.015 PPC Data Dictionary definition

### 3.6.3 Biometric Decision Submission (BDEC)

This transaction allows the user to notify the FBI/CJIS of a decision for a potential match resulting from an unsolved or investigative search. The Biometric Decision Submission (BDEC) will ~~include the unique identifier (BSI for face searches or BSI FGP for friction ridge searches) of the biometric against which the decision is made, along with the nature of the decision. BDECs will~~ be used to generate statistics in order to track and analyze FBI/CJIS investigative service performance and identify possible improvements. ~~To aid~~ This message requires identifiers about the matched candidate, the searching record (or probe), and the biometric decision.

The candidate record is identified through the UCN. For latent and tenprint investigative search decisions, the Biometric Set Identifier (2.2029 BSI) can optionally be provided to explicitly designate the image set used for the decision. The FGP (2.074) field also may optionally be used to specify the position code of the friction ridge record that resulted in the ~~capture of these statistics, the Transaction Control Record~~ decision. For facial photo decisions, the BSI is required.

~~To aid in the capture of these statistics, the Transaction Control Record (1.010 TCR) field in the Type-1 record of the BDEC shall contain the Transaction Control Number (1.009 TCN) from the transaction (ULM/UBM or SRL/SRB) containing the candidate information from which this decision is being made.~~

For latent, tenprint, and facial investigative searches, the probe is identified by the TCR (1.010) field in the Type-1 record of the BDEC; it will contain the Transaction Control Number value from the TCN (1.009) field of the ULM, UBM, SPN, SRL, SRB, or SRT.

When BDEC is applicable to friction ridge the appropriate SRF values are Identification (I), Non-Identification (N), Pending Verification of Identification (P), and Inconclusive (C). When BDEC is applicable to facial photo the appropriate SRF values are Identification (I), Probable (Y), Inconclusive (C), and Non-Identification (N).

~~Unless the Unsolved Latent Retained (2.2034 ULR) field is set to “Y”, a BDEC indicating a positive identification will result in the unsolved record being removed from the corresponding unsolved file (ULF or UPF). However, when the positive BDEC is the result of a directed search of the ULF or UPF, the latent record in the unsolved file is not deleted, and a notification (ULM or UBM) is triggered to the owner of the matching unsolved record. A notification (ULM or UBM) will not be generated if the BDEC reflects a negative decision.~~

Unless the Unsolved Latent Retained (2.2034 ULR) field is set to “Y”, an IDENT decision on an unsolved record from a known probe will result in the record being deleted if the requestor owns the unsolved record. A ULR value of “Y” indicates that the unsolved record should be retained (i.e., in the ULF or UPF). If the requestor does not own the unsolved record or the probe is also an unknown record then the unsolved record in the ULF or UPF is not deleted, and a ULM, UBM, or SPN notification is triggered to the owner of the unsolved record. A notification (ULM or UBM) will not be generated if the BDEC reflects a negative decision.

## Appendix C: Descriptors and Field Edit Specifications for Type-2 Logical Records

### Type-2 Data Dictionary

#### AKA 2.019 Aliases

This 3-to-50 alpha-numeric special (ANS) field contains alias names of the subject. Up to ten aliases may be provided.

For the traditional encoding of this field, each alias will be separated from one another by the {RS} character. AKA may contain a comma, hyphen, or blank as special characters. The format shall be the surname followed by a comma, followed by the given names separated by a space. The following restrictions and exceptions to the general format apply (the first three apply only to the traditional encoding):

1. Minimum length is three bytes in the following sequence: alphabetic, comma, alphabetic.
2. A comma must be followed by a minimum of one alphabetic character.
3. A blank before or after comma is invalid.
4. A hyphen in first and last position of any name segment is invalid.
5. Two consecutive blanks or hyphens between characters are invalid.

#### DPR 2.038 Date Printed

This field contains the date that ~~the subject was printed~~ the subject's biometric(s) were captured. The format shall be the same as that specified in Section 1.1 of this appendix. This date field shall contain the local date for the region submitting the request. DPR shall not exceed the date of submission.

#### DOS 2.046 Date of Arrest – Suffix

~~This field contains a code representing the sequence of the subject's arrests within a given date. The code also indicates the type of fingerprint card on which the Date of Arrest was contained. This field is for internal use within the FBI only.~~

#### NOT 2.088 Note Field

This free-text field is used to provide additional information regarding electronic latent submissions. For latent search identification results feedback, the NOT field will be used to indicate the candidate from the SRL that matched the search image. ~~For ULM transactions, the NOT field will provide information related to latent search images that are candidates for comparison with the unsolved latent (e.g., case related identifiers or point of contact information).~~ For UHN transactions, the NOT field will contain case related information about the search transaction with the hit that generated the unsolicited notification.

Table C-1 Field Edit Specifications for Type-2 Elements

Field Number	Identifier	Field Name	Character	Field Size		Occurrences		Example	Comments/ Special Characters
				(not including Character Separators)		Min	Max		
				Min	Max				
2.046	DOS	DATE OF ARREST – SUFFIX	A	1	1		1	2.046:L<GS>	

  

Field Number	Identifier	Field Name	Character	Field Size		Occurrences		Example	Comments/ Special Characters
				(not including Character Separators)		Min	Max		
				Min	Max				
[2.2028] G	SMT	NCIC SMT CODE	AS	3	10	0	1		

  

Field Number	Identifier	Field Name	Character	Field Size		Occurrences		Example	Comments/ Special Characters
				(not including Character Separators)		Min	Max		
				Min	Max				
[2.2032] I	SMT	NCIC SMT CODE	AS	3	10	0	1		

  

Field Number	Identifier	Field Name	Character	Field Size		Occurrences		Example	Comments/ Special Characters
				(not including Character Separators)		Min	Max		
				Min	Max				
[2.2033] M	SMT	SCARS, MARKS, AND TATTOOS	AS	3	10	0	1		

Field Number	Identifier	Field Name	Character	Field Size		Occurrences		Example	Comments/ Special Characters
				(not including Character Separators)		Min	Max		
				Min	Max	Min	Max		
[2.2061] D	SMT	NCIC SMT CODE	AS	3	10	0	1		

## Appendix D: Summary of Logical Record Layouts for Type-2 Identification and Verification Transactions

### 2.0 Interpretation of the Table

The column headers at the top of the page select a particular transaction. The row headers in the left margin give the tag number and ID for each field. The cell at the intersection of any given row and column gives the **cardinality minimum and maximum occurrences** for ~~the use of~~ that field (row) in that transaction (column). For example, if the cardinality is 0..9 the field is optional with the possibility of up to 9 occurrences. If the cardinality is 1..9 the field is mandatory with the possibility of up to 9 occurrences. If that cell is blank, the field is not used in that record. If the minimum and maximum values are the same then only one number is given. See Appendix D Reference Notes following Table D-1, pertaining to the use of record fields with footnotes.

**Table D-1 Summary of Field Lists for Identification and Verification Transactions**

Tag Element	DOCE
2.096 RPR	0..4

Tag Element	DOCE
2.098 NDR	0..10

Tag Element	DOCE
2.2037 ESI	0..4

Tag Element	EMUF
2.096 RPR	0..4
2.098 NDR	0..10
2.2015 RBXD	0..4
2.2020 RBR	0..9
2.2037 ESI	0..4
2.2040 RBT	0..40
2.2062 RBNF	0..4
2.2063 RBOO	0..4
2.2064 RBUD	1..10
2.2065 RBC	0..4
2.2067 RBDI	0..4
2.2070 RBATN	0..4
2.2071 RBST	0..4

Tag Element	ERRT
2.2007 SDOB	0..4
2.2008 SNAM	0..4

## Appendix E: Summary of Logical Record Layouts for Type-2 Investigation, Information, and Notification Transactions

### 2.0 Interpretation of the Table

The column headers at the top of the page select a particular transaction. The row headers in the left margin give the tag number and ID for each field. The cell at the intersection of any given row and column gives the **cardinality minimum and maximum occurrences** for ~~the use of~~ that field (row) in that transaction (column). **For example, if the cardinality is 0..9 the field is optional with the possibility of up to 9 occurrences. If the cardinality is 1..9 the field is mandatory with the possibility of up to 9 occurrences.** If that cell is blank, the field is not used in that record. If the minimum and maximum values are the same then only one number is given.

**Table E-1 Summary of Field Lists for Investigation, Information, and Notification Transactions**

Tag Element	CPR
2.046 DOS	0..1

  

Tag Element	PRR
2.046 DOS	0..1

  

Tag Element	TPRR
2.079 NCR	0..4

## Appendix I: Summary of Logical Record Layouts for Type-2 Data Management Transactions

### 2.0 Interpretation of the Table

The column headers at the top of the page select a particular transaction. The row headers in the left margin give the tag number and ID for each field. The cell at the intersection of any given row and column gives the **cardinality minimum and maximum occurrences** for ~~the use of~~ that field (row) in that transaction (column). **For example, if the cardinality is 0..9 the field is optional with the possibility of up to 9 occurrences. If the cardinality is 1..9 the field is mandatory with the possibility of up to 9 occurrences.** If that cell is blank, the field is not used in that record. If the minimum and maximum values are the same then only one number is given.

**Table I-1 Summary of Field Lists for Data Management Transactions**

Tag Element	CPD
2.046 DOS	0..1

  

Tag Element	PDR
2.046 DOS	0..1

## Appendix L: Summary Tables

Table L-1 Complete Element Cross-Reference List by Tag Number

EBTS Tag Number	Element ID	Element Name
2.046	DOS	DATE OF ARREST - SUFFIX

## Appendix M: Transaction Message

Table M-1 Transaction Message

Code	Condition for Message	Description	Count	Insert #1	Insert #2	Insert #3
A0015	Unauthorized File Update	Requestor is not authorized to update the requested file.	0			

Code	Condition for Message	Description	Count	Insert #1	Insert #2	Insert #3
L0031	Invalid update of subject record	Cannot update subject record %1 because of its AUD value.	1	UCN		

Code	Condition for Message	Description	Count	Insert #1	Insert #2	Insert #3
M0033	RISC Notification from Rapid and Investigative Searches, as well as Biometric Decision	A %1 request submitted by %2 with TCN %3 resulted in a potential match to your agency's RISC record as referenced in this notification	3	TOT (of the submission)	CRI (CRI1 from submission)	TCN (from submission)

Code	Condition for Message	Description	Count	Insert #1	Insert #2	Insert #3
M0051	SMT Photo Missing Descriptors	SMT photo, biometric set identifier %1, was retained for UCN %2 but did not include the following required SMT descriptive EBTS fields and may not be returned for a Text Based SMT search: %3	3	BSI	UCN	Field Tag (List of field tag separated by commas)
M0052	ULF Add Error	Latent Print failed to deposit into the Unsolved Latent File. A search of the criminal master file (NDR1) is required prior to enrollment.	0			

## Appendix N: Descriptors and Field Edit Specifications for Type-14 Logical Records

### Type-14 Data Dictionary

#### PPC 14.015 Print Position Coordinates

This field is mandatory when 14.013 FGP is '19'.

This field contains repeating sets of offsets to the locations for each of the full finger views within an EJI, and/or segments within a finger view. This field shall consist of six (6) mandatory information items to describe the type of image and its location within an EJI. **This information will describe either the location of the entire joint image, one full finger view, or segment. Individual full finger or segment definitions may be repeated as repeating sets of information items:**

3. The first information item is the code for the full finger view, values 'FV1' to 'FV4'. ~~or the rolled finger tip, 'TIP'~~. Values 'FV1' to 'FV4' specify the perspective for each full finger view. For a fingertip, the first information item shall be 'TIP'. Full finger view will contain the code "NA" if only a proximal, distal or medial segment is available.
4. The second information item is used to identify the location of a segment within a full finger view. It will contain the code value 'NA' if the image portion refers to either a full finger view, tip, or to the entire joint image locations. Otherwise, it shall contain 'PRX', 'DST', or 'MED' for a proximal, distal, or medial segment, respectively.
5. The third information item contains the left horizontal offset in pixels to the left edge of the bounding box relative to the origin position of the upper left corner of the image.
6. The fourth information item contains the right horizontal offset in pixels to the right edge of the bounding box relative to the origin position of the upper left corner of the image.
7. The fifth information item contains the top vertical offset (pixel counts down) to the top of the bounding box.
8. The sixth information item contains the bottom vertical offset in pixels from the upper left corner of the image down to the bottom of the bounding box.

The maximum occurrences of this field is 12. For EJI images, all finger segment (i.e., distal, medial, proximal) coordinates for all available finger views must be specified within the Type-14 record. Using this provided information, the finger views will be calculated at enrollment time as the rectangles encapsulating all segments from a particular finger view. This obviates the need for the contributor to explicitly specify the finger view coordinates. Please note that an EJI image from a thumb only has two segments - distal and proximal.

**SECTION 7 – FUNCTIONAL CHANGES FOR 10.0.1**

Section 7 contains information concerning the modifications constituting EBTS 10.0.1. The following table is an overview of the modifications for this TOU version.

<b>Section</b>	<b>Change</b>
<b>3.1.1.6 EMUF</b>	Updated second paragraph
<b>3.1.1.9 FIDR</b>	Updated first paragraph
<b>3.1.3.1 RPIS</b>	Updated second paragraph
<b>3.3.1.1 IRQ</b>	Updated first paragraph Added paragraph after the first paragraph
<b>3.3.1.3 IRR</b>	Updated first paragraph
<b>3.3.1.4 ISR</b>	Updated first paragraph
<b>3.4.4.2 TXTSRCH</b>	Updated first paragraph Added second and third paragraphs, describing TOT use
<b>3.4.4.4 SRB</b>	Replace second paragraph
<b>3.5.1 SPN</b>	Updated first paragraph
<b>3.5.6 ULM</b>	Updated second paragraph
<b>3.6.5 BDEL</b>	Updated third paragraph
<b>3.6.14 FISR</b>	Updated first paragraph
<b>3.6.15 SPMNT</b>	Updated second paragraph
<b>Appendix B</b>	Added 1.011 NSR
<b>Appendix C</b>	Relabeled column headings and table name, also reversed columns for Table 11 BID Values Table Updated 2.014 FBI Data Dictionary definition Updated 2.037 RFP Data Dictionary definition Updated 2.054 SSD Data Dictionary definition Updated 2.079 NCR Data Dictionary definition Updated 2.084 AMP Data Dictionary code table Updated 2.2010 NIR Data Dictionary definition Updated 2.2032C TOT of Dissemination for Max Length 2.2058 SMD spelling correction in SMI Values Table Updated 2.2069B RBT for Min Occurrences Updated 2.2069C RBEI for Min Occurrences
<b>Appendix D</b>	Updated 2.017 MNU for FDSP Updated 2.084 AMP for AMN, CAR, CNA, CPDR, CPNU, DEK, DEU, DOCE, EMUF, FANC, FAUF, FDSP, FIDR, FNDR, FVR, MAP, MPR, NFUE, NFUF, NNDR, and RPIS Added 2.098 NDR to FIDR

SECTION 7 – EBTS FUNCTIONAL CHANGES

Section	Change
<b>Appendix E</b>	Updated 2.014 FBI for IRR Updated 2.018 NAM for EQHR and EQRR Updated 2.021 CTZ for EQHR Updated 2.037 RFP from UULD Updated 2.073 CRI for EHRR, EQER, EQHR, EQRR and ERRR Updated 2.075 ERS for RBN Updated 2.084 AMP for SRT Updated 2.084 AMP for TPIS and TPRS Updated 2.098 NDR for ISR Updated 2.2033 CNL for SRB Updated 2.026 SMT for TXTSRCH Updated 2.2058 SMD for TXTSRCH Updated 2.2059 TCL for TXTSRCH
<b>Appendix F</b>	Updated section 4.10.4 Requirement
<b>Appendix I</b>	Removed 2.006 ATN from XACT and XACTR Updated 2.014 FBI for PDR Removed 2.055 SLE from SRNR Added 2.073 CRI, 2.2100 SED, 2.2101 SST, 2.2102 RSC, 2.2103 STT, and 2.2104 SRA to SRNR Added 2.073 CRI and 2.075 ERS to SRNRR Updated 2.084 AMP for FIS Updated 2.2035 EVI for DSPR
<b>Appendix J</b>	Updated table heading for Table 45 Updated Table 46 Update table heading for Table 47
<b>Appendix K</b>	Added sentence to end of section
<b>Appendix L</b>	Updated FIS for T17 Updated FIDR for T4 and T14 Updated IRR for T9 and T14 Updated IRQ Response TOTs
<b>Appendix M</b>	Updated messages in Table M-1 based on Operational needs Added Error Class Key to Table M-1
<b>Appendix O</b>	Corrected appendix introduction

### 3.1.1.6 Electronic In/Manual Out User Fee (EMUF)

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When the FBI/CJIS successfully completes processing, it will send an SRE message in response, and print an Identity History Summary and mail it to the requestor. ~~When the FBI/CJIS completes processing, it will print a non-identification, positive identification, or Reject response report and mail it to the requestor.~~ See the Identifying Previous Transactions section for a discussion of the use of Transaction Control Number (1.009 TCN) and Transaction Control Reference (1.010 TCR) in no-charge resubmission of user-fee submissions that the FBI/CJIS has rejected. Such resubmissions are allowed only when the fingerprint image quality of the original submission was unacceptable.

### 3.1.1.9 Foreign Information Direct Route (FIDR)

This transaction consists of a fingerprint submission from a federal or international agency that will be directly routed to an FBI/CJIS internal log application for special processing. The submission shall contain ten rolled **or flat** and four plain impressions, or three identification flat impressions, along with biographic descriptor data. If the FIDR is successfully processed, a new identity will be created in the Foreign Subjects of Interest (FSI) repository.

### 3.1.3.1 Rapid Fingerprint Identification Search Submission (RPIS)

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When the Name of Designated Repository (2.098 NDR) field contains values of 6 (all of RISC), 11 (Wants and Warrants), 12 (Sexual ~~Offense-Offender~~ Registry), 13 (Known or Suspected Terrorists) or 15 (Persons of Special Interest), the submission **must contain at least two finger images, either two to ten rolled impressions or a set of one to four identification flat impressions, along with optional biographic data.**

### 3.3.1.1 Biometric Image/Feature Retrieval Request (IRQ)

This transaction enables users to retrieve images from the FBI/CJIS databases so a comparison can be made by the requester at user facilities. The requester identifies the subjects whose biometric images are being requested. The requester may also include additional parameters to specify particular modalities or image types of the subjects. Up to 1,000 subject records may be requested per transaction. Specific fingerprint, supplemental fingerprints, palm print images or the complete set may be requested. **Other images, such as facial and SMT photos which are associated with the records, may also be requested.** The transaction will be processed, and requested images on file at the FBI/CJIS will be transmitted in the response. Each subject record identifier number in the request and each set of biometrics being returned for the subject will be addressed in a separate Image Request Response (IRR).

**Alternately, this transaction may be used to request images from external repositories. The Name of Designated Repository (2.098 NDR) field is added to IRQ where only a single external system value is valid. The Biometric Image Description (2.2028 BID) field information item UCN (2.2028A) has been changed to Subject Identifier (SI) in order to support external system identifiers.**

### 3.3.1.3 Image Request Response (IRR)

This transaction is returned by the FBI/CJIS to provide requested images on file at the FBI/CJIS, **or the specified external system**, to the requester. Each image set identified in the IRQ request will cause a separate IRR response. The response will include **either** the subject record identifier number (2.014 FBI) **or the External Subject Identifier (2.2037 ESI)** and the requested image set in the format in which they were enrolled.

### 3.3.1.4 Image Summary Response (ISR)

This transaction is returned by the FBI/CJIS to summarize the results of the IRQ request processing. This transaction contains the listing of each subject identifier number whose imagery was successfully returned in **either** the FBI Number/UCN (2.014 FBI) field **or the External Subject Identifier (2.2037 ESI) field**. The length of this list corresponds with the number of IRRs returned in response to a given IRQ. For each subject record identifier for which images were not returned due to invalid **subject record identifier number FBI Number/UCN** or image not on file, the subject identifier and the appropriate error message are returned in the Status/Error Message (2.060 MSG) field.

### 3.4.4.2 Text-Based Photo/SMT Search Request (TXTSRCH)

This transaction will allow the user to specify demographic data along with Scar, Mark, and Tattoo (SMT) descriptive data to be used in a search for investigative leads and return facial or SMT photos, based on the Image Type (2.062 IMT) **and descriptive parameters** specified in the request. The TXTSRCH transaction is typically used to generate photo lineups of criminal subjects that have physical characteristics (i.e., skin tone, hair color, eye color, sex, SMT specific characteristics, etc.) similar to a criminal suspect. ~~If Name of Designated Repository (2.098 NDR) is omitted, then criminal is the default.~~ To search for facial images, the IMT (2.062) field must be set to '9' and the sought for image should be described using one or more of the biographic descriptive fields. Each descriptor will be added to the required match parameters, therefore adding multiple descriptors may return few or no candidates.

~~In order to search for an SMT image, the IMT (2.062) field must be set to '10' and the SMT should be described using the 2.026 SMT, 2.2058 SMD, 2.2059 TCL and 2.2055 SMS fields as applicable. Up to three possible SMT locations may be specified for the search. Occurrences of SMD and TCL correspond to one another (i.e., the first occurrence of TCL describes the colors of the first occurrence of SMD.) All specified values of SMD and TCL will be applied to each of the SMT locations.~~

~~If the Number of Candidates Returned (2.079 NCR) field is omitted, then the default maximum number of candidates returned will be 99. If the Number of Images Requested (2.2010 NIR) is omitted, then the default number of images returned will be 20. The returned Candidate Investigative List (2.2033 CNL) will contain an unranked list of possible candidates.~~

Up to 99 candidates may be requested by including the Number of Candidates Returned (2.079 NCR) field in the search request. If NCR is not included in the request, 20 candidates will be returned. If NIR is not specified in the search request, one image per candidate will be returned, up to a maximum of 50. The returned Candidate Investigative List (2.2033 CNL) will contain an unranked list of possible candidates.

#### 3.4.4.4 Search Results Biometric (SRB)

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~~If NCR was omitted in the search, the default behavior is to return up to 20 ranked or unranked candidates, depending on the search type. The number of candidates returned may be less than the specified NCR as a result of thresholds determined by trade study tests and the algorithm used to determine potential matches. Additional biometric images on file for each candidate may be retrieved through separate Subject Photo Requests (CPRs) or Biometric Image/Feature Retrieval Requests (IRQs).~~

If NCR was omitted in the search, the default behavior is to return up to 20 ranked (FRS) or unranked (TXTSRCH) candidates, depending on the search type. Up to 99 candidates may be requested by including the Number of Candidates Returned (2.079 NCR) field in the search request, but the number of candidates returned may be less than the specified NCR as a result of thresholds determined by trade study tests and the algorithm used to determine potential matches. A maximum of 50 images may be requested, however, the number returned will not exceed the number of candidates returned. Additional biometric images on file for each candidate may be retrieved through separate Biometric Image/Feature Retrieval Requests (IRQs).

#### 3.5.1 Special Population Cognizant Notification (SPN)

A Special Population Cognizant Notification (SPN) notifies the owner of an Special Population Cognizant (SPC) File identity that a biometric image from the identity has been potentially or positively matched with a biometric image from an identification or investigative search transaction. ATN, SCNA, and CRI are associated with the SPC record, while the biographic information fields (FBI, NAM, AKA, POB, CTZ, DOB, SEX, RAC, SMT, HGT, WGT, EYE, HAI, DPR, MSG, IMT, FGP, BSI, PPD, BIA, and POS) are associated with the search transaction identity that hit against the SPC record. **The FBI Number/UCN (2.014 FBI) field may contain “BDEC” when the SPN is generated from an investigative search result.** Only the imagery from the incoming identification or investigative transaction that is a potential match will be returned in the SPN. The SPC identity imagery will not be returned.

#### 3.5.6 Unsolved Latent Match (ULM)

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The Biometric Image Available (2.2031 BIA) field is included to reflect the available biometric image types available for the enrolled identity that matched the latent. Depending on availability, the existing Subject Control Number (2.086 SCNA) field is populated with the legacy SCNA or with the FBI Number/UCN (~~2.014 FBI~~) value for the ULF latent that matched. **The FBI Number/UCN (2.014 FBI) field may contain “BDEC” when the ULM is generated from an investigative search result.**

### 3.6.5 Biometric Delete Request (BDEL)

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The BDEL can also be used to remove biometric images from a special identity by including the ~~Name of Designated Repository (2.098 NDR)~~, FBI Number/UCN (2.014 FBI) and Biometric Set Identifier (2.2029 BSI) values.

### 3.6.14 Biometric Image Submission Response (FISR)

The Biometric Image Submission Response (FISR) will provide details on each biometric type enrolled by a FIS. The Biometric Image Enrollment (2.2061 BIE) field will provide the Biometric Set Identifier (2.2061A BSI) and Image Type (2.2061B IMT) of each biometric set or photo that was enrolled. Where photos are enrolled, the Subject Pose (2.2061C POS) is populated for facial photos, and the Scars, Marks, and Tattoos (2.2061D SMT) ~~field information item~~ is populated for SMT photos. The Fingerprint Images Updated (2.072 FIU) field indicates which fingers (if any) were replaced in the composite fingerprint set for the contributor-provided FBI Number/UCN (2.014 FBI). If fingerprints accompanying the FIS do not match the provided FBI Number/UCN (2.014 FBI), an error response (ERRA) will be returned to the user. ~~The Controlling Agency Identifier (2.073 CRI) is an optional field in a FIS transaction. If a CRI is not included in the FIS, the Originating Agency Identifier (ORI) will be inserted into the CRI field of the FISR.~~

### 3.6.15 Special Repository Maintenance Request (SPMNT)

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Biometric images may be removed from an SPC or FSI identity with a BDEL request containing the ~~Name of Designated Repository (2.098 NDR)~~, FBI Number/UCN (2.014 FBI) and Biometric Set Identifier (2.2029 BSI) values. Biometric images may be added to an existing SPC or FSI identity with a FIS request containing the ~~Name of Designated Repository (2.098 NDR) and~~ FBI Number/UCN (2.014 FBI). Reference the BDEL and FIS descriptions for further details on the use of those TOTs.

## Appendix B: Descriptors and Field Edit Specifications for Type-1 Logical Records

### **NSR 1.011 Native Scanning Resolution**

~~This mandatory field shall specify the nominal scanning resolution of the AFIS or other image capture device supported by the originator of the transmission. This field permits the recipient of this transaction to send response data at a transmitting resolution tailored to the NSR (if it is able to do so) or to the minimum scanning resolution. This field shall contain five bytes specifying the native scanning resolution in pixels per millimeter. The resolution shall be expressed as two numeric characters followed by a decimal point and two more numeric characters (e.g., 20.00). This field is needed because the interchange of fingerprint information between systems of the same manufacturer may, in some instances, be more efficiently done at a transmitting resolution equal to the native scanning resolution of the system rather than at the minimum scanning resolution specified in this standard. This field currently applies only to Type-4 and Type-7~~

record. For those logical files that contain their own scanning resolution, this field shall be set to '00.00'. A single transaction can only contain multiple Type-4 and/or Type-7 records if all images have the same resolution.

## Appendix C: Descriptors and Field Edit Specifications for Type-2 Logical Records

### Type-2 Data Dictionary

Table 11 BID Submitted Values and Results Table

BID Field Values Submitted	Biometric Images Returned
IMT	Representative set for image type specified
IMT, BSI	Specific image set indicated by specified in the BSI of that image type specified
IMT, FNR	The friction ridge position image of the representative set for the image type specified
BSI, FNR	The finger position image of the specific image set indicated by specified in the BSI
IMT, BSI, FNR	The finger position image of the specific image set specified in the BSI of that image type specified

### FBI 2.014 FBI Number/UCN

This field is used to uniquely specify Identities contained in the NGI database, and shall be no more than nine alphanumeric characters. This Universal Control Number (UCN) is used to identify records in the criminal, civil, ULF and other repositories. The UCN number returned in a response is dependent upon the search results. The Legacy Subject Control Number (SCNA) used for ULF records may be provided in this field where designated in the message definition. The UCN field may also contain "BDEC", when it is on an investigative search result.

### RFP 2.037 Reason Fingerprinted

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Agencies may choose to use standard terms in this field related to the purpose of the fingerprint submission instead of the specific statutory authority. The standard reasons are:

- Firearms
- Volunteer
- Criminal Justice Employment
- Child Care/School Employee
- Other Employment and Licensing

### SSD 2.054 Custody or Supervisory Status Start Date

This field contains the start date for the subject's custody or supervisory status. The date shall appear as specified in Section 1.1 of this appendix. This date field shall contain the local date for the region submitting the request. The SSD may not be less than DOA. The SSD shall not exceed the current date. ~~If custody data is submitted, all custody fields (SSD, OCA, and SLE) must be entered.~~

**NCR 2.079 Number of Candidates Returned**

This optional field contains the number of candidates the submitter desires to receive in response to a biometric Investigative Search request per ranked candidate list, with a maximum of 99. If multiple candidate lists are to be returned in a search request, the NCR value applies to each. ~~If NCR is omitted in a biometric investigative search request, it defaults to the max value of NIR.~~ If the NIR in the request is greater than NCR in the request, CJIS will set NIR to the NCR value. This field is also found in the responses to a biometric Investigative Search where it reflects the actual total number of candidates returned in the CNL field for the entire concatenated list. For EQRR, this field identifies the number of Identity History Summary reports that are ~~be~~ returned in response to an EQHR.

**AMP 2.084 Amputated or Bandaged**

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Table 9 AMP Codes Table

Finger Position	FGP
Right thumb	01
Right index	02
Right middle	03
Right ring	04
Right little	05
Left thumb	06
Left index	07
Left middle	08
Left ring	09
Left little	10
Plain right thumb	11
Plain left thumb	12
Plain right four fingers	13
Plain left four fingers	14
Plain left and right thumbs	15

Note: When codes 13 – 15 are included, the entire block is referenced.

Descriptor	AMPCD
Amputation	XX
Unable to print (e.g., bandaged)	UP

**NIR 2.2010 Number of Images Requested**

This optional field contains the number of maximum candidate images the submitter desires to receive in response to a biometric Investigative Search request for a given candidate list. If multiple candidate lists are to be returned the NIR value applies to each. ~~If NIR is omitted in a biometric investigative search request, it defaults to 20.~~ This field is also found in the responses to a biometric Investigative search where it reflects the actual number of candidates with image returned in the CNL field for the entire concatenated list.

## SMD 2.2058 SMT Descriptors

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Table 36 SMI Values Table

Value	Description
SCAR	indicate healed scar tissue that was the result an of accident or medical procedure
PIERCING	a deliberately made hole through body tissue, usually to wear body ornamentation
MARK	used for the pattern resulting from needle or track marks
TATTOO	for deliberately applied or drawn images (common tattoo) or indelible image resulting from the pricking of the skin with a coloring matter
CHEMICAL	the image was created by the use of chemicals to burn the image into the skin
BRANDED	the image was burned into the skin using a branding iron or other form of heat
CUT	the image was caused by incision of the skin*

\*The value for this information item is selected from the “Image sub-code” column of ANSI/NIST-ITL 1-2011 Table 58.

Table C-1 Field Edit Specifications for Type-2 Elements

Field Number	Identifier	Field Number	Character	Field Size (not including Character Separators)		Occurrences	
				Min	Max	Min	Max
				2.2032	ATR	AUDIT TRAIL RECORD	SET
A	ORI	ORIGINATING AGENCY IDENTIFIER	AN	9	9	1	1
B	DAT	DATE OF DISSEMINATION	N	8	8	1	1
C	TOT	TOT OF DISSEMINATION	A	3	516	1	1
D	BSI	BIOMETRIC SET IDENTIFIER DISSEMINATED	N	4	24	0	1
E	IMT	IMAGE TYPE DISSEMINATED	N	1	2	0	1
F	FNR	FRICTION RIDGE POSITION REQUESTED	N	2	2	0	1
G	PPD	PRINT POSITION DESCRIPTION	AN	5	5	0	1
H	POS	SUBJECT POSE	A	1	1	0	1
I	SMT	NCIC SMT CODE	A	3	10	0	1

Field Number	Identifier	Field Number	Character	Field Size (not including Character Separators)		Occurrences	
				Min	Max	Min	Max
				2.2069	RBTE	Rap Back Triggering Event Details	SET
A	DORBE	Date of Rap Back Event	N	8	8	1	1
B	RBT	Rap Back Trigger	N	1	2	40	1
C	RBEI	Rap Back Event Information	ANS	1	300	40	1

## Appendix D: Summary of Logical Record Layouts for Type-2 Identification and Verification

**Table D-1 Summary of Field Lists for Identification and Verification**

Tag Element	FDSP
2.017 MNU	0..4 0..4

Tag Element	AMN	CAR	CNA	CPDR
2.084 AMP	0..4 <sup>7</sup> 0..13 <sup>7</sup>			

Tag Element	CPNU	DEK	DEU	DOCE
2.084 AMP	0..4 <sup>7</sup> 0..13 <sup>7</sup>			

Tag Element	EMUF	FANC	FAUF
2.084 AMP	0..4 <sup>7</sup> 0..13 <sup>7</sup>	0..4 <sup>7</sup> 0..13 <sup>7</sup>	0..4 <sup>7</sup> 0..13 <sup>7</sup>

Tag Element	FDSP	FIDR	FNDR	FVR
2.084 AMP	0..4 <sup>7</sup> 0..13 <sup>7</sup>			

Tag Element	MAP	MPR
2.084 AMP	0..4 <sup>7</sup> 0..13 <sup>7</sup>	0..4 <sup>7</sup> 0..13 <sup>7</sup>

Tag Element	NFUE	NFUF	NNDR	RPIS
2.084 AMP	0..4 <sup>7</sup> 0..13 <sup>7</sup>			

Tag Element	FIDR
2.098 NDR	0..10

## Appendix E: Summary of Logical Record Layouts for Type-2 Investigation, Information, and Notification Transactions

**Table E-1 Summary of Field Lists for Investigation, Information, and Notification Transactions**

Tag Element	IRR
2.014 FBI/ <del>UCN</del>	4 0..1

Tag Element	EQHR	EQRR
2.018 NAM	0..4 1	0..4 1

Tag Element	EQHR
2.021 CTZ	0..4 0..10

Tag Element	UULD
2.037 RFP	4

Tag Element	EHRR	EQER	EQHR
2.073 CRI	0..4 1	0..4 1	0..4 1

Tag Element	EQRR
2.073 CRI	<del>0..1</del> 1

Tag Element	ERRR
2.073 CRI	<del>0..1</del> 1

Tag Element	RBN
2.075 ERS	4 0..1

Tag Element	SRT
2.084 AMP	<del>0..1</del> 0..13

Tag Element	TPIS	TPRS
2.084 AMP	<del>0..10</del> 0..13	<del>0..10</del> 0..13

Tag Element	ISR
2.098 NDR	<del>0..1000</del> 0..1

Tag Element	SRB
2.2033 CNL	0..99 <sup>1</sup>

Tag Element	TXTSRCH
2.026 SMT	<del>0..10</del> 0..3

Tag Element	TXTSRCH
2.2058 SMD	<del>0..1</del> 0..9

Tag Element	TXTSRCH
2.2059 TCL	<del>0..1</del> 0..9

## Appendix F: FBI/CJIS Image Quality Specifications

### 4.10.4 Step Tablet

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#### *Requirement*

When printing fingerprints in tenprint card format, the printing process shall have the capability to print a step tablet, consisting of two adjacent horizontal bands, each band having 16 gray-levels. ~~The top~~ **One** band should progressively darken from left to right and the ~~bottom~~ **other** band should progressively darken from right to left. The 16 digital input gray-levels corresponding to one band shall be identically the same as for the other band, and both bands shall substantially cover the total gray-level range. This step tablet shall be positioned at the top edge within the left thumb plain impression printblock and shall have a total width between 0.5 inches and 0.8 inches and a total height between 0.0625 inches and 0.125 inches.

## Appendix I: Summary of Logical Record Layouts for Type-2 Data Management Transactions

**Table I-1 Summary of Field Lists for Data Management Transactions**

Tag Element	XACT	XACTR
2.006 ATN	4	4

Tag Element	PDR
2.014 FBI/ <del>UCN</del>	5 1..5

Tag Element	SRNR
2.055 SLE	0..4

Tag Element	SRNR
2.073 CRI	1..3
2.2100 SED	1
2.2101 SST	1..8
2.2102 RSC	0..1
2.2103 STT	0..1
2.2104 SRA	1

Tag Element	SRNRR
2.073 CRI	1..3
2.075 ERS	1

Tag Element	FIS
2.084 AMP	0..4 0..13

Tag Element	DSPR
2.2035 EVI	4 0..1

## Appendix J: Descriptors and Field Edit Specifications for Type-9 Logical Records

### Type-9 Data Dictionary

**Table 45 FCP Values MET Values Table**

Description	Code
<b>First (leftmost) character (classification):</b>	
Automatic pattern classification without manual intervention	C
Manually initiated or verified pattern classification	N
<b>Second (middle) character (minutiae generation):</b>	
Minutiae automatically generated, no manual editing or verification	A
Minutiae automatically generated, examiner verified or edited	E
Minutiae manually generated by examiner	M
<b>Third (rightmost) character (ridge count):</b>	
Automatic, synthesized ridge count without manual verification	S
Automatic, actual ridge count without manual verification	T
Automatic ridge count any method, examiner edited or verified	V

**FGN 9.014 Finger Number**

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Allowable codes ~~are taken from the ANSI/NIST IFL standards, and~~ are as follows:

**Table 46 Finger Number Table**

Finger Position	Code
Unknown finger	00
Right thumb	01
Right index	02
Right middle	03
Right ring	04
Right little	05
Left thumb	06
Left index	07
Left middle	08
Left ring	09
Left little	10

**MAT 9.023 Minutiae and Ridge Count Data**

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**Table 47 ~~MATMNT~~ Values Table**

Description	Type
Ridge ending	A
Ridge bifurcation	B
Ridge ending or bifurcation, no distinction provided	C
Type other than ending or bifurcation	D

**Appendix K: Descriptors and Field Edit Specifications for Type-10 Logical Records**

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In addition to these required fields, users are strongly encouraged to populate the additional SMT descriptors SMT Size (10.042 SMS) and Tattoo Colors (10.043 COL) as applicable, to facilitate subsequent searches of their enrolled SMT images.

**Appendix L: Summary Tables****Table L-2 Record Set Requirements Summary by Type of Transaction**

Transaction	Enrollment TOT	T17
BIOMETRIC IMAGE SUBMISSION	FIS	0-2

Transaction	Enrollment TOT	T4	T9	T14
FOREIGN INFORMATION DIRECT ROUTE	FIDR	<del>0-10</del> 0-14	0	<del>0-42</del> 0-46

**Table L-3 Record Set Requirements Summary by Type of Response**

Transaction	Enrollment TOT	T4	T9	T14
IMAGE REQUEST RESPONSE	IRR	0-14	<del>0-34</del> 0-52	<del>0-34</del> 0-20

**Table L-4 Transaction/Response/Error TOT Correspondence**

Transaction	TOT	Response TOT	Error TOTs
BIOMETRIC IMAGE/FEATURE RETRIEVAL REQUEST	IRQ	IRR, <b>ISR</b>	ERRI

**Appendix M: Transaction Message****Table M-1 Transaction Message**

Code	Condition for Message	Description	Count	Insert #1	Insert #2	Insert #3
A0001	Unauthorized ULF delete	Requested deletion from ULF not authorized.	0			
A0004	Unauthorized EBTS Transaction	Requestor is not authorized for transaction type %1.	1	TOT of incoming message		
<del>A0008</del>	<del>Unauthorized ULF Add Confirm</del>	<del>Requested ULF Add Confirm request not authorized.</del>	<del>0</del>			
A0009	Latent Search Queue Request Reject	This Latent Search Queue modification request is invalid.	0			
A0016	Unauthorized Repository Access	Requestor search of repository %1 not authorized	1	NDR(s) (each applicable NDR value is listed separated by commas)		
A0017	Unauthorized Dissemination Information Access	Requestor does not own the imagery in the audit trail dissemination information request	0			
A0018	Unauthorized Biometric Delete	Requested deletion of UCN %1 BSI %2 is not authorized for requestor	2	UCN	BSI	
A0019	Rap Back Subscription Does Not Exist	An active Rap Back subscription does not exist for the UCN %1 and subscription %2	2	UCN	RBSI	

SECTION 7 – EBTS FUNCTIONAL CHANGES

Code	Condition for Message	Description	Count	Insert #1	Insert #2	Insert #3
A0020	The Maximum Rap Back Subscription List Size was Exceeded.	The Maximum Rap Back Subscription List Size was Exceeded. Either further filter the subscriptions returned and resubmit, or contact CJIS customer service.	0			
A0021	External Link Anomaly	The External Subject Identifier %1 has no association with the UCN %2.	2	ESI	UCN	
A0022	External Link Anomaly	The External Subject Identifier %1 is already associated with another UCN %2.	2	ESI	UCN	
A0023	UCN Does Not Exist	The UCN %1 does not exist in NGI repositories.	1	UCN		
A0024	External Link Anomaly	The External Subject Identifier %1 does not exist in NGI repositories.	1	ESI		
A0025	UCN does not Exist in FSI Repository	The %1 does not exist in the NGI RISC FSI repository.	1	UCN		
A0026	UCN has Multiple Events in FSI Repository	The %1 UCN has multiple events, the EVI must be specified.	1	UCN		
A0027	Unauthorized Biometric Delete by Event	Requested deletion of UCN %1 EVI %2 is not authorized for requestor	2	UCN	EVI	
A0028	External Link Already Exists	The External Subject identifier %1 is already associated with UCN %2	2	ESI	UCN	
B0001	Unable to Generate Template	A template could not be created for the submitted image	0			

SECTION 7 – EBTS FUNCTIONAL CHANGES

Code	Condition for Message	Description	Count	Insert #1	Insert #2	Insert #3
B0002	Corrupt Image	The submitted image is corrupted	0			
E0001	Required element missing	Mandatory element %1 was not supplied in message.	1	Element Name		
E0002	Element failed validation	Element %1, with value of [%2] contains invalid data.	2	Element Name	Element Value	
E0003	Element failed validation	Element %1, with value of [%2] contains invalid data. The data may not comply with the acceptable range of values.	2	Element Name	Element Value	
E0004	EBTS record parse error	EBTS logical record type %1 containing IDC of [%2] in message does not comply with message Contents or Length field values or the record is not parse able	2	Logical Record Type	IDC value or the value -1 if the named logical record is missing or is a Type-1 record.	
E0005	EBTS field parse error	EBTS field %1 could not be parsed. Check use of separator characters and presence of all required subfields.	1	Field Tag Element Name		
E0006	Field relationship error	The value of element %1 is inconsistent with the value of element %2.	2	Element Name	Element Name	
E0012	Message Length Inconsistent	The length of the CJIS WAN message is inconsistent with the sum of the lengths of the logical records contained within it.	0			
E0014	Invalid EVI for Delete Operation	Deletion request with invalid EVI %1	1	EVI		

SECTION 7 – EBTS FUNCTIONAL CHANGES

Code	Condition for Message	Description	Count	Insert #1	Insert #2	Insert #3
H0001	Required header element missing	Mandatory element %1 was not supplied in message header.	1	Element Name		
H0002	Header element failed validation	Header element %1, with value of [%2], contains invalid data.	2	Element Name	Element Value	
H0003	Header element failed validation (range)	Header element %1, with value of [%2], contains invalid data. The data may not comply with the acceptable range of values.	2	Element Name	Element Value	
L0001	SLC Repositories SPC Repository Full	SPC repository %1 is at max allowed records; to add new subject, delete existing subject.	1	NDR		
L0002	Subject does not exist in the Criminal or Civil File Repository	Subject with identifier %1 does not exist in repository.	1	UCN		
L0003	SPC Repository does not exist	Cannot perform requested action. SPC repository %1 does not exist. Inform Segment Administrator of possible SPC File Synchronization error.	1	NDR		
L0004	File image not available	The images for subject identifier %1 are not available from repository %2.	2	UCN	NDR	
L0005	High Penetration Search Rejected	Latent search penetration estimate of %1 percent exceeds the allowable limit of %2 percent.	2	Request Percent	Authorization Cap	
L0006	Invalid image type	The supplied image(s) could not be used for characterization of subject.	0			
L0007	Features not usable	The supplied features could not be used for requested search.	0			

SECTION 7 – EBTS FUNCTIONAL CHANGES

Code	Condition for Message	Description	Count	Insert #1	Insert #2	Insert #3
*L0008	Characteristics quality low	The quality of the characteristics is too low to be used.	0			
L0009	Image decompression error	Error occurred during decompression of the fingerprint images.	0			
L0010	Cannot search an empty SPC repository	A search request was made against SPC repository number %1 which currently contains no subjects. To differentiate from a search with no results, this error is being returned.	1	NDR		
L0011	Subject already exists, duplicates not allowed in Criminal or Civil Files	A request was made to add subject identifier %1 to Criminal or Civil File in which the subject already exists.	1	UCN		
L0012	ULF Delete Error	An error was encountered in processing the requested deletion from the Unsolved Latent File.	0			
L0014	ULF Delete Subject Missing	Cannot perform the ULF delete request for %1 because the subject is not present in the ULF	1	SCNA or UCN		
L0015	Attempt to Remove Last Arrest, Court, or Custody Component	An attempt has been made to remove the last %1 from subject record %2.	2	Element Name	UCN	
L0016	Latent Search Penetration Estimate	NOTICE ONLY, NOT AN ERROR – Latent search penetration estimate is %1. Your limit is currently %2.	2	Request Percentage	Authorization Cap	
L0017	Attempt to modify SCHF with improper TYS	Attempt to change the Criminal History File with an improper TYS of %1.	4	TYS		

SECTION 7 – EBTS FUNCTIONAL CHANGES

Code	Condition for Message	Description	Count	Insert #1	Insert #2	Insert #3
L0018	Latent search queue full	The requested search exceeds the allocation for your organization or state.	0			
L0019	Subject already exists, duplicate identifiers not allowed in SPC file	A request was made to add subject identifier %1 to SPC repository %2 in which the subject already exists. Subjects may NOT be duplicated within this repository.	2	UCN	NDR	
L0020	Subject does not exist in SPC file	A request was made to delete or update subject identifier %1 to SPC repository %2. The subject does not exist in this repository.	2	UCN or BSI	NDR	
L0023	SID required	NFF participants must provide a SID on a criminal retain tenprint submission.	0			
L0024	SID already exists for NFF submission	The SID provided in the criminal tenprint submission, %1, is already associated with the subject with FBI number %2 and could not be established for a new NFF subject.	2	SID	UCN	
L0025	SID already exists	The SID provided in the criminal ten- print submission, %1, is already associated with the subject with FBI number %2 and could not be established for a new subject.	2	SID	UCN	

SECTION 7 – EBTS FUNCTIONAL CHANGES

Code	Condition for Message	Description	Count	Insert #1	Insert #2	Insert #3
L0028	Exceeded ICO maximum length	Cannot add data because the maximum length of ICO field would be exceeded. There are only %1 characters remaining in the ICO field.	1	Number of unused bytes remaining in ICO field (ASCII representation)		
L0029	Invalid update of subject with AUD C	Cannot update subject record %1 because it contains an AUD = C	1	UCN		
L0033	Element Entry Limit Exceeded	The requested update of this record would cause the maximum number of entries of the %1 field to be exceeded.	1	Field Name		
L0034	Existing identification comments	Cannot overwrite existing ICO	0			
L0035	DOD prior to DOA	Date of arrest in submission is later than the date of death in subject's record.	0			
L0036	Conversion anomaly	Cannot add a conversion cycle for an NFF participating state	0			
L0037	DOA not later than existing DOB	Date of arrest in submission is prior to existing date of birth in the subject's record.	0			
L0038	SID already exists from NFF state	Cannot establish new SID %1 for this subject because your state has already established SID %2 for this subject	2	SID from submission	Existing SID	
L0040	No Matching DOA	There is no matching DOA in the subject's record.	0			

SECTION 7 – EBTS FUNCTIONAL CHANGES

Code	Condition for Message	Description	Count	Insert #1	Insert #2	Insert #3
L0041	Cannot Update Due to Inactive Data	The subject cycle cannot be updated due to inactive record status.	0			
L0045	Data Already On File	Cannot update this cycle - data already exists in record.	0			
L0046	TPTP Notify Error	AFIS Search number %1 or candidate number %2 cannot be associated with previous search.	2	SCNA	UCN	
<del>L0047</del>	<del>ULF Add Confirm Error</del>	<del>Cannot perform the ULF add confirm request for %1 because the subject is not present in the ULF.</del>	<del>4</del>	<del>SCNA</del>		
L0052	Submitter is not Authorized to Update Record	Requestor is not authorized to perform the requested file maintenance action.	0			
L0057	Improper Finger Specified	Latent searches cannot process %1 possible finger positions for %2 supplied search fingers.	2	FGN_CNT	AFV_CNT	
L0058	UCN and NDR format incompatible	The designated repository (%1) does not correlate to the provided record format number (%2).	2	NDR	UCN	
L0059	Duplicate fingers	Ten finger information supplied for field %1 (%2) is incorrect.	2	Field Name	Field Value	
L0060	Death is already recorded for this subject.	An indication that this subject is deceased is currently present in this record.	0			
L0063	Existing Data Condition	Data cannot be added to this field, %1, because data is already present.	1	Field Name		
L0079	Invalid SID	The SID %1 failed III edit check.	1	SID Value		

SECTION 7 – EBTS FUNCTIONAL CHANGES

Code	Condition for Message	Description	Count	Insert #1	Insert #2	Insert #3
L0109	Poor Image Quality	The quality of the images is too poor to permit processing.	0			
L0110	MRD Merge Failure	Tenprint submission failed to merge with MRD data.	0			
L0111	Image Sequence Error	Submitted tenprint finger images are out of sequence.	0			
L0113	Non-serious charge	This submission references an arrest charge representing a non-criterion offense.	0			
L0114	TOT/Submission Data Error	The Type of Transaction is inconsistent with the Reason Fingerprinted.	0			
L0115	Other QC Error	A QC error has occurred.	0			
*L0116	Fingerprint Pattern Quality Error	Fingerprint pattern(s) not discernible	0			
*L0117	Fingerprint Pattern Area Error	Insufficient pattern area(s) recorded for identification purposes	0			
*L0118	ITN Image Quality/Sequence Error	Erroneous or incomplete fingerprint(s) on images: fingers or hands out of sequence, printed twice, missing, and no reason given	0			
L0119	Charge listed needs literal translation	The charge listed in the submission requires that a literal translation be provided	0			

SECTION 7 – EBTS FUNCTIONAL CHANGES

Code	Condition for Message	Description	Count	Insert #1	Insert #2	Insert #3
L0121	Invalid update of subject with AUD M	Cannot update record %1 because this record is currently contained in the manual file. Record must be converted.	1	UCN		
L0122	No SPC Add	Unable to complete SPC Add for identifier %1 in repository %2 and <del>user</del> ORI %3.	3	UCN	NDR	ORI
L0123	No SPC Delete	Unable to complete SPC Delete for identifier %1 in repository %2 and <del>user</del> ORI %3.	3	UCN	NDR	ORI
L0124	Unacceptable Criteria	The submission does not meet latent acceptance criteria.	0			
L0125	Invalid ORI	This ORI, %1, is not present in the CCA file.	1	ORI value from Maintenance Request		
L0126	Invalid CRI	CRI %1 is not present in the CCA file.	1	CRI value from Maintenance Request		
L0128	Missing SRE	This file maintenance request must contain a value for SRE.	0			
L0130	File maintenance element error	This file maintenance request contains invalid data, %1, in the field %2.	2	Field value from Maintenance Request	Field Name	
L0131	Required element missing	Mandatory element %1 was omitted from message.	1	Element Name		

SECTION 7 – EBTS FUNCTIONAL CHANGES

Code	Condition for Message	Description	Count	Insert #1	Insert #2	Insert #3
L0132	<del>STOT/NDR Discrepancy</del>	<del>The STOT, %1, for this request is not consistent with placing the images in the %2 file.</del>	2	STOT value	Name of the target file (NDR)	
L0133	Fingerprint Image Submission Non-Ident	The subject of this Fingerprint Image Submission contains UCN %1, which is not contained in the FBI Subject Criminal History files.	1	UCN		
L0139	Extraneous Data	The file maintenance request contained data for %1 which is either not needed or not allowed in this context.	1	Field Name		
L0141	<del>STOT/RET Discrepancy</del>	<del>Retention code must equal Y for an STOT of CNA.</del>	0			
L0142	SLC Copy Failed	SLC Copy failed: %1 %2 %3.	0-3	Free Text	Free Text	Free Text
L0143	<del>AFIS Storage Full for SLC Repository</del>	<del>SLC repository %1 is at max allotted storage capacity within AFIS; to add new subject, delete existing subject or contact the ITN Segment Administrator to allot more storage capacity.</del>	4	NDR		
L0144	Field Relationship Error	The value of element %1 is inconsistent with the value of element %2.	2	Element Name	Element Name	
L0147	Contributor has remote capability	The contributing state has remote capability.	0			
L0148	Poor Latent Image Quality	The image quality is not adequate for conducting an AFIS search.	0			

SECTION 7 – EBTS FUNCTIONAL CHANGES

Code	Condition for Message	Description	Count	Insert #1	Insert #2	Insert #3
L0149	Bad Search Criteria	The descriptive search criteria is not adequate or is incomplete.	0			
L0150	Unassigned FBI Number	Subject %1 may be in the FBI manual files, but does not exist in the Subject Criminal History File.	1	UCN		
L0151	Photo Not Available	Photo Not Available	0			
L0152	Photo Action on Improper AUD Code	CJIS cannot retrieve or delete the cited photo because the associated record is purged, expunged, not automated, deceased, or deleted.	0			
L0153	Photo Action on AUD C Record	CJIS cannot retrieve or delete the cited photo with FBI %1 because it has been consolidated with FBI %2.	2	UCN	UCN	
<del>L0154</del>	<del>Improper Positions Specified</del>	<del>Multi-Latent investigative searches cannot process non-finger position codes.</del>	<del>0</del>			
<del>L0154</del>	<del>SID / Multiple FNUs</del>	<del>The SID in the maintenance request matches multiple FNUs in the SCH</del>	<del>0</del>			
L0155	The palm image orientation is bad	The palm image orientation is too poor to permit processing	0			
L0156	The supplemental image orientation is bad	The supplemental image orientation is too poor to permit processing	0			
L0157	Failure in segmenting image	Failure in segmenting image	0			

SECTION 7 – EBTS FUNCTIONAL CHANGES

Code	Condition for Message	Description	Count	Insert #1	Insert #2	Insert #3
L0158	Failure in validating secondary biometrics with fingerprints on file	Failure in validating secondary biometrics with fingerprints on file	0			
L0159	The palm print imagery is incomplete	The palmprint imagery is incomplete	0			
L0160	The supplemental imagery is incomplete	The supplemental imagery is incomplete	0			
L0161	Invalid UCN for Delete operation	Deletion Request with invalid UCN %1	1	UCN		
L0162	Secondary Biometric Delete Error	Unable to delete biometric of type %1, biometric set identifier %2 for identifier %3	1	IMT	BSI	UCN
L0163	Secondary Biometric Enrollment Error	Unable to enroll biometric of type %1 for identifier %2	2	IMT	UCN	
L0164	Enrollment Request without Fingerprints (no MOU)	Enrollment Request without Fingerprints (no MOU)	0			
L0165	Fingerprint and Secondary Biometric Enrollment Failed Validation	Unable to enroll Fingerprints, secondary biometric enrollment was not attempted	0			
L0166	Enrollment Failure due to 1-to-1 Fingerprint Verification	Enrollment failure, Fingerprints failed 1-to-1 verification with Fingerprints on file	0			
L0167	Biometric Not Available	The requested biometric is not available	0			

SECTION 7 – EBTS FUNCTIONAL CHANGES

Code	Condition for Message	Description	Count	Insert #1	Insert #2	Insert #3
L0167	Biometric Sample Failed Validation	The biometrics provided failed to validate against an existing Identity	0			
L0169	Biometric Not Available	The requested biometric for UCN %1 is not available	1	UCN		
L0170	Photo Image Delete Error	No Photo images were deleted, the DOA %1 has multiple events. Please contact CJIS customer service.	1	DOA		
M0001	Unsolved Record Status	Unsolved record removed from unsolved repository	0			
M0002	Unsolved Record Status	Unsolved record retained in unsolved repository	0			
M0003	Unsolved Record Status	Unsolved record retained, requestor not owner	0			
M0004	Unsolved Record Status	Unsolved record retained, probe is unsolved	0			
M0005	Unauthorized Repository Access	Requestor search of repository %1 not authorized	1	NDR(s) (each applicable NDR value is listed separated by commas)		
M0006	Mix of Known and Unsolved Records	Request contains mix of Known and Unsolved records for search, the Unsolved records in repository %1 were not searched	1	NDR		

SECTION 7 – EBTS FUNCTIONAL CHANGES

Code	Condition for Message	Description	Count	Insert #1	Insert #2	Insert #3
M0007	Mix of Known and Unsolved Records	Request contains mix of Known and Unsolved records for search, the Known records in repository %1 were not searched	1	NDR		
M0008	Caveat for Returning Matched Minutiae	This match was made using information beyond feature data	0			
M0009	Audit Trail Incomplete	Only latest 100 image disseminations are included, contact CJIS customer service for further audit information, or further limit the biometric audit trail request and resubmit.	0			
M0010	Additional Biometric Sets were deleted besides what is reported	The maximum number of deleted biometric sets for reporting has been exceeded, contact CJIS customer service for the remainder of the deleted records.	0			
M0011	Biometric Sample Quality Below Threshold	The %1 biometric for UCN %2 fails to meet NGI Minimum Image Quality Standards and has not been enrolled	2	IMT	UCN	
M0012	Biometric Sample Failed Validation	The %1 biometric for UCN %2 has failed validation with Fingerprints on file and was not enrolled	2	IMT	UCN	
M0013	Enrollment Request without Fingerprints (no MOU)	The %1 biometric enrollment request had no accompanying Fingerprints (no MOU)	1	IMT		
M0014	Photo not Available	The requested photo is not available	0			

SECTION 7 – EBTS FUNCTIONAL CHANGES

Code	Condition for Message	Description	Count	Insert #1	Insert #2	Insert #3
M0015	Potential Identity Theft Victim – Fingerprint Match	The fingerprints of the individual match an Identity record; however, the descriptive information provided does match a different Identity record. The individual may be a victim of Identity Theft.	0			
M0016	Potential Identity Theft Victim – Fingerprint No Match	The fingerprints of the individual do not match an Identity record; however, the descriptive information provided matches an Identity record. The individual may be a victim of identity theft.	0			
M0017	LESC Quota Exceeded	The LESG was not searched due to daily quota exceeded.	0			
M0018	LESC Not Searched	Based on TP Identification search content the LESG was not searched.	0			
M0019	Photo Images from Multiple Events	The Photo images returned span multiple events for the DOA %1 specified in request.	1	DOA		
<del>M0020</del>	<del>Photo Image Delete Error</del>	<del>No Photo Images were deleted, the DOA %1 has multiple events. Please contact CJIS customer service.</del>	<del>4</del>	<del>DOA</del>		
M0021	Matching Minutiae Could Not be Returned	Matched minutiae could not be returned for one or more of the candidates.	0			
M0022	Biometric Sample Failed Validation	The %1 biometric for UCN %2 has failed validation with Fingerprints in submission and was not enrolled	2	IMT	UCN	

SECTION 7 – EBTS FUNCTIONAL CHANGES

Code	Condition for Message	Description	Count	Insert #1	Insert #2	Insert #3
M0023	Biometric Not Available	The requested biometric for UCN %1 is not available	1	UCN		
M0024	Image Retrieval Element Failed Validation	Image retrieval for SI %1 contains invalid data for element %2, with value of [%3]	3	SI (from BID)	Element Name	Element Name Name Value
M0025	Image Retrieval Field Relationship Error	Image Retrieval for SI %1 contains an inconsistency between element %2 and element %3	2 3	SI (from BID)	Element Name	Element Name
M0026	Photo(s) Not Enrolled to Matcher	The following facial photos were retained for UCN %1 but fail to meet NGI Minimum Image Quality Standards and were not enrolled for searching: %2	2	UCN	BSI (List of BSI's separated by commas. If MSG field becomes full another MSG is generated with remaining BSIs)	
M0027	Unauthorized to Establish External Link	The requestor is not authorized to establish external link with TOT %1	1	TOT of incoming message		
M0028	External Link Already Exists	The External Subject identifier %1 is already associated with UCN %2	2	ESI	UCN	
M0029	External Link Already Exists	The UCN %1 is already associated with an ESI: %2	2	UCN	ESI (of previously established external link for same external system)	

SECTION 7 – EBTS FUNCTIONAL CHANGES

Code	Condition for Message	Description	Count	Insert #1	Insert #2	Insert #3
M0041	Match Notification from Cascaded Search of ULF with Retained Biometrics	Biometrics submitted by %1 are a potential match to your agency's Unsolved Latent File record as referenced in this notification	1	CRI (CRI1 of cascaded search submission)		
M0042	Match Notification from Cascaded search of ULF with Non-Retain Biometrics	Non-retain biometrics submitted by %1 / %2 are a potential match to your agency's ULF record as referenced in this notification. If contact information can't be located for %1 in NCIC or Nlets and additional information is needed, contact the CJIS Division at 304-625-5868.	2	ORI (ORI of non-retain submission)	CRI (CRI1 of non-retain submission)	
M0043	Match Notification from Biometric Decision on ULF record	A Biometric Decision with TCN %1 submitted by %2 is a potential match to your agency's Unsolved Latent File record as referenced in this notification. Your ULF record is enrolled as UCN %3.	3	TCN (of BDEC submission)	CRI (CRI1 of the BDEC submission)	UCN (Of ULF record from candidate list, not legacy SCNA)
M0044	Match Notification from Cascaded Search of UPF with Retained Biometrics	Biometrics submitted by %1 are a potential match to your agency's Unsolved Photo File record as referenced in this notification	1	CRI (CRI1 of cascaded search submission)		
M0045	Match Notification from Cascaded search of UPF with Non-Retain Biometrics	Non-retain biometrics submitted by %1 / %2 are a potential match to your agency's UPF record as referenced in this notification. If contact information can't be located for %1 in NCIC or Nlets and additional information is needed, contact the CJIS Division at 304-625-3223.	2	ORI (ORI of non-retain submission)	CRI (CRI1 of non-retain submission)	
M0046	Match Notification from Biometric Decision on UPF record	A Biometric Decision with TCN %1 submitted by %2 is a potential match to your agency's Unsolved Photo File record as referenced in this notification.	3	TCN (of BDEC submission)	CRI (CRI1 of the BDEC submission)	UCN (UCN of UPF record from candidate list)

SECTION 7 – EBTS FUNCTIONAL CHANGES

Code	Condition for Message	Description	Count	Insert #1	Insert #2	Insert #3
M0047	Match Notification from Cascaded Search of SPC with Retained Biometrics	Biometrics submitted by %1 are a potential match to your agency's Special Population Cognizant File record as referenced in this notification	1	CRI (CRI1 of cascaded search submission)		
M0048	Match Notification from Cascaded search of UPF with Non-Retain Biometrics	Non-retain biometrics submitted by %1 / %2 are a potential match to your SPC file as referenced in this notification. If contact information can't be located for %1 in NCIC or Nlets and additional information is needed, contact the CJIS Division at 304-625-5868.	2	ORI (ORI of non-retain submission)	CRI (CRI1 of non-retain submission)	
M0049	Match Notification from Biometric Decision on SPC record	A Biometric Decision with TCN %1 submitted by %2 is a potential match to your agency's SPC File record as referenced in this notification. Your SPN record is enrolled as UCN %3.	3	TCN (of BDEC submission)	CRI (CRI1 of the BDEC submission)	UCN (UCN of SPC record from candidate list)
M0050	Supervised Release Identity Restoration Triggering Event	The Identity associated with your agency's supervised release has been restored to its previous state.	0			
RB001	Unauthorized to Participate in Rap Back Service	Requestor is not authorized to participate in Rap Back Service.	0			
RB002	Unable to Create Rap Back Subscription	The Rap Back Subscription was not created	0			
RB003	Unauthorized Trigger Event	Requestor is not authorized for Rap Back Trigger %1	1	RBT [Each unauthorized event trigger description separated by commas]		

SECTION 7 – EBTS FUNCTIONAL CHANGES

Code	Condition for Message	Description	Count	Insert #1	Insert #2	Insert #3
RB004	Invalid Expiration Date	An invalid Rap Back expiration date was requested, changed to maximum allowed date %1	1	Date of expiration in the form CCYYMM DD		
RB005	Invalid TOT for Rap Back Service Subscription	The TOT %1 cannot be used for a Rap Back subscription request	1	TOT		
RB006	Rap Back Subscription Access Error	Contributor is not a Rap Back subscriber for subscription %1 on the Identity %42.	2	RBSI	UCN	
RB007	Rap Back Subscription Expired	Rap Back maintenance cannot be performed on subscription %1 because it has expired or been cancelled. A new Rap back subscription must be established.	1	RBSI		
RB009	Rap Back Consolidation Triggering Event	A Consolidation of NGI Identities has resulted in the information for deleted identity(ies) (UCN(s) %1 being consolidated with the retained Identity UCN %2.	2	UCN [Each killed UCN is listed and separated by commas]	UCN [The kept UCN]	
RB010	Rap Back Identity Deletion Triggering Event	The Identity associated with UCN:%1 has been deleted from NGI, resulting in the deletion of your Rap Back Subscription ID#:%2	2	UCN	RBSI	
RB011	Death Notice with Fingerprints	Person with UCN:%1 has been reported to FBI CJIS as deceased. Deceased's fingerprints were provided.	1	UCN		
RB012	Death Notice without Fingerprints	Person with UCN:%1 has been reported to FBI CJIS as deceased. Deceased's fingerprints were not provided.	1	UCN		

SECTION 7 – EBTS FUNCTIONAL CHANGES

Code	Condition for Message	Description	Count	Insert #1	Insert #2	Insert #3
RB013	Rap Back Subscription Does Not Exist	An active Rap Back subscription does not exist for the UCN %1 and subscription %2	2	UCN	RBSI	
RB014	Rap Back Subscription Deleted with Civil Event	Rap Back Subscription %1 was deleted due to the Civil event being deleted for UCN %2	2	RBSI (if multiple then they are listed and separated by commas)	UCN	
RB015	The Rap Back Specification is Missing Required Fields	The Rap Back Subscription was not created due to the %1 not being specified	1	Field Tag Name		
RB016	Rap Back Renewal Notification	The Rap Back subscription %1 will expire on %2 unless the expiration date is extended or the term renewed through a Rap Back maintenance request	2	RBSI	Date of expiration in the form CCYYMMDD	
RB017	Rap Back Identity Restoration Triggering Event	<del>Reference Prior Rap Back Notification ID</del> The %1: <del>This %2</del> action has been reversed in NGI for UCN %2. Rap Back ID# %3 has been restored to its previous state	3	<del>RBN</del> The action that is to be restored; e.g. expunge, consolidation, deletion.	UCN (for which the action was reversed, can be killed or kept UCN during consolidation) <del>The action that is to be restored; e.g., expungement, consolidation, deletion.</del>	RBSI
RB018	Criminal Retain Submissions	Criminal arrest received from CRI – %1: Date of Arrest %2	2	CRI	DOA	
RB019	Dispositions	Court Disposition received from JID - %1: Date of Arrest %2	2	ORI	DOA	

SECTION 7 – EBTS FUNCTIONAL CHANGES

Code	Condition for Message	Description	Count	Insert #1	Insert #2	Insert #3
RB020	Civil Retain	Civil Event received from CRI - %1: Date of Receipt %2	2	CRI	Date of Civil Event receipt in the form CCYYMMDD	
RB021	Expungement / Partial Expungement	Expungement of Criminal Arrest from CRI - %1: Date of Arrest %2	2	CRI	DOA	
RB022	Want Addition	NCIC Wanted Person entry from ORI - %1: NIC/%2, Date of Warrant %3	3	ORI	NCIC number	Date of Warrant in the form CCYYMMDD
RB023	Want Deletion	NCIC Wanted Person deletion from ORI - %1: NIC/%2, Subject no longer wanted by agency	2	ORI	NCIC number	
RB024	Want Modification	NCIC Wanted Person modification from ORI - %1: NIC/%2, Date of Warrant %3	3	ORI	NCIC number	Date of Warrant in the form CCYYMMDD
RB025	Sexual Offender Registry Addition	Sexual Offender Registry entry from ORI - %1:NIC/%2, Date of Registration %3	3	ORI	NCIC number	Date of Registration in the form CCYYMMDD
RB026	Sexual Offender Registry Deletion	Sexual Offender Registry deletion from ORI - %1:NIC/%2, Subject no longer registered with agency.	2	ORI	NCIC number	
RB027	Sexual Offender Registry Modified	Sexual Offender Registry modification from ORI - %1:NIC/%2, Date of Registration %3	3	ORI	NCIC number	Date of Registration in the form CCYYMMDD

Code	Condition for Message	Description	Count	Insert #1	Insert #2	Insert #3
RB028	External	External System Activity received from ORI - %1:%2	2	ORI	Date of Activity in the form CCYYMMDD	
S0002	General segment error	A general segment error was detected that is not currently defined. Optional error message: %1 %2%3.	0-3	Free Text	Free Text	Free Text
W0002	Manual Arrest Records	The Criminal History of subject %1 is contained in the FBI manual files	1	FNU		
W0003	Unassigned FBI Number	Subject %1 may be in the FBI manual files, but does not exist in the Criminal History Files.	1	FNU		

## Error Class Key:

A – Authorization – Security Errors  
 B – General Biometrics  
 E – Element – Intersegment and External Message Element Errors  
 H – Header – Intersegment Message Header Errors  
 L – Logic – Operational Errors  
 M – Message – Informational Messages  
 R – Error with Retry Allowed  
 RB – Rap Back  
 S – Status – Segment Status Errors  
 W – Warning Only

### Appendix O: POB Code Table

Appendix O contains the codes for Place of Birth (POB 2.020) and Citizenship (CTZ 2.021) fields. The ‘CTZ’ contains an asterisk (\*) for those codes that are valid for usage in the CTZ 2.021 field. All codes are valid for usage in the POB 2.020 field. The “DATE AHEAD FLAG” indicates those codes where the ~~Date of Birth (DOB 2.022)~~ local date may be a day ahead of North American time zones.

## Section 8 – Aggregate List of Changes

Section	TOU Number	Change
1.8	10.0.4	Added new compression references
3.1.1.6 EMUF	10.0.1	Updated second paragraph
3.1.1.9 FIDR	10.0.1	Updated first paragraph
3.1.3.1 RPIS	10.0.1	Updated second paragraph
3.3.1	10.0.5	Updated Response TOT list for CPR
3.3.1.1 IRQ	10.0.1	Updated first paragraph Added paragraph after the first paragraph
	10.0.5	Updated third paragraph
3.3.1.3 IRR	10.0.1	Updated first paragraph
3.3.1.4 ISR	10.0.1	Updated first paragraph
3.3.2	10.0.3	Updated Response Transaction list
3.3.2.1 BATQ	10.0.3	Updated section
3.3.2.2 BATR	10.0.3	Updated section title
3.4.2	10.0.5	Updated third paragraph
3.4.4.2 TXTSRCH	10.0.1	Updated first paragraph Added second and third paragraphs, describing TOT use
3.4.4.3 FRS	10.0.5	Updated first paragraph
	10.0.6	Added text to end of first paragraph
3.4.4.4 SRB	10.0.1	Replaced second paragraph
3.4.5.1 IIIS	10.0.4	Updated sentence
3.4.6	10.0.3	Reordered sections to conform with Response Transaction list Corrected TOT name for EQHR and EQRR
3.4.6.3 EQER	10.0.3	Restored EQER section
3.4.6.4 EQRR	10.0.5	Updated first paragraph
3.4.6.5 ERRR	10.0.5	Updated first paragraph and added second paragraph
3.5.1 SPN	10.0.1	Updated first paragraph
3.5.6 ULM	10.0.1	Updated second paragraph
	10.0.5	Updated third paragraph
3.6.3 BDEC	10.0.2	Updated section
	10.0.3	Updated second paragraph
3.6.5 BDEL	10.0.1	Updated third paragraph
3.6.13 FIS	10.0.6	Updated first paragraph
3.6.14 FISR	10.0.1	Updated first paragraph
	10.0.6	Updated first paragraph

SECTION 8 – EBTS FUNCTIONAL CHANGES

Section	TOU Number	Change
3.6.15 SPMNT	10.0.1	Updated second paragraph
3.6.23 RBMNT	10.0.3	Updated first paragraph
3.8.2	10.0.4	Updated first and second paragraph
Appendix A	10.0.3	Restored Friction Ridge Investigation Search – Latent rows
	10.0.4	Updated Table A-1
Appendix B	10.0.1	Added 1.011 NSR
	10.0.3	Updated 1.013 DOM
Appendix C	10.0.1	Relabeled column headings and table name, also reversed columns for Table 11 BID Values Table Updated 2.014 FBI Data Dictionary definition Updated 2.037 RFP Data Dictionary definition Updated 2.079 NCR Data Dictionary definition Updated 2.084 AMP Data Dictionary code table Updated 2.2010 NIR Data Dictionary definition Updated 2.2032C TOT of Dissemination for Max Length 2.2058 SMD spelling correction in SMI Values Table Updated 2.2069B RBT for Min Occurrences Updated 2.2069C RBEI for Min Occurrences
	10.0.2	Updated 2.019 AKA Data Dictionary definition Updated 2.038 DPR Data Dictionary definition Added 2.046 DOS to Data Dictionary Added 2.046 DOS to Table C-1 Updated 2.088 NOT Data Dictionary definition Updated the data type for fields 2.2028G SMT, 2.2032I SMT, 2.2033M SMT and 2.2061D SMT
	10.0.3	Updated 2.098 NDR Values Table Updated 2.2020 RBSL
	10.0.4	Updated section 1.1 Updated 2.051 CSL definition Updated 2.2063 RBOO definition
	10.0.5	Updated 2.083 ULF name and definition Updated Table C-1 for 2.2064A RBFN and 2.2064B RBFT Updated Table C-1 for 2.071 ACN Example Updated Table C-1 for 2.083 ULF
	10.0.6	Updated 2.046 DOS definition Corrected IDENT description in Table 23: NDR Values Table
	Appendix D	10.0.1

SECTION 8 – EBTS FUNCTIONAL CHANGES

Section	TOU Number	Change
	10.0.2	Removed 2.096 RPR, 2.098 NDR, 2.2037 ESI from DOCE Removed 2.096 RPR, 2.098 NDR, 2.2015 RBXD, 2.2020 RBR, 2.2037 ESI, 2.2040 RBT, 2.2062 RBNF, 2.2063 RBOO, 2.2064 RBUD, 2.2065 RBC, 2.2067 RBDI, 2.2070 RBATN, 2.2071 RBST from EMUF Removed 2.2007 SDOB and 2.2008 SNAM from ERRT Updated section introduction
	10.0.6	Added field 2.046 DOS to CPNU and FIDR
Appendix E	10.0.1	Updated 2.014 FBI for IRR Updated 2.018 NAM for EQHR and EQRR Updated 2.021 CTZ for EQHR Updated 2.037 RFP from UULD Updated 2.073 CRI for EHRR, EQER, EQHR, EQRR and ERRR Updated 2.075 ERS for RBN Updated 2.084 AMP for SRT Updated 2.084 AMP for TPIS and TPRS Updated 2.098 NDR for ISR Updated 2.2033 CNL for SRB Updated 2.026 SMT for TXTSRCH Updated 2.2058 SMD for TXTSRCH Updated 2.2059 TCL for TXTSRCH
	10.0.2	Added 2.046 DOS to CPR and PRR Removed 2.079 NCR from TPRR Updated section introduction
	10.0.6	Updated 2.073 CRI for FRS
Appendix F	10.0.1	Updated section 4.10.4 Requirement
	10.0.4	Update note under Table F-5 Update web site reference under Table F-5
	10.0.6	Updated Table F-2 for minimum modulation for 500 ppi scanner to 2 cy/mm
Appendix I	10.0.1	Removed 2.006 ATN from XACT and XACTR Updated 2.014 FBI for PDR Removed 2.055 SLE from SRNR Added 2.073 CRI, 2.2100 SED, 2.2101 SST, 2.2102 RSC, 2.2103 STT, and 2.2104 SRA to SRNR Added 2.073 CRI and 2.075 ERS to SRNRR Updated 2.084 AMP for FIS Updated 2.2035 EVI for DSPR
	10.0.2	Added 2.046 DOS to PDR and CPD Updated section introduction
Appendix J	10.0.1	Updated table heading for Table 45 Updated Table 46 Update table heading for Table 47
Appendix K	10.0.1	Added sentence to end of section

SECTION 8 – EBTS FUNCTIONAL CHANGES

Section	TOU Number	Change
Appendix L	10.0.1	Updated FIS for T17 Updated FIDR for T4 and T14 Updated IRR for T9 and T14 Updated IRQ Response TOTs
	10.0.2	Added 2.046 DOS to Table L-1
	10.0.4	Corrected transaction name for EHRR Updated IIDS for T10 and T17 Updated IRR for T17 Updated SRB for T17
	10.0.5	Updated Table L-1 for 2.083 ULF Updated Table L-4 for CPR
Appendix M	10.0.1	Updated messages in Table M-1 based on Operational needs Added Error Class Key to Table M-1
	10.0.2	Added A0015 to Message Table Added L0031 to Message Table Added M0033 to Message Table Added M0051 to Message Table Added M0052 to Message Table
	10.0.3	Added footnote
	10.0.4	Added L0174 and L0179 to Message Table
Appendix N	10.0.2	Updated 14.015 PPC Data Dictionary definition
Appendix O	10.0.1	Corrected appendix introduction
	10.0.4	Updated appendix introduction
	10.0.6	Corrected CTZ value for four codes in POB Code Table Corrected FR code description
Appendix P	10.0.4	Updated section introduction text, sixth paragraph Updated web address for Palm Print Capture Guide Added note to Table P-2 Friction Ridge
Appendix AC	10.0.4	Removed acronyms IID, IIE, IIER, IIR and IRD Corrected EHRR
	10.0.5	Updated acronym ULF
	10.0.6	Corrected description for IIIS