U.S. Department of Justice
Federal Bureau of Investigation
Criminal Justice Information Services (CJIS) Division

October 19, 2022

ELECTRONIC BIOMETRIC TRANSMISSION SPECIFICATION (EBTS)

TECHNICAL AND OPERATIONAL UPDATE (TOU) 11.1 REDLINES

SECTION 1 – MESSAGE TO CJIS SYSTEMS OFFICERS, STATE IDENTIFICATION BUREAUS, AND OTHER INTERFACE AGENCIES

Technical and Operational Updates (TOUs) document functional changes to the Electronic Biometric Transmission Specification (EBTS) as an interim solution (until the release of the next major version) to enable FBI/CJIS system user compliance. The purpose of this document is to identify TOU 1 changes with redlines for user clarity. This TOU is documented within the full text of the EBTS version 11.1, identified through Sentinel Case Number NGI-DOC-01862-1.2.

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. A comprehensive list of all TOU functional changes since the release of the most recent major version of the EBTS is located in Section 3 and sorted by section.

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Users are reminded that any questions concerning the distribution of EBTS 11.0 should be directed to the Programs Research and Standards Unit at <https://www.fbibiospecs.cjis.gov/Comments/Comments>.

Archived and Active versions of the EBTS and associated TOUs are available via the Internet on the FBI Biospecs Web site at <http://www.fbibiospecs.cjis.gov>.

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SECTION 2 – FUNCTIONAL CHANGES FOR 11.0

Section 2 contains information concerning the modifications constituting EBTS 11.1. The following table is an overview of the functional modifications for this TOU version.

Section	Change
Throughout	Grammar, punctuation, and minor style updates
3.1.1.16 DEK	Added information pertaining to the use of "stitching"
3.1.1.17 DEU	Added information pertaining to the use of "stitching"
3.3.1.1 IRQ	Added "11. Unsolved Facial Photos" to list of biometric and descriptive record types retrieved.
3.4.4.3 FRS	Added paragraph pertaining to Unsolved Photo File
Appendix C	Updated "letter" to "character" in 2.020 POB paragraph – Effective one year from EBTS 11.1 publication date
	Updated 2.2100 SED from 99 to 110 years
	Update 2.029 WGT from 499 to 999 lbs.
	Updated 2.030 WTR from 499 to 999 lbs.
	Updated 2.020 character code to "AN" in Table C-1
Appendix E	Updated 2.060 MGS for SRB in Table E-1 – Effective one year from EBTS 11.1 publication date
Appendix F	Added paragraphs pertaining to the us of "stitching" for DEK and DEU usage
Appendix K	Added 10.350 BNL
	Added BNO Code table
Appendix M	Updated M0042
	Added new error message code M0071
	Added new error message code M0072
Appendix O	Updated Table O-1 POB Code

3.1.1.16 Known Deceased (DEK)

These transactions are submitted for a deceased individual whose identity is known to the contributor. Due to additional variables associated with capturing fingerprints from deceased individuals, strict adherence to the anti-stitching provisions of Appendix F are waived for the DEK transaction. Best practice remains submitting ~~The submission contains~~ either ten rolled and four plain impressions, or three identification flat impressions, along with biographic descriptor data. However, in circumstances where this is prohibitive, Appendix F certified fingerprint acquisition profile 45 devices are permitted to be used for capturing deceased fingerprints (see Appendix F for additional information). If the fingerprints are determined to match ~~to~~ those of a subject in FBI/CJIS ~~criminal~~ files, the subject's FBI/CJIS record will be marked as deceased. ~~The ICO field in this submission may be filled with the text "DECEASED."~~ The subject will be added to the FBI/CJIS database when no identification results.

3.1.1.17 Unknown Deceased (DEU)

This transaction is submitted with fingerprints obtained from a deceased individual whose identity is not known to the contributor. Due to additional variables associated with capturing fingerprints from deceased individuals, strict adherence to the anti-stitching provisions of Appendix F are waived for the DEU transaction. Best practice remains submitting ~~The submission contains~~ either ten rolled and four plain impressions, or three identification flat impressions, along with biographic descriptor data. However, in circumstances where this is prohibitive, Appendix F certified fingerprint acquisition profile 45 devices are permitted to be used for capturing deceased fingerprints (see Appendix F for additional information). If the fingerprints are determined to match ~~to~~ those of a subject in the FBI/CJIS ~~criminal~~ files, the subject's FBI/CJIS record will be marked as deceased, and the contributor will be notified of the results. ~~Should no identification result from a search of the criminal file, a search of the civil file will be performed.~~ The subject will be added to the FBI/CJIS database when no identification results. Please refer to Appendix C for specific NAM values to be used when submitting with this TOT.

3.3.1.1 Biometric Image/Feature Retrieval Request (IRQ)

[Unchanged text not included here for brevity]

The following biometric and descriptive record types may be retrieved:

1. Tenprint FP Images from an Event using the Biometric Set Identifier (2.2029 BSI)
2. Tenprint FP Features associated with a retrieved image
3. Palm Print Images from an Event using the Biometric Set Identifier (2.2029 BSI)
4. Palm Print Features associated with a retrieved image
5. Supplemental (joint and tip) Prints from an Event using the Biometric Set Identifier (2.2029 BSI)
6. Supplemental (joint and tip) Features associated with a retrieved image
7. Latent Friction Ridge images and associated Features
8. Facial Photos
9. SMT Photos
10. Iris Images
11. Unsolved Facial Photos

3.4.4.3 Facial Recognition Search Request (FRS)

[Unchanged text not included here for brevity]

The user may also enroll the probe photo to the Unsolved Photo File (UPF) by setting the Unsolved Biometric File (2.083 ULF) field to "Y" and performing a search of the Criminal Master File (NDR = 1). The Biometric NCIC Offense Code (10.350 BNO) is also required and must contain a valid value. If any of these fields are not provided or are invalid, the FRS will still process, but a message will be provided in the 2.060 MSG field of the response to indicate why the photo was not enrolled in the UPF. If the FRS is rejected, then the photo will not be enrolled in the UPF. The UCN of the UPF record will be returned in the FBI Number/UCN field (2.014). See Appendix K for valid BNO codes.

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

POB 2.020 Place of Birth

The subject's place of birth shall be entered in this field. Indicate in this POB field the state (Mexico or United States), territorial possession, province (Canada), or country of birth. The appropriate two ~~letter~~ character* abbreviation shall be used as listed in Appendix O. The criteria listed below shall also be considered when assigning POB.

***Note:** The use of alpha/numeric characters will take effect one year after the EBTS 11.1 publication date.

[Unchanged text not included here for brevity]

SED 2.2100 Custody or Supervisory Status End Date

This field contains the end date for the subject's indicated custody or supervisory status. The date shall appear as an eight-digit number in the same format as specified in Section 1.1 of this appendix. The SED may not be less than the SSD and may not exceed ~~99~~ 110 years from the record DOB..

WGT 2.029 Weight

In this field, the subject's weight in pounds is entered. If weight is unknown, 000 is entered. All weights in excess of ~~4~~999 pounds will be set to ~~4~~999 lbs. WGT must be in the range 050 to ~~4~~999 lbs. (however, there is no minimum range limit for missing persons or unknown persons).

WTR 2.030 Weight Range

If a range of weight is given, it shall be expressed as two three digit numbers indicating the minimum and maximum weights (in pounds) of the subject. There shall be no separator character used between the weights. WTR must be in the range 050 to ~~4~~999 lbs. (however, there is no minimum range limit for missing persons or unknown persons).

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

Field Number	Identifier	Field Name	Character	Field Size (not including Character Separators)		Occurrences		Example	Comments/Special Characters
				Min	Max	Min[1]	Max		
2.020	POB	ORIGINATING AGENCY CASE NUMBER	AN*	2	2		1	2.020:VA{GS}	

*Note: The use of alpha/numeric characters will take effect one year after the EBTS 11.1 publication date.

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	SRB
2.060 MSG	0..~~1~~2*

*Note: Change to number of instances will take place one year from the EBTS 11.1 publication date.

Appendix F: FBI/CJIS Image Quality Specifications

2.0 Finger/Palm Print Scanner

[Unchanged text not included here for brevity]

The stitching prohibition is in place for all transactions as an engineering control which protects against mislabeling individual fingers, promotes fingerprint match accuracy, and fosters interoperability. All are necessary to ensure the best match opportunity within NGI regardless of the services (i.e. tenprint, latent print, RISC, etc.). However, the stitching prohibition and other safeguards put in place to promote positive identification of living persons, are not always obtainable or applicable to deceased individuals. NGI has two transactions dedicated for the identification of deceased persons, the DEK and DEU. Obtaining fingerprints from deceased persons is often dictated by uncontrollable environmental factors, which can make collecting four-finger plain impressions difficult or counterproductive. Therefore, *strictly for DEK and DEU ONLY*, it is permissible to leverage Appendix F certified fingerprint acquisition profile (FAP) 45 devices (see table F-5) to capture decedent fingerprints. If an agency elects to allow FAP 45 devices for DEK and DEU transactions, in the order of best practice collection, the submission should contain (1) 10 rolled and four plain impressions, (2) 10 rolled impressions, or (3) three plain impressions. Because the FAP 45 devices are only capable of capturing plain impressions of two fingers at a time, *and ONLY for DEK and DEU*, four finger plain impressions created by stitching together the plain impressions of the index and middle fingers with that of the ring and little fingers is permitted. The finger position codes for the resulting stitched images would remain 13 and 14 regarding the right and left hands respectively.

Note: Coordination with the FBI is *strongly encouraged* before leveraging FAP 45 devices for the DEK and DEU TOTs.

For quality assurance purposes and when possible, agencies leveraging an Appendix F certified FAP 45 device for deceased fingerprint capture are encouraged to leverage the Type-14 record for fingerprint image submission. The Type-14 record permits the inclusion of both the optional Make/Model/Serial information for the capture device in the 14.904 Make/Model/Serial Number field, as well as the optional stitched image indicator of "Y" placed into the 14.027 Stitched Image Flag field.

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

Type-10 Data Dictionary

BNO   10.350 Biometric NCIC Offense Code

The BNO field is mandatory when submitting facial photos to the UPF, to describe the NCIC Offense Code associated with the image.

Only the following offenses are acceptable justification for images to be enrolled in the UPF:

BNO Codes

NCIC Offense
0099 Homicide
1199 Sexual Assault
1399 Assault
6499 Exploitation
1099 Kidnapping
1299 Robbery
2699 Sex Offense

Appendix M: Transaction Messages

Table M-1 Transaction Messages

Code	Condition for Message	Description	Count	Insert #1	Insert #2	Insert #3
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 latentsupport@leo.gov.	2	ORI (ORI of non-retain submission)	CRI (CRI1 of non-retain submission)	
M0071	The BIL exceeds the maximum of 1000 occurrences	The maximum number of available biometric sets for this request has been exceeded, contact CJIS customer service for the remainder of the available records.	0			
M0072	The Criminal Master File was not searched prior to enrollment attempt	The image was not enrolled, as a search of the criminal file must take place prior to enrollment	0			

Appendix O: Place Of Birth (POB) Code Table

[Unchanged text not included here for brevity]

Note: In conjunction with the changes in the POB 2.020 Place of Birth field to allow alpha/numeric characters, one year from the EBTS 11.1 publication date, Table O-1 POB Code will include the alpha/numeric codes located in the above mentioned NCIC Code Manual.

O-1 POB Code

CODE	CTZ	DESCRIPTION	DATE AHEAD FLAG
~~KP~~		~~Shakopee~~	
ZG		Pamunkey India Tribe	
ZH		Chickahominy Indian Tribe	
ZJ		Chickahominy Indian Tribe - Eastern Division	
ZK		Upper Mattaponi	
ZL		Rappahannock Tribe Inc.	
ZN		Monacan Indian Nation	
ZP		Nansemond Indian Nation	
ZQ		Cahuilla Band of Indians	
ZS		Iipay Nation of Santa Ysabel	
ZT		Inaja Band of Digueno Mission Indians of the Inaja and Cosmit	
ZU		Ione Band of Miwok Indians of California	
ZV		Table Mountain Rancheria	
ZW		Native Village of Afognak	
ZX		Native Village of Akhiok	
ZY		Native Village of Akutan	
ZZ		Native Village of Aleknagik	

Section 3 – Aggregate List of Changes

This section records the changes made for EBTS 11.0.

EBTS	Date
11.0	6/15/20
11.1	10/19/22

Section	TOU Number	Change
1.9 Specific Changes to this Version	11.0	Removed references to previous versions of the EBTS
3.1.1.1 CAR	11.0	Updated first paragraph
3.1.1.2 CNA	11.0	Updated first paragraph
3.1.1.9 FIDR	11.0	Updated first paragraph
3.1.1.16 DEK	11.1	Updated section to include the use of "stitching"
3.1.1.17 DEU	11.1	Updated section to include the use of "stitching"
3.1.1.22 ERRT	11.0	Section moved to 3.7.6 ERRT
3.1.5 Iris Identification Search Submission	11.0	Removed (Future Capability) from title
3.1.5.1 IIDS	11.0	Removed (Future Capability) from title
3.1.5.2 IIDS - SRE	11.0	Section added
3.3.1.1 IRQ	11.0	Added "10. Iris Images" to list
3.3.1.1 IRQ	11.1	Added "11. Unsolved Facial Photos" to list
3.3.2.3 ERRI	11.0	Section moved to 3.7.3 ERRI
3.4.4.3 FRS	11.1	Added last paragraph pertaining to Unsolved Photo File
3.4.5 Iris Image Investigation Search Submission	11.0	Section removed
3.4.5.1 IIIS	11.0	Section removed
3.4.6 Biometric Investigation Submission	11.0	Section and subsections renumbered to 3.4.5
3.4.6.3 EQER	11.0	Section moved to 3.7.7 EQER
3.4.6.4 EQRR	11.0	Section renumbered to 3.4.5.3 EQRR
3.4.6.5 ERRR	11.0	Section moved to 3.7.5 ERRR
3.6.15 SPMNT	11.0	Removed "Tier 2" from first paragraph
3.6.20 RBSCVL	11.0	Updated first paragraph
3.7 Error Message Format	11.0	Added sections 3.7.1 ERRA, 3.7.2 ERRB, 3.7.3 ERRI, 3.7.4 ERRL, 3.7.5 ERRR, 3.7.6 ERRT, and 3.7.7 EQER

Section	TOU Number	Change
Appendix A	11.0	Updated A-1 NGI Maximum Transaction Response Times Removed (Future Capability) from IIDS transaction in A-2 NGI Type of Transaction By Service table Removed from the IIDS transaction in A-2 NGI Type of Transaction By Service table
Appendix C	11.0	Updated 2.2028 BID Added SI to BID Submitted Values and Results table Updated 2.2029 BSI Updated 2.051 CSL Added 2.2105 FI Updated 2.062 IMT table Added note to 2.017 MNU and updated MNU Values table Added note to 2.2072 POC Updated 2.070 RAP field to include ability to request XML response Updated header in 2.2065 RBC Values table Updated 2.2040 RBT Values table Updated 2.059 SFR Values table Updated Code 2 and added Code 4 and 5 2.2046 TLI Values table Added 2.2105 FI to C-1 Field Edit Specifications for Type-2 Elements table
	11.1	Updated first paragraph of 2.020 POB Updated 2.2100 SED Updated 2.029 WGT Updated 2.030 WTR Updated Table C-1 2.020 Character Code
Appendix D	11.0	Updated 2.054 SSD, 2.055 SLE in D-1 Summary of Field Lists for Identification and Verification Transactions table Added 2.2105 FI to D-1 Summary of Field Lists for Identification and Verification Transactions table Added IIDS TOT to D-1 Summary of Field Lists for Identification and Verification Transactions table Updated SRE TOT to D-1 Summary of Field Lists for Identification and Verification Transactions table Removed CSL note and updated remaining notes in Reference Notes Removed FC1 note from Reference Notes
Appendix E	11.0	Updated 2.084 AMP fields in E-1 Summary of Field Lists for Investigation, Information, and Notification Transactions table Added footnote to E-1 Summary of Field Lists for Investigation, Information, and Notification Transactions table
	11.1	Updated 2.060 MGS for SRB in Table E-1
Appendix F	11.0	Updated footnote for F-5 Mobile ID IQS Requirements table

Section	TOU Number	Change
	11.1	Added paragraphs pertaining to the us of "stitching" for DEK and DEU usage
Appendix I	11.0	Updated 2.084 AMP, 2.009 OCA, and 2.055 SLE fields in I-1 Summary of Field Lists for Data management Transactions table Added footnote to I-1 Summary of Field Lists for Data Management Transactions table
Appendix K	11.0	Added new fields 10.200 – 10.249 RSV to Type-10 Data Dictionary Added new fields 10.351 – 10.400 RSV to Type-10 Data Dictionary
	11.1	Added new field 10.350 BNO to Type-10 Data Dictionary Added BNO Codes table
Appendix L	11.0	Added 2.2105 FI to L-1 Complete Element Cross-Reference List by Tag Number table Added Type-17 fields to L-1 Complete Element Cross-Reference List by Tag Number table Added FBI Allocated Fields to L-1 Complete Element Cross-Reference List by Tag Number table Updated T17 values to DOCE, EMUF, FANC, FAUF, FNDR, NNDR, NFUE, NFUF, MAP, DEK, DEU, MPR, AMN, and FDSP in L-2 Record Set Requirements Summary by Type of Transaction table Removed (Future Capability) from the IIDS transaction in L-2 Record Set Requirements Summary by Type of Transaction table Removed the IIIS transaction in L-2 Record Set Requirements Summary by Type of Transaction table Added Biometric Search Error to Identification Service Responses in L-3 Record Set Requirements Summary by Type of Response table Updated SRB transaction to remove IIIS values from Type-17 Removed (Future Capability) form IIDS transaction in L-4 Transaction/Response/Error TOT Correspondence Removed IIIS transaction from L-4 Transaction/Response/Error TOT Correspondence Added L-5 Record Type Fields Allocated by the FBI table

Section	TOU Number	Change
Appendix M	11.0	Updated and added corresponding footnote to L0008 in M-1 Transaction Message table Removed footnote associated with L0008, L0116, L0117, and L0118 in M-1 Transaction Message table Added new codes IR001, IR002, IR003, IR004, IR005, IR006, IR007, IR008, IR009, IR010, IR011, IR012, IR013, IR014, IR015, IR016, IR017, IR018, IR019, IR020, IR021, and IR022 to M-1 Transaction Message table Updated and added corresponding footnote for L0008 to M-1 Transaction Message table Added new codes L0062, L0183, L0185, L0186, L0187, L0188, L0189, and L0191 to M-1 Transaction Message table Removed code M0011 from M-1 Transaction Message table Updated M0012 from M-1 Transaction Message table Added new codes M0058, M0059, M0060, M0061, M0062, M0063, M0064, M0065, and M0066, to M-1 Transaction Message table
	11.1	Updated contact information for code M0042 Added new codes M0071 and M0072 to M-1 Transaction Message table
Appendix N	11.0	Added new fields 14.201 – 14.400 RSV to Type-14 Data Dictionary
Appendix O	11.1	Removed KP – Shakopee from O-1 POB Code table Added ZG, ZH, ZJ, ZK, ZL, ZN, ZP, ZQ, ZS, ZT, ZU, ZV, ZW, ZX, ZY, and ZZ to O-1 POB Code table Addition of alpha/numberic characters from the NCIC Code Table, one year from the EBTS 11.1 publication date
Appendix R	11.0	Added new fields 13.200 – 13.400 RSV to Type-13 Data Dictionary
Appendix S	11.0	Added new appendix and Data Dictionary for Type-17
	11.0	Added S-1 Iris Transaction with Image table
	11.0	Added S-2 Iris Transaction without Image table
Appendix AC	11.0	Removed IIIS from acronyms list