CJIS Division
Information Technology Management Section

NIEM Information Exchange Package Documentation

Version 11.0

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Prepared by:
Criminal Justice Information Services Division
Information Technology Management Section
Enterprise Technology Services Unit
Enterprise Service Integration & Standards

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CHANGE DESCRIPTION FORM

Revision	Change Description	Created/Changed by	Date	Approved By
11.0	Baseline		09/04/2020	

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1 PURPOSE

The Federal Bureau of Investigation (FBI) uses the Electronic Biometric Transmission Specification (EBTS) in support of exchanging biometric data to facilitate the determination of the personal identity of a subject from fingerprint, palm, iris, facial or other biometric information, across criminal justice agencies or organizations that use an Automated Fingerprint Identification System (AFIS) or related systems nationwide.

These biometric specifications are standards for electronically encoding and transmitting biometric image, identification and arrest data. The FBI EBTS is an extension of the biometric standard entitled "Data Format for the Interchange of Fingerprint Facial, & Other Biometric Information" (ANSI/NIST-ITL 1-2011), which is composed by the American National Standards Institute (ANSI) in correspondence with the Information Technology Laboratory (ITL) of the National Institute of Standards and Technology (NIST). Together, these standards define the content, format, and units of measurement for the exchange of biometric information with the FBI.

The FBI EBTS serves criminal justice agencies in the 50 states, the District of Columbia, Puerto Rico, and Canada.

This Information Exchange Package Documentation (IEPD) supercedes all previous versions covering the FBI EBTS, which contains the requirements for implementation of the Next Generation Identification (NGI) System. These requirements are documented in the "Electronic Biometric Transmission Specification (EBTS) version 11.0" (242-HQ-A6687913-SYSDOCU).

2 SCOPE

Data in the FBI EBTS files are exchanged with and are for the official use of criminal justice officials of local, state, and federal governments in the U.S. and its possessions and in Canada.

The EBTS IEPD is intended to provide information essential for conformance with the FBI and ANSI/NIST-ITL 1-2011 standards. This IEPD provides the necessary general XML formats and schema information for XML implementation.

3 LIST OF ARTIFACTS

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4 XML SCHEMA

The National Information Exchange Model (NIEM) is an interagency initiative providing a foundation for information exchange. The FBI Advisory Policy Board decided that the FBI would implement EBTS schema using NIEM; therefore, NIEM 2.0, the most current version that was available at the time, was used during the implementation of the original FBI EBTS Information Exchange Package (IEP). With EBTS 11.0, the IEP was updated to use NIEM 4.0.1. The NIEM Data Model contains elements of the NIEM data components used to generate XML schemas for building IEPDs, called reference schemas. These reference schemas are a set of XML schemas representing a single coherent release of the NIEM Data Model, including NIEM Core, domains, code lists, and other support schemas such as appInfo.xsd and structures.xsd.

The NIEM Data Model also incorporates schemas geared toward specific domains (e.g., Criminal Justice and Biometrics) necessary to capture the business requirements for an EBTS transaction. These domain specific schemas were released in correspondence with NIEM 4.0.1.

4.1 NIEM Subset Schemas

A NIEM subset was downloaded to capture basic elements and types that are components of the EBTS IEPD. This subset was created to promote NIEM conformance through the reuse of common data elements. It is not necessary, nor is it desirable, to work directly with the NIEM subset schemas. The subset schemas are stored in the FBI EBTS Information Exchange Package, located in the base-xsd\niem directory. It includes NIEM version 4.0.1 reference schemas and the following NIEM 4.0.1 domains:

> A JXDM version 6.0 subset schema was downloaded to capture criminal justice elements and types that are components of the EBTS IEPD. This subset schema is included the FBI EBTS IEPD, located at base-xsd\niem\domains\jxdm\6.0\jxdm.xsd.

> A FBI NCIC version 2.0 subset schema was created to capture code lists utilized by the FBI that are components of the EBTS IEPD. This subset schema is in the FBI EBTS IEPD, located at base-xsd\niem\codes\fbi_ncic\4.0\fbi_ncic.xsd .

> Additionally, the IEPD contains a subset of the ANSI/NIST Biometrics 4.0.1 schema, which captures biometric elements and types that are components of the EBTS IEPD. The ANSI/NIST 2011 release was updated with an errata and this schema incorporates the changes. This schema is in the FBI EBTS Schema Package, located at base-xsd \niem\domains\biometrics\4.0\1\biom.xsd. For the purpose of this document, elements utilized from these schemas will be referred to as NIEM Elements but referenced by the corresponding namespace.

4.2 Extension Schemas

In support of the development of NGI and in accordance with the recommendations of the CJIS Advisory Policy Board (APB) Identification Services Subcommittee, the FBI has developed a standard for electronically encoding and transmitting fingerprint images, identification, and arrest data. ANSI/NIST-ITL was established in conjunction with the National Institute of Standards and Technology (NIST) and the fingerprint identification community. This exchange specification is the American National Standards Institute (ANSI) standard titled the "Data Format for the Interchange of Fingerprint, Facial, & Other Biometric Information" (ANSI/NIST-ITL 1-2011).

This XML extension schema is in the FBI EBTS IEP, located at base-xsd\itl\itl.xsd. It contains the root element used for EBTS exchanges, <itl:NISTBiometricInformationExchangePackage>.

The itl.xsd schema adds types and properties that are not in NIEM and are unique to the standard; the transmission message and record type structure is defined in this schema.

The FBI's EBTS defines requirements that agencies must adhere to when electronically communicating with CJIS. The EBTS and its future revisions will inherit the basic requirements for logical records set forth in the ANSI standard. However, the FBI-specific requirements for the implementation of ANSI/NIST-ITL 1-2011 logical record types are contained in the EBTS. See section 5.1.2 for descriptions of the EBTS record types.

The EBTS extension schema contains customized types and elements that are needed by the FBI for the IEPD but that are not part of the NIEM data model nor included in the ANSI/NIST-ITL exchange schema. This extension schema is in the EBTS Information Exchange Package, located at base-xsd\fbi_ebts\11.0\fbi_ebts.xsd.
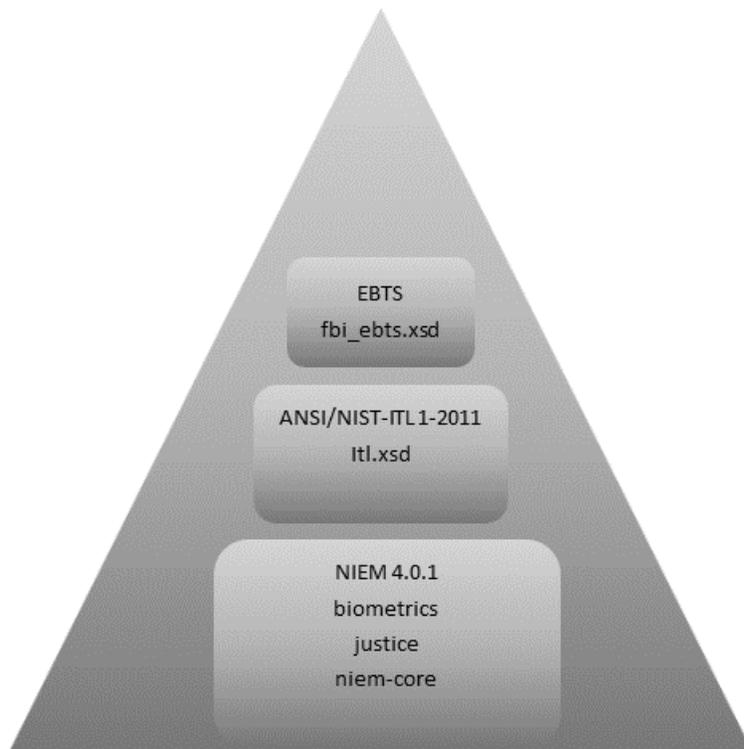
Figure 4-1 EBTS Schema Model

5 ADDITIONAL PROVISIONS

5.1 The EBTS Transactions

FBI CJIS Division will process the following types of transactions for the service areas listed in EBTS. Several types of transactions for each service area will be accepted by the FBI; the sender must designate the Type of Transaction (TOT) in the <ebts:TransactionCategoryCode> element, located within the Type-1 Record, to specify which process is to be followed. Each transaction contains only one Type-1 Record, which is always located at the beginning of the transaction. A list of TOTs by service, including request and response information, is listed in Tables L-2 and L-3 of the "Electronic Biometric Transmission Specification (EBTS) version 11.0" (242-HQ-A6687913-SYSDOCU).

5.1.1 Minimal Properties Set

FBI EBTS XML inbound and outbound messages should have at least the XML processing instruction, a namespace definition, a Type-1 (header) record, and a Type-2 (descriptive) record.

5.1.2 The EBTS Records

The table below lists the logical record types accepted by NGI and the corresponding root XML element.

Table 5-1 EBTS Record Descriptions

Record	Description
Type-1 Header Record Transaction Information *<itl:PackageInformationRecord>*	Type-1 Records are required for every transaction submitted. The Type-1 Record must be the first record in the transaction. Transmissions may only include one Type-1 Record per transaction and at least one other record must be present in the file. Type-1 Records provide information describing the type and use or purpose for the transaction involved, a listing of each logical record included, and the original source of the transaction, among other information items.
Type-2 Record User-defined descriptive text *<itl:PackageDescriptiveTextRecord>*	Records containing textual fields providing identification and descriptive information associated with the subject of the transaction.
Type-4 Record High Resolution grayscale fingerprint image *<itl:PackageLegacyFingerprintImageRecord>*	Records used to exchange high-resolution grayscale fingerprint image data that was scanned at no less than 500 ppi.
Type-7 Record User-defined image *<itl:PackageUserDefinedImageRecord>*	Records used to exchange image data that is not elsewhere specified or described in the ANSI/NIST-ITL standard, including miscellaneous images such as scanned fingerprint cards.
Type-9 Record Minutiae Record *<itl:PackageMinutiaeRecord>*	Records used to exchange geometric and topological minutiae templates and related information encoded from a fingerprint, palm, or latent image. Each record shall represent the processed image data from which the location and orientation descriptors of extracted minutiae characteristics are listed.

Record	Description
Type-10 Record Face, other body part, or scar, mark tattoo (SMT) image *<itl:PackagePhotographicBodyPartImageRecord>*	Records used to exchange facial image data, or image data from scars, marks, and tattoos (SMT), together with textual information pertinent to the image.
Type-13 Record Variable-resolution latent friction ridge image *<itl:PackageLatentImageRecord>*	Records used to exchange image data acquired from latent friction ridges. Textual information regarding the scanning resolution, the image size and other parameters or comments required to process the image are recorded within the record.
Type-14 Record Variable-resolution fingerprint image *<itl:PackageFingerImpressionImageRecord>*	Records used to exchange variable-resolution fingerprint image data, segmented flat fingerprint data, or supplemental print data. All fingerprint impressions shall be acquired from a ten- print card, a supplemental print card, or from a live-scan device at up to 1000 ppi. Fingerprint images can be either rolled or plain (including swiped) impressions.
Type-15 Record Variable-resolution fingerprint image *<itl:PackagePalmPrintImageRecord>*	Records used to exchange variable-resolution palm print image data.
Type-17 Record Iris Image *<itl:PackageIrisImageRecord>*	Records used to exchange iris image data.

5.1.3 State and Local Records

In accordance with the EBTS specification, user agencies may add their own state- or local-specific data not otherwise required by the FBI to the EBTS transactions. The ANSI/NIST-ITL 1-2011 standard provides for this user-defined data use by creating the abstract type element <itl:OtherDescriptiveDetail>.

Consequently, users may take advantage of the EBTS-provided substitution element <ebts:StateDefinedFields> within the Type-2 Record. Individual data elements within this field must be well-formed XML and contain UTF-8 data values. These elements are user-definable; their size and content shall be defined by the user and be in accordance with the receiving agency. Currently, these data elements will be ignored when included in the transactions submitted to CJIS/FBI.

5.1.4 EBTS Field Mnemonic/NIEM Definitions

The XML Mapping Table, included within the FBI EBTS IEP, located in the documentation\ directory, represents the association of EBTS Field Mnemonics, Field Numbers, and the NIEM XML Data elements, presented in hierarchical order. This table is provided to help implementers

cross-reference the XML property definitions. The data element definitions and specifications are available in the "Electronic Biometric Transmission Specification (EBTS) version 11.0" (242-HQ-A6687913-SYSDOCU).

5.1.5 XML Encoding

The XML encoding requires some deviations from the traditional format, in both structure and content. Structurally, elements with multiple data items that are traditionally represented as a single concatenated string are instead placed in separate fields. For example, an entire name would be held in a single string in 'AKA' in the legacy format, while the XML encoding would break this into separate elements for First, Middle, and Last. In regard to content, the XML encoding has a few differences from the traditional format in the allowed data, for example "Y/N" values are represented as Boolean "true" and "false."

Additional variances from the traditional encoding are described below.

5.1.5.1 Date Fields

NIEM-conformant date fields are used to represent dates. The format is the following:

A date is shown as CCYY-MM-DD, where:

CC (Century) must be 19 or 20
YY (Year) must be 00 to 99
MM (Month) must be 01 to 12
DD (Day) must be 01 to the limit defined by the month and year (e.g., DD may be 29 for MM = 02 in leap years).

For example <nc:Date>1992-12-01</nc:Date> represents December 1, 1992.

The legacy date format does not include the dashes between the year, month, and day information, however, XML date values that are submitted this way are unable to be processed correctly.

5.1.5.2 Image Type Codes

EBTS Code values are captured as enumerated lists of specified values. Several fields that capture enumerated lists use textual values rather than the traditional numeric values. These fields include: Image Type (IMT, 2.062), <ebts:RecordBiometricImageCategoryCode>; and Biometric Image Available (BIA, 2.2031), <ebts:BiometricImageAvailableCode>. Table 5-2 lists the allowable codes for each image type.

The values for the Biometric Image Available (BIA 2.2031) also differ from the traditional encoding in that multiple values are repeated, rather than demarcated by a separate code for each possible combination as is done in traditional encodings.

Table 5-2 Image Type Codes

Code	Type	BIA	IMT
NOU	None and/or Unsolved	✓	
FP	Fingerprint (Event)	✓	✓
PP	Palm Print	✓	✓
SP	Supplemental Print	✓	✓
LFR	Latent Friction Ridge		✓
CFP	Composite Fingerprint		✓
PHT	Photo Facial	✓	✓
PSMT	Photo Scar, Mark and Tattoo	✓	✓
IRIS	Iris	✓	✓
FFPC	Fingerprints on Front of Palm Card		✓
FBPC	Fingerprints on Back of Palm Card		✓
UFP	Unsolved Facial Photo		✓

5.1.5.3 Pattern Level Classification, Ridge Core Delta, and Amputations

Data items that are related and/or have dependencies on one another may be represented by a nested XML structure, in order to convey this relationship. For example, the concept of a "finger" is represented by using one of the complex elements <itl:FingerprintImageFingerMissing> or <ebts:FingerprintImageFinger>. The information for each finger patterns and ridge counts are grouped together within a parent element representing exactly one finger.

The following is an XML representation of a finger position "guess":

PAT 2.034 / RCD1 2.091 /RCD2 2.092

<ebts:FingerprintImageFinger>

2.034A / 2.091A / 2.092A

<ansi-nist:FingerPositionCode>3</ansi-nist:FingerPositionCode>

<ansi-nist:FingerPositionCode>8</ansi-nist:FingerPositionCode>

<ebts:RidgeCoreDelta>

PATCL 2.034B

<ebts:FingerprintPatternClassificationCode>WU</ebts:FingerprintPatternClassificationCode>

RCN1 2.091B

<ansi-nist:RidgeCountValue>13</ansi-nist:RidgeCountValue>

RCN2 2.092B

<ansi-nist:RidgeCountValue>10</ansi-nist:RidgeCountValue>

```
        </ebts:RidgeCoreDelta>

    </ebts:FingerprintImageFinger>
```

For XML encoding, RCD1 and RCD2 are represented by a single grouping which contains the FGP and two ridge count elements. Permissible values are 1 to 30 for actual ridge counts and 30 if there are more than 30 ridges. The count of 31 indicates an unknown number of ridges, and 0 indicates that the ridge count is not applicable. For XML encoding, when the ridge count is 0 the ridge count element is omitted.

5.2 Additional Business Rules

5.2.1 XML Formats

Existing Data requirements of the Electronic Biometric Transmission Specification (EBTS) apply to the FBI EBTS XML content. It is strongly recommended that the "Electronic Biometric Transmission Specification (EBTS) version 11.0" (242-HQ-A6687913-SYSDOCU) be referenced for appropriate FBI EBTS data value and format.

The order of elements in the schema and in the sample XML files might be different from the order of FBI EBTS transaction elements in the traditional format because of the structure of NIEM. Following the NIEM standard FBI EBTS extension elements are added after existing NIEM elements.

In addition, certain Field Mnemonics for the FBI EBTS transactions are sets made up of several fields. These fields have been represented as nested XML elements within the parent field. Due to the structure of the XML implementation, this may sometimes cause differences in cardinality between the legacy and the XML specifications.

5.2.2 Header Data

Specifications for the EBTS Type-1 Record Type of Transaction Field (TOT) require values that are not defined in the ANSI/NIST-ITL standard. Therefore, the EBTS specification implements a concrete substitution for the abstract element <ansi-nist:TransactionCategory> in order to represent the EBTS TOT codes. To use the EBTS TOT codes, the <ebts:TransactionCategoryCode> substitution element must be used in place of the <ansi-nist:TransactionCategory> element within the Type-1 Record element, <itl:PackageInformationRecord>.

The EBTS Type-1 Record also requires that the Domain (DOM) field, 1.013, be populated with the version of the specification being implemented, (i.e., EBTS 11.0 for this version) and the transaction domain, which is 'NORAM' for FBI EBTS transactions.

5.2.3 User Defined Descriptive Fields

Specifications for the ANSI/NIST-ITL Type-2 Record require substitution of the abstract element, <itl:DomainDefinedDescriptiveFields> with a user-defined structure. EBTS provides the substitution element <ebts:DomainDefinedDescriptiveFields> to represent the EBTS Type-2 Record. The hierarchical structure of the EBTS Type-2 Record is presented in the XML Mapping Table, included within the FBI EBTS IEPD, and located in the docs\ directory. This table is provided to help implementers cross-reference the XML property definitions and determine their order and cardinalities. The data

element definitions and specifications are available in "Electronic Biometric Transmission Specification (EBTS) version 11.0" (242-HQ-A6687913-SYSDOCU).

Certain further substitutions are required within the Type-2 record, in order to replace abstract or generic elements with more specific or more correct EBTS representations. In order to present correct EBTS code values, please refer to the normative XML mapping document located in the documentation\ directory.

5.2.4 Fingerprint Images

Specifications for fingerprint images are defined in the ANSI/NIST-ITL 1-2011 Type-4 Record and ANSI/NIST-ITL 1-2011 Type-14 Record, based on the resolution requirements.

5.2.5 User Defined Images

Specifications for EBTS User Defined Images are based on the ANSI/NIST-ITL 1-2011 Type-4 Record.

5.2.6 Minutiae Data

Specifications for minutiae data are based on the ANSI/NIST-ITL 1-2011 Type-9 Record. NGI will accept the ANSI/NIST-ITL 1-2011 Extended Feature Set fields, as corrected in the ITL 2011 Errata, which is available in the documentation\ directory.

In order to support backwards compatibility for legacy users with LFFS searches of fingerprint (FGP 0-10) features only, the FBI has created a substitution element for the abstract ANSI/NIST-ITL element <ansi-nist:RecordMinutiae>. EBTS maintains this element, <ebts:Minutiae>, to represent the Legacy FBI IAFIS Feature Set. This element is deprecated, and use of this element for new implementations is strongly discouraged. **EFS is the preferred method of transmitting minutiae information to NGI**.

5.2.7 Facial and SMT Images

Specifications for facial and SMT images are defined in the ANSI/NIST-ITL 1-2011 Type-10 Record, and EBTS.

5.2.8 Latent Print Images

Specifications for latent images are defined in the ANSI/NIST-ITL 1-2011 Type-13 Record, and EBTS.

5.2.9 Supplemental Print Images

Specifications for Supplemental Print images are based on the ANSI/NIST-ITL 1-2011 Type-14 Record, EBTS, and the additional information supplied in the <ebts:Type14UserDefinedFields> element.

5.2.10 Palm Print Images

Specifications for palm print images are based on the ANSI/NIST-ITL 1-2011 Type-15 Record, EBTS, and the additional information supplied in the <ebts:Type15UserDefinedFields> element.

5.2.11 Iris Images

Specifications for iris images are based on the ANSI/NIST-ITL 1-2011 Type-17 Record and EBTS.

5.2.12 Messages Layout

The EBTS IEPD contains transaction templates to aid in understanding and creating new transactions. These are listed in Section 6.1.

The sample template instances include all the required and optional fields for any given transaction and are to be used as "blueprints" for creating new messages, not taken as valid transactions. There is one template included for each EBTS TOT. These templates are organized by EBTS service and located within the service subdirectories in the iep-sample\ directory of the IEPD. The goal of these representations is to help guide agencies and vendors in their design of systems for FBI EBTS XML interchange. They are informative in nature.

EBTS XML transactions require schema instance references and domain prefixes to enable both the use of predefined elements and the enforcement of constraints that have been implemented in the extension schema and in the various domain schemas. The 'xmlns:' attribute allows global elements declared in the specified namespace to be used in this instance. The 'xsi:schemaLocation' attribute is used to associate the EBTS schema with the namespace.

The following example declaration allows the use of necessary global elements from NIEM Data Model namespaces and the ITL namespace. It is relative to the iep-sample\ directory in the EBTS IEPD:

```
<itl:NISTBiometricInformationExchangePackage
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:itl="http://biometrics.nist.gov/standard/2011"
xmlns:ebts="http://cjis.fbi.gov/fbi_ebts/11.0"
xmlns:nc="http://release.niem.gov/niem/niem-core/4.0/"
xmlns:j="http://release.niem.gov/niem/domains/jxdm/6.0/"
xmlns:biom="http://publication.niem.gov/niem/domains/biometrics/4.0/1/"
xsi:schemaLocation="http://cjis.fbi.gov/fbi_ebts/11.0 ../../base-xsd/fbi_ebts/11.0/fbi_ebts.xsd">
```

5.2.13 Inbound Messages

An individual XML inbound transaction must contain at least two records: a Header Record (Type-1 Record) and a User Defined Descriptive Detail Record (Type-2 Record). The Type-1 Record must be the first record in the transaction. Inbound transactions may also contain several Image Records including: Palm or Fingerprint Images, User Defined Images, Facial and SMT Images, and Iris Images. Inbound transactions may also contain records pertaining to Minutiae Information.

The normative record requirements for each TOT are listed in the "Electronic Biometric Transmission Specification (EBTS) version 11.0", "Table L-2, Record Set Requirements Summary by Type of Transaction."

5.2.14 Response Messages

An individual XML outbound transaction contains at least two records: a Header Record (Type-1 Record) and a User Defined Descriptive Detail Record (Type-2 Record).

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Information pertaining to the actual response will be contained within the User Defined Descriptive Detail Record. The response message may also contain Palm or Fingerprint Images, User Defined Images, Facial and SMT Images, Iris Images and Minutiae Information Records.

The User Defined Descriptive Detail Record of an EBTS response message will contain a Transaction Response Data Section, which has information specific to an EBTS response transaction, including fields specifying any action or direction for the user to take upon receiving the transaction, error messages and other detailed information pertaining to the results of a search.

Additional records that may be returned by the responses are listed in the "Electronic Biometric Transmission Specification (EBTS) version 11.0", "Table L-3, Record Set Requirements Summary by Type of Response."

6 TEMPLATES

To help agencies, users and vendors design and develop their XML processing system for FBI EBTS messages, the FBI has provided as part of this Interface Definition Package sample templates for EBTS XML messages.

6.1 Sample XML Instances

The FBI EBTS XML message templates (not to be taken as valid transactions) include:

- o **iep-sample\Data Management Service**
  Template(BDEC)BiometricDecisionSubmissionTransaction.xml
  Template(BDECR)BiometricDecisionResponseTransaction.xml
  Template(BDEL)BiometricDeletionSubmissionTransaction.xml
  Template(BDELR)BiometricDeletionResponseTransaction.xml
  Template(CDEL)CivilRecordDeleteRequest.xml
  Template(CDELR)CivilEventDeletionResponse.xml
  Template(CPD)CriminalSubjectPhotoDeleteRequestTransaction.xml
  Template(DSPE)DispositionFileMaintenanceRequest.xml
  Template(DSPR)DispositionFileMaintenanceResponse.xml
  Template(ERRA)AdministrativeTransactionErrorTransaction.xml
  Template(ERRL)LatentTransactionErrorTransaction.xml
  Template(FIS)BiometricImageSubmission.xml
  Template(FISR)BiometricImageSubmissionResponse.xml
  Template(PDR)PhotoDeleteResponseTransaction.xml
  Template(RBMNT)RapBackMaintenanceRequest.xml
  Template(RBMNTR)RapBackMaintenanceResponse.xml
  Template(RBSCRM)RapBackSubsequentSubscriptionRequestCriminal.xml
  Template(RBSCVL)RapBackSubsequentSubscriptionRequestCivil.xml
  Template(RBSR)RapBackSubscriptionResponse.xml
  Template(SPMNT)SpecialRepositoryMaintenanceRequest.xml
  Template(SPMNTR)SpecialRepositoryMaintenanceResponse.xml
  Template(SRNR)SupervisedReleaseNotificationRequestTransaction.xml
  Template(SRNRR)SupervisedReleaseNotificationResponse.xml
  Template(ULD)UnsolvedLatentRecordDeleteRequestTransaction.xml
  Template(ULDR)UnsolvedLatentDeleteResponseTransaction.xml
  Template(XACT)ExternalSystemLinkActivityRequest.xml
  Template(XACTR)ExternalSystemLinkActivityResponse.xml
  Template(XMNT)ExternalLinkFileMaintenanceRequest.xml
  Template(XMNTR)ExternalLinkFileMaintenanceResponse.xml

- o **iep-sample\Identification Service**
  Template(AMN)AmnesiaVictimTransaction.xml
  Template(CAR)CriminalAnswerRequiredTransaction.xml
  Template(CNA)CriminalTenprintSubmissionTransaction.xml
  Template(CPDR)CriminalFingerprintDirectRouteTransaction.xml
  Template(CPNU)CriminalFingerprintProcessingNonUrgentTransaction.xml
  Template(DEK)KnownDeceasedTransaction.xml
  Template(DEU)UnknownDeceasedTransaction.xml

Template(DOCE)DepartmentalOrderChannelingElectronicTransaction.xml
Template(EMUF)ElectronicInManualOutUserFeeTransaction.xml
Template(ERRL)LatentTransactionErrorTransaction.xml
Template(ERRT)TenPrintTransactionErrorTransaction.xml
Template(FANC)FederalApplicantTransaction.xml
Template(FAUF)FederalApplicantUserFeeTransaction.xml
Template(FDSP)ElectronicFingerprintDispositionSubmission.xml
Template(FIDR)ForeignInformationDirectRoute.xml
Template(FNDR)FederalNoChargeDirectRoute.xml
Template(IIDS)IrisIdentificationSearch.xml
Template(LFS)LatentFingerprintImageSubmissionTransaction.xml
Template(LSR)LatentSubmissionResultsTransaction.xml
Template(MAP)MiscellaneousApplicantCivilTransaction.xml
Template(MPR)MissingPersonTransaction.xml
Template(NFUE)NonFederalUserFeeExpediteTransaction.xml
Template(NFUF)NonFederalApplicantUserFeeTransaction.xml
Template(NNDR)NonFederalNoChargeDirectRouteTransaction.xml
Template(RPIS)RapidFingerprintIdentificationSearchTransaction.xml
Template(RPISR)RapidFingerprintIdentificationResponseTransaction.xml
Template(SRE)ElectronicSubmissionResultsTransaction.xml

- o **iep-sample\Information Service**
  Template(BATQ)BiometricAuditTrailRetrievalTransaction.xml
  Template(BATR)BiometricAuditTrailResponseTransaction.xml
  Template(CPR)CriminalSubjectPhotoRequestTransaction.xml
  Template(ERRI)InformationErrorResponseTransaction.xml
  Template(IRQ)FingerprintImageRequestTransaction.xml
  Template(IRR)FingerprintImageRequestResponseTransaction.xml
  Template(ISR)FingerprintImageSummaryResponseTransaction.xml
  Template(PRR)SubjectPhotoRequestResponseTransaction.xml
  Template(RBIHS)RapBackIdentityHistorySummaryRequest.xml
  Template(RBIHSR)RapBackIdentityHistorySummaryResponse.xml
  Template(RBRPT)RapBackSubscriptionListRequest.xml
  Template(RBRPTR)RapBackSubscriptionListResponse.xml

- o **iep-sample\Investigation Service**
  Template(EHRR)ElectronicHistoryRequestResponse.xml
  Template(EQER)ExternalQueryHistoryErrorResponseTransaction.xml
  Template(EQHR)ExternalQueryHistoryRequestTransaction.xml
  Template(EQRR)ExternalQueryHistoryRequestResponseTransaction.xml
  Template(ERRA)AdministrativeTransactionErrorTransaction.xml
  Template(ERRB)BiometricSearchErrorResponse.xml
  Template(ERRL)LatentTransactionErrorTransaction.xml
  Template(ERRR)TransactionErrorElectronicResponseTransaction.xml
  Template(FRS)FacialRecognitionSearchRequest.xml
  Template(LFFS)LatentFrictionRidgeFeaturesSearchTransaction.xml
  Template(LFIS)LatentFrictionRidgeImageSearchTransaction.xml
  Template(LPNQ)LatentPenetrationQueryTransaction.xml
  Template(LPNR)LatentPenetrationResponseTransaction.xml
  Template(LRSQ)LatentRepositoryStatisticsQueryTransaction.xml

Template(LRSR)LatentRepositoryStatisticsResponseTransaction.xml
Template(SRB)SearchResultsBiometric.xml
Template(SRL)SearchResultsLatentTransaction.xml
Template(SRT)SearchResultsTenprintTransaction.xml
Template(TPIS)TenprintFingerprintImageSearchTransaction.xml
Template(TPRR)TenprintRapSheetResponseTransaction.xml
Template(TPRS)TenprintRapSheetTransaction.xml
Template(TXTSRCH)TextBasedPhotoSMTSearchRequest.xml

- o **iep-sample\Notification Service**
    Template(RBN)RapBackActivityNotification.xml
    Template(RBRN)RapBackRenewalNotification.xml
    Template(SPN)SpecialPopulationCognizantNotification.xml
    Template(UBM)UnsolicitedBiometricMatchResponse.xml
    Template(UHN)UnsolicitedHitNotificationTransaction.xml
    Template(ULM)UnsolvedLatentMatchResponseTransaction.xml
    Template(UUBD)UnsolicitedUnsolvedBiometricDelete.xml
    Template(UULD)UnsolicitedUnsolvedLatentDeleteTransaction.xml

- o **iep-sample\Verification Service**
    Template(FVR)FingerprintVerificationRequestTransaction.xml
    Template(SRE)ElectronicSubmissionResultsTransaction.xml

7 CONFORMANCE

ANSI-NIST recognized its support of the business model demonstrated in the FBI CJIS Division's EBTS Specification and IEPD.

Systems claiming conformance with this standard shall implement the transmitting and/or receiving record types as defined by the ANSI/NIST-ITL1-2011 and EBTS Specifications and Technical and Operational Updates. At a minimum, they must be capable of transmitting and receiving Type-1 and Type-2 records.

Implementers may not introduce new elements or record types not supported by EBTS. All required elements and records must be present in a conforming instance document, even if the implementers' standards do not strictly enforce the requirement.