

Real Time Identification

... a National Police Services Project
Under the stewardship of the
Royal Canadian Mounted Police



AFIS INTERFACE CONTROL DOCUMENT

(AFIS ICD)

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**RCMP NATIONAL POLICE SERVICES
FORENSIC SCIENCE AND IDENTIFICATION SERVICES (FS&IS)
AFIS INTERFACE CONTROL DOCUMENT**

DISCLAIMER

The purpose of the specifications contained in this document is to enable the NPS NIST Server (the NNS) at the Royal Canadian Mounted Police (RCMP), to electronically exchange information with the RCMP National AFIS. This specification will enable the exchange of data between these systems in support of Fingerprint Identification Services, Criminal Records Maintenance, Civil Screening processes and International Exchange Services.

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RECORD OF AMENDMENTS

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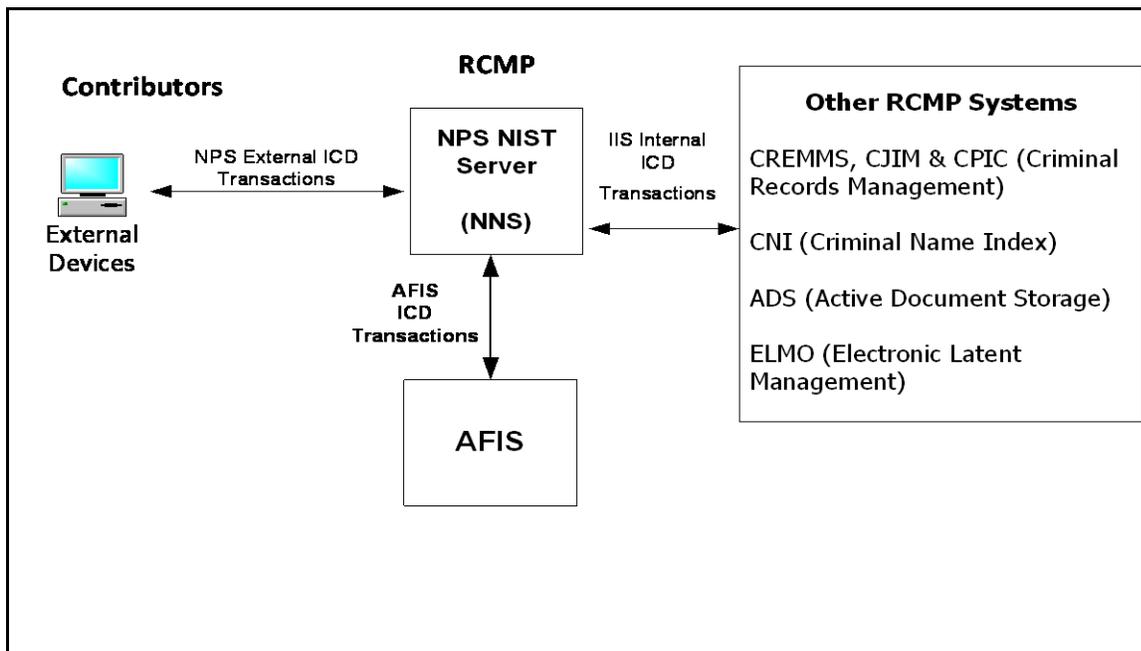
1. INTRODUCTION

The RCMP Forensic Science and Identification Services Directorate (FS&IS) uses several autonomous computer systems in support of fingerprint identification and criminal record maintenance functions. These systems have been developed at various points in time and are not fully integrated due to differing database and platform technologies employed. To facilitate communication between these systems, a set of Interface Control Documents containing transaction specifications has been defined.

This document, the AFIS Interface Control Document (AFIS ICD) defines all NIST-based transactions interchanged between the NNS and AFIS. The AFIS ICD should be read in conjunction with the various NPS NIST Interface Control Documents for External Contributors (the NPS External ICDs). Information that is common to both documents, such as definitions for RCMP-defined descriptor tags, can be located in the NPS External ICDs.

The FS&IS Internal Subsystem Interface Control Document (IIS ICD) describes other transactions designed to facilitate data exchange between the NNS and other RCMP applications required to support RCMP business processes.

The following diagram is a high level depiction of the positioning and use of the AFIS ICD transactions.



As shown above, those transactions included in this specification facilitate the interchange of information between the AFIS and the NNS. AFIS functionality must be built to receive and process request transactions from the NNS and to provide responses back to the NNS as per the data specifications documented herein.

1.1 OVERVIEW

This document contains the details of all AFIS ICD transactions required to provide communication capabilities between the NNS and AFIS. The transactions defined herein contain the information necessary to process NNS "requests" involved in the biometric identification processes at FS&IS.

The implementation of the interface protocol is not documented in this specification. Refer to the *Web Service Transport Description Document* (RDIMS #18413) for a description of these details.

All transactions are documented as a logical representations conformant with conventional ANSI/NIST "tag number:tag value" encoding standards. All transactions are formatted according to ANSI/NIST specifications. External requests requiring the services of the AFIS will be firstly routed through the NNS. The AFIS is expected to be insulated from external transactions and it is a role of the NNS to translate external requests into one or more internal transactions defined within this specification. By doing so, the NNS ensures that the AFIS is exposed to one common interface since all external requests are converted to one standard set of internally-defined transactions prior to processing by AFIS. Foreign conversions, compatibility with previous versions of the NPS External ICD and changing business rules wherever possible are shielded by the NNS from AFIS. The internal interface specifications provided by this AFIS ICD will provide the RCMP with more flexibility to change its business processes and contain requirements for modifications to the AFIS.

This document is intended to be a data interchange specification for both the AFIS vendors and NNS developers. As a data specification, the AFIS ICD does not provide exhaustive details of functionality provided by the NNS or that to be provided by the AFIS system.

Readers must also keep in mind that AFIS Verification Subsystem functionality and transaction interchange with external contributors is not in scope of this ICD. Verification requests and responses are not routed through the NNS, and accordingly, no specification details are provided herein.

1.2 REFERENCES

Reference documents are listed below.

- American National Standard for Information Systems, Data Format for the Interchange of Fingerprint, Facial & Other Biometric Information, ANSI/NIST-ITL 1-2011: UPDATE 2013, NIST Special Publication 500-290 Rev1 Version 2 (2013), December 2013
- Electronic Biometric Transmission Specification (EBTS), Criminal Justice Information Services, FBI, Version 7, July 2, 2013, NGI-DOC-01078-10.0
- RCMP Web Service Transport Description, June 5, 2006, RDIMS Document No. 18413

The RCMP publishes and supports several National Police Services NIST Interface Control Document versions. These NPS NIST ICD versions provide the necessary data interchange specifications to allow external contributors to submit transactions to the RCMP's RTID system and to receive RTID responses to their searches, inquiries and enrolment requests. Within this AFIS ICD specification, these NPS NIST ICD documents are also referred to collectively as the **NPS External ICDs**. These are:

- National Police Services NIST Interface Control Document for External Contributors (NPS NIST ICD) version 1.7.7E2 (RDIMS #22062)
- National Police Services NIST Interface Control Document for External Contributors (NPS NIST ICD) version 1.7.8 (RDIMS #38923)
- National Police Services NIST Interface Control Document for TRB External Contributors (NPS NIST ICD) version 2.1.0 (RDIMS #35766)
- National Police Services NIST Interface Control Document for Immigration External Contributors (NPS NIST ICD) version 2.1.1 (RDIMS #40361)

1.3 INTERNAL TRANSACTION INTEGRITY

The protocol used to implement communications between subsystems must include a means of providing transactional integrity by providing:

1. Reliable units of work that deliver complete, consistent update results and correct recovery upon any type of failure;
2. Independence and isolation for multiple transactions running concurrently within any subsystem.

Transactional integrity implies that the subsystems exchanging internal transactions shall communicate with each other in such a way that all system-related errors encountered between subsystems are trapped and raised to the appropriate user groups who monitor and administer the subsystems involved. An application-detected error raised within a subsystem must be returned to the calling subsystem with appropriate supporting error details. All errors must be made available in an easily accessible and clearly readable format to the person tasked with investigating the circumstances.

The RTID document entitled *Web Service Transport Description*, RDIMS #18413, summarizes the current technical approach to error handling at the system and communication level.

1.4 TRANSACTION CONTROL NUMBER GENERATION

Transaction Control Number (TCN) is used to uniquely identify each transaction that is created by the NNS or other Internal Subsystems. It is placed in the NIST Type-1 record in tag 1.009 of a request transaction. The TCN shall be formatted as a 12 digit number consisting of 2 leading zeroes followed by a 10 digit sequence number. The two leading zeroes are fixed to prevent conflicts with NPS external TCN numbering. When a reply is sent by the NNS to an external contributor, an internally generated TCN is assigned by the NNS to the Type-1 Record. In order to establish uniqueness, the following sequence number ranges are made available to the subsystems involved in creating TCNs. For example, AFIS will require the ability to generate its own unique TCNs for the reply transactions (e.g., the STI, the TPREI).

Subsystem	Start TCN Range	End TCN Range
NNS and other RCMP systems	0 000 000 001	5 499 999 999
Formerly ELMO (reserved for the express use of the RCMP)	5 500 000 000	5 999 999 999
AFIS	6 000 000 000	6 999 999 999
AFIS Verification Subsystem	7 000 000 000	7 999 999 999
AFIS	8 000 000 000	8 999 999 999
Formerly Paper Conversion (reserved for the express use of the RCMP)	9 000 000 000	9 999 999 999

Notes:

Spaces shown within numbers presented in this table are for readability only.

Upon any upgrade or enhancement of either NNS or AFIS System, it is the responsibility of the applicable implementation support group to ensure all starting seed TCN values are appropriately set to resume number assignment based on last used values.

TCN values assigned to the Type-1 record for all transactions defined in this ICD are always formatted as unique positive integer values and are commonly referred to within the NNS as "Internal TCN" values. These are not to be confused with Type-2 tag 2.1052 Contributor TCN values which appear in various AFIS ICD transactions. A Contributor TCN is an alphanumeric value of up to 40 characters in length that originally appears as the Type-1 TCN supplied in a submission originating from one of the RCMP's authorized external contributors.

1.5 POPULATION OF TCR

When a transaction is created by AFIS in response to a transaction initiated by the NNS, then the AFIS must include the TCN (tag 1.009) of the transaction passed to AFIS in the TCR (tag 1.010) of the corresponding response transaction.

1.6 DATE/TIME FORMATS

The format for an 8 digit date shall be as follows: YYYYMMDD (all numerics; year, month and day values form a consistent date value).

The date/time format may be one of 12, 14 or 18 digits as follows:

- YYYYMMDDhhmm
- YYYYMMDDhhmmss
- YYYYMMDDhhmmssSSSS where

YYYY is a four digit year (e.g., 2017),

MM is the month number (01–12),

DD is the day of the month (01–31),

HH is the hour of the day, expressed in a 24-hour clock representation (00–23),

mm is the minute of the hour (00–59),

ss is a whole number of seconds within the minute (00–59),

SSSS is a fractional portion within second (0000–9999)

1.7 POPULATION OF OAI AND DAI

For transactions sent by the NNS to AFIS

When the NNS sends a request transaction to AFIS which is connected to the workflow for a submission received from an external contributor, the NNS shall set tag 1.008 OAI to the ORI value assigned to that contributor (example: AB12345 – some contributor located in Alberta).

When the NNS sends a request transaction to AFIS which has no relationship to a contributor submission, the NNS shall set tag 1.008 to the ORI value assigned to the NNS (example: ON70001 – the NPS NIST Server).

In either case, the NNS sets tag 1.007 DAI to the ORI value assigned to the AFIS (example: IC12002 – the AFIS System).

For transactions sent by AFIS to the NNS

When AFIS sends a response transaction back to the NNS, AFIS shall set tag 1.008 OAI to its assigned ORI value (example: IC12002).

AFIS shall also set tag 1.007 DAI to the ORI value assigned to the NNS (example: ON70001 – the NPS NIST Server), and not the ORI of a contributor who might be identified in the request transaction.

1.8 DERIVATION RULES FOR DCN AND DOCID

The format of a system-generated Document Control Number (**DCN**) is as follows:

“CYYJJJNNNNNNNnnnnESK” (20 digits), where:

C is current century (“0”=19xx, “1”=20xx)

YY is last two digits of current year (e.g. “03” when 2003)

JJJ is Julian Date, the number of days counting from Jan. 1st (e.g. “032” when February 1st)

NNNNNNN is the numeric representation of the contributing Agency ID (ORI)

nnnn is a sequence number 0001, 0002, etc,

E is the system environment that created the DCN

0 = CREMMS

1 or 2 = externally generated (by a contributor)

9 = Data Conversion

Note: Livescans assign a value of 1 for E; CREMMDES assigns values 1 or 2.

S is Type of Request (0 = Livescan, 3=Criminal, 4=Civil, 5=Refugee)

K is a calculated Check Digit (Mod 10)

Details of the modulus 10 check digit calculation can be found in any of the NPS External ICD versions.

The format of a system-generated Document Identifier (**DOCID**) is as follows:

“CYYJJN>NNNNNDPPPEK” (20 digits) where:

C is current century (“0”=19xx, “1”=20xx)

YY is last two digits of current year (e.g. “03” when 2003)

JJJ is Julian Date, the number of days counting from Jan. 1st (e.g. “032” when February 1st)

NNNNNN is a sequence number that remains the same for all documents in a submission and restarts at 000001 each day

DD is document type (see AFIS ICD for list of permissible values)

PPP is page number 001, 002, etc.

E is the system environment that created the number

0 = CREMMS (old style DOCID)

3 = NPS NIST Server

4 = PC Subsystem

5 = CREMMS (new style DOCID)

9 = Data Conversion

S is Single Side vs Double Side Indicator

0 = Single Side

1 = Front of a Double Side document

2 = Back side of a Double Side document

K is a calculated Check Digit (Mod 10)

The same modulus 10 check digit calculation defined for DCN is applied here to DOCID. See the calculation details in any of the NPS External ICD versions.

1.9 STANDARD NPS CHARACTER TYPES

All data tags populated in NIST transactions are composed of one or more of the following character types:

A (Alphabetic) - refers to all upper case letters (A to Z), defined in the ASCII character set, decimal 65 to 90 inclusive.

B (Binary) – a binary representation, constrained only by length and not by value

D (Date) – an 8 digit numeric value representing a date in format YYYYMMDD

T (Date/Time) – one of YYYYMMDDhhmm (12 digits), YYYYMMDDhhmmss (14 digits) or YYYYMMDDhhmmssSSSS (18 digits)

N (Numeric) – refers to 10 digits (0 to 9) defined in the ASCII character set, decimal 48 to 57 inclusive.

S – RCMP Special Character Set; refers to allowable ASCII characters appearing in Table 2-1 and Table 2-2.

Table 1-1: RCMP Special Character Set			
Character Name	Character Image	Decimal Value	Hexadecimal Value
Space		32	'20'
Number Sign	#	35	'23'
Dollar Sign	\$	36	'24'
Ampersand	&	38	'26'
Apostrophe	'	39	'27'
Left Bracket	(40	'28'
Right Bracket)	41	'29'
Asterisk	*	42	'2A'
Comma	,	44	'2C'
Hyphen	-	45	'2D'
Period	.	46	'2E'

Other ASCII characters are allowable within certain NPS tags, as indicated by the "Special Characters Allowed" notes found in the logical record definitions. Those characters allowed on an individual tag basis appear in Table 1-2 below.

Table 1-2: Other Special Characters Allowed by Specific Tags			
Character Name	Character Image	Decimal Value	Hexadecimal Value
Line Feed <LF>		10	'0A'
Carriage Return <CR>		13	'0D'
Question Mark	?	63	'3F'
At Sign	@	64	'40'
Underscore	_	95	'5F'

1.10 HANDLING OF US LFFS TRANSACTIONS AND REPLIES

Note to reader: The capability described in this section is not currently operational within the NNS environment.

The RCMP's AFIS shall generate US LFFS transactions and forward these to the NNS to pass on to the FBI NGI (IAFIS) system. In this case, a link between the US LFFS and the specific Latent Image ID is required in order for the NNS to correlate the US LFFS to a specific latent image instance. The RCMP's AFIS shall add tag 2.8336 (Latent Image Identifier) to the standard US EBTS LFFS Type 2 Record prior to forwarding the transaction to the NNS.

2. SUBSYSTEM TRANSACTIONS

2.1 TENPRINT TRANSACTIONS

Listed below are the transactions defined by the RCMP to support Tenprint workflows implemented by the NNS and AFIS.

TOT	<u>INTERNAL TRANSACTION</u>
TPRI	Tenprint Search Request
TPREI	Tenprint Search Response
TPQCI	Tenprint Quality Control Response
TPDI	Tenprint Delete
TPDRI	Tenprint Delete Response
TPWDI	Tenprint Work in Progress Delete
TPWDRI	Tenprint WIP Delete Response
TPAI	Tenprint Amend
TPARI	Tenprint Amend Response
IRQI	Image Retrieval Request
IRRI	Image Retrieval Response
TPCI	Tenprint Pre-Certification
ILRI	Image List Retrieval
ILRRI	Image List Retrieval Response
TPULI	Tenprint to Unsolved Latent Response
TPCNI	Tenprint Consolidation Request
TPCNRI	Tenprint Consolidation Response

2.1.1 TENPRINT SEARCH REQUEST (TPRI)

This transaction is used by the NNS to send a Tenprint request to AFIS for searching and possibly to enrol the Tenprint subject in an AFIS repository. Each internal Tenprint Search Request will have a set of parameters directing AFIS to perform specific steps such as:

- Image Quality Check
- Validation of a Biometric Consent image to one applicable Tenprint image
- One to One Tenprint Match
- One to Many TP Search
- TP Certification upon hit
- Reverse Search to Latent Repositories

In addition, the incoming transaction will indicate which file types (AFIS repositories) to search against.

The types and quantities of logical records that may be included in a Tenprint Request (TPRI) based on a submission consisting of traditional RT-4 rolled and plain images are as follows:

- 1 Type-1 Header Record
- 1 Type-2 Record (Data Descriptors)
- 0 – 14 Type-4 Records (10 Rolled Impressions and 4 Sets of Plain Impressions)
- 0 – 10 Type-10 Records (Photo Images)
- 0 – 1 Type-14 Record (Biometric Consent Finger Image)
- 0 – 6 Type-15 Records (Palm Print Image)
- 0 – 20 Type-16 Records (Document Images)

The types and quantities of logical records that may be included in a Tenprint Request (TPRI) consisting of alternate RT-14 rolled and plain images are as follows:

- 1 Type-1 Header Record
- 1 Type-2 Record (Data Descriptors)
- 0 – 10 Type-10 Records (Photo Images)
- 0 – 15 Type-14 Records (10 Rolled Impressions and 4 Plain Impressions plus one Biometric Consent Finger Image)
- 0 – 6 Type-15 Records (Palm Print Image)
- 0 – 20 Type-16 Records (Document Images)

The types and quantities of logical records that may be included in a Tenprint Request (TPRI) constituted as Identification Flats in "4-4-2" configuration are as follows:

- 1 Type-1 Header Record
- 1 Type-2 Record (Data Descriptors)
- 0 – 10 Type-10 Records (Photo Images)

0 – 4 Type-14 Records (3 Plain Impressions plus one Biometric Consent Finger Image)

0 – 6 Type-15 Records (Palm Print Image)

0 – 20 Type-16 Records (Document Images)

As a result of a TPRI transaction, AFIS may return one or more of the following responses:

A TPREI (Tenprint Search Response) shall contain the search/enrol results of the request transaction, unless rejected as indicated in the TPQCI;

A Status Transaction (STI) where an AFIS process requires manual intervention; example: Wait for Manual QC;

A TPQCI upon completion of Quality Control verification. An automated QC step may be performed on its own to confirm image quality, in which case, the TPQCI is returned upon completion of the automated QC step. When it is determined that both automated QC and manual QC steps must be performed, the TPQCI shall be returned upon completion of the manual QC step;

One or two TPULI Reverse Search results are returned upon completion of each requested reverse search (Tenprint fingers to ULF, and possibly, Tenprint palms to ULF);

A TPCNI consolidation result is returned upon certification to multiple files;

An ERRIN is returned when an error has occurred and the AFIS is unable to process the transaction.

The response transaction (TPREI) contains information relative to the normal completion of the TPRI transaction.

For each TPRI received, AFIS normally responds with zero to many STI Transactions, one TPQCI transaction, one TPREI transaction, one TPULI reverse search result based on finger images and another optional TPULI result based on palm images.

2.1.2 TENPRINT SEARCH RESPONSE (TPREI)

This transaction is used by the AFIS to return the final search/enrol results of a TPRI to the NNS. Depending on the parameters set in the TPRI it may contain the identification result in the form of:

- a search result
- a verification result
- a certification result
- fingerprint match results required by the NNS to produce a Match Report

The AFIS Match information will be returned as structured data in the Type-2 Record. Certain activity logging information will be included in the TPREI.

The following logical records are included in a TPREI:

1 Type-1 Header Record

1 Type-2 Record (Data Descriptors)

2.1.3 TENPRINT QUALITY CONTROL RESPONSE (TPQCI)

This transaction is returned to the NNS by the AFIS upon completion of QC verification that the finger images are sufficiently distinct and complete in order to proceed with a search/enrolment.

The TPQCI may contain the following rejection outcomes when poor quality prints are encountered:

Automatic Quality Rejection

Manual Quality Rejection

Request for Rescan

Where a rejection outcome is returned, then the TPRI transaction is considered complete.

The following logical records are included in a TPQCI:

1 Type-1 Header Record

1 Type-2 Record (Data Descriptors)

2.1.4 TENPRINT DELETE (TPDI)

This transaction is used by the NNS to request the deletion of Tenprint entries held in an AFIS repository. An NNS File Number or unique DCN must be provided. Multiple occurrences of File Number and/or DCN may be specified in order to delete several sets of fingerprints.

If DCN is not provided, all fingerprints associated to a specific file identified by File Number will be deleted. If a DCN is specified in the TPDI, then one the specific Tenprint entry corresponding to the DCN will be deleted.

The TPDI will delete the complete Tenprint entry including palm images, fingerprint images, feature sets, descriptors, file reference numbers, photos and any Type-2 data retained on file for that particular set of fingerprints. A best composite set previously derived from the deleted Tenprint entry must be reconstituted from other tenprint sets retained on file. The TPDI shall not delete AFIS transaction log, statistics or match data related to the Tenprint entry.

If the transaction fails in AFIS, then an ERRIN is returned. If a particular set of prints is not found in the database, then the success indicator is set to negative in the TPDI.

The types and quantities of logical records included are as follows:

1 Type-1 Header Record

1 Type-2 Record (Data Descriptors)

The possible response transactions are:

Internal Error Transaction (ERRIN)

Tenprint Delete Response (TPDI)

2.1.5 TENPRINT DELETE RESPONSE (TPDRI)

This transaction is used by the AFIS to notify the NNS of the result of a TPDI. It will indicate which Tenprint entry or entries have been deleted from the Tenprint database.

The types and quantities of logical records included are as follows:

- 1 Type-1 Header Record
- 1 Type-2 Record (Data Descriptors)

2.1.6 TENPRINT WORK IN PROGRESS DELETE (TPWDI)

This transaction is used to request the deletion of a Tenprint submission from Work In Progress (WIP) within an AFIS workflow that was previously started but not completed. The DCN identifying a Tenprint workflow in flight must be provided.

The TPWDI will delete the complete tenprint request including rolled and plain fingerprint images, palm images, photos and all file reference numbers and Type-2 descriptors retained as Work In Progress on AFIS for that particular DCN.

There will be occasions when the NNS needs to handle a Tenprint workflow failure that occurs prior to the completion of that workflow. Subsequent to that failure, the NNS shall issue a TPWDI request to AFIS to clear all WIP content for the TP submission that failed. The NNS shall then resend to AFIS the tenprint request for that submission in order to restart the workflow from the beginning.

If the particular DCN is not found in AFIS, then the success indicator is set to negative in the TPWDRI.

If the transaction fails in AFIS for reasons other than DCN not found, then an ERRIN is returned.

The types and quantities of logical records included are as follows:

- 1 Type-1 Header Record
- 1 Type-2 Record (Data Descriptors)

The possible response transactions are:

- Internal Error Transaction (ERRIN)
- Tenprint WIP Delete Response (TPWDRI)

2.1.7 TENPRINT WORK IN PROGRESS DELETE RESPONSE (TPWDRI)

This transaction is used by the AFIS to notify the NNS of the result of a TPWDI. It will indicate for each WIP region whether the deletion request was successful or not.

The types and quantities of logical records included are as follows:

- 1 Type-1 Header Record
- 1 Type-2 Record (Data Descriptors)

2.1.8 TENPRINT AMEND (TPAI)

This transaction is used by the NNS to set or amend Tenprint information on the AFIS. Using this internal transaction, a file reference number could be assigned to the specific set of fingerprints identified by DCN. This transaction can also be used to amend the priority of a transaction in WIP. All changes made to a Tenprint entry as a result of an internal Tenprint Amend transaction shall be logged by AFIS.

This transaction will be used routinely to set an NNS-assigned File Number to a specific set of fingerprints.

The types and quantities of logical records included are as follows:

- 1 Type-1 Header Record
- 1 Type-2 Record (Data Descriptors)

The possible response types of transactions are:

- Internal Error Transaction (ERRIN)
- Tenprint Amend Response (TPARI)

2.1.9 TENPRINT AMEND RESPONSE (TPARI)

This transaction is sent to the NNS from AFIS to acknowledge the completion of the Tenprint Amend request.

The types and quantities of logical records included are as follows:

- 1 Type-1 Header Record
- 1 Type-2 Record (Data Descriptors)

2.1.10 IMAGE RETRIEVAL REQUEST (IRQI)

This transaction is used by the NNS to instruct the AFIS to fetch fingerprint, palm and/or photo images from a Tenprint repository. The IRQI will contain a File Number and/or DCN to locate the required information. The images requested might include fingers, palms, photos or a combination thereof. When requesting fingers and only a File Number is specified, the best composite set of finger images for that File Number shall be fetched. Best composite set of palms is not supported.

Photos can be requested when fetching one specific Tenprint set (identified by DCN) or when fetching best composite set of fingerprints.

When a DCN is specified, the Image Request will return the specific set of images requested along with the file descriptors associated with that DCN. The types and quantities of logical records included are as follows:

- 1 Type-1 Header Record

1 Type-2 Record (Data Descriptors)

The responses may include:

Internal Error Transaction (ERRIN)

Image Request Response (IRRI)

2.1.11 IMAGE REQUEST RESPONSE (IRRI)

This transaction is issued by the AFIS in response to an IRQI request to retrieve fingerprint, palm and/or photo images from a Tenprint repository.

If the AFIS cannot find all of the Image Types requested it will set the Success Indicator to 'Failure' but still return as many images as possible of the types requested.

The types and quantities of logical records included are as follows:

1 Type-1 Header Record

1 Type-2 Record (Data Descriptors)

0 – 14 Type-4 Records (10 Rolled Impressions and 4 Plain Impressions, when available)

0 – 20 Type-9 Records (Minutiae Data) corresponding to the finger and palm images

0 – 14 Type-14 Records (10 Rolled Impressions and 4 Plain Impressions, or, 3 Plain Impressions representing a set of Identification Flats in 4-4-2 arrangement)

0 – 6 Type-15 Records (Palm Print Images)

0 – 10 Type-10 Records (Photo Images)

Note: When the IRQI transaction requests composite set of fingerprints plus photos, the AFIS shall determine which Tenprint set with photos has the most recent value within tag 2.8038 Date Fingerprinted and shall return the photos stored for that particular Tenprint set.

2.1.12 TENPRINT PRE-CERTIFICATION (TPCI)

This transaction is most commonly issued by the AFIS to the NNS when a tenprint search is pending certification to two or more enrolled subjects. The NNS is provided with the File Numbers to which the transaction is expected to be certified to.

The types and quantities of logical records included are as follows:

1 Type-1 Header Record

1 Type-2 Record (Data Descriptors)

2.1.13 IMAGE LIST RETRIEVAL (ILRI)

This transaction is submitted by the NNS to AFIS to fetch a list of fingerprint sets available by DCN for a specified File Number.

The types and quantities of logical records included are as follows:

1 Type-1 Header Record

1 Type-2 Record (Data Descriptors)

The responses may include:

Internal Error Transaction (ERRIN)

Image List Retrieval Response (ILRRI)

2.1.14 IMAGE LIST RETRIEVAL RESPONSE (ILRRI)

This transaction is the transaction sent by AFIS to the NNS in response to the Image List Retrieval (ILRI). It will contain a list of prints available on the AFIS by DCN for the specified File Number. Other descriptors on file such as and Date Fingerprinted shall also be returned in the response.

The types and quantities of logical records included are as follows:

1 Type-1 Header Record

1 Type-2 Record (Data Descriptors)

2.1.15 TENPRINT TO ULF RESPONSE (TPULI)

This transaction is used by AFIS to send the results of a Tenprint to ULF (reverse search) to the NNS. When a potential identification is detected, the results shall have been certified within AFIS and the certification details shall be returned to the NNS within the TPULI transaction. Certification details will include a "screenshot image" from the AFIS UI that combines the latent search image and the matching Tenprint image as viewed at the time of certification.

The types and quantities of logical records included are as follows:

1 Type-1 Header Record

1 Type-2 Record (Data Descriptors)

0 – 20 Type-16 Records (Certification screen images)

2.1.16 TENPRINT CONSOLIDATION (TPCNI)

This transaction is issued by the AFIS to the NNS when fingerprints received in a TPRI Tenprint transaction have certified to more than one subject identifier. After the TPCNI transaction has been sent, the AFIS shall then await the return of a TPCNRI response from the NNS. The TPCNRI provides confirmation of which AFIS Subject Identifiers are to be included or excluded from the intended consolidation. The types and quantities of logical records included are as follows:

1 Type-1 Header Record

1 Type-2 Record (Data Descriptors)

2.1.17 TENPRINT CONSOLIDATION RESPONSE (TPCNRI)

This transaction is issued by the NNS to AFIS in response to a Tenprint Consolidation (TPCNI) transaction and contains information as to which AFIS Subject Identifiers are to be included or

excluded from the AFIS consolidation action. The types and quantities of logical records included are as follows:

- 1 Type-1 Header Record
- 1 Type-2 Record (Data Descriptors)

2.2 TENPRINT TRANSACTION DETAILED LOGICAL RECORD FORMATS

The following detailed Type-2 record formats facilitate communication between the AFIS and the NNS when searching, enrolling or fetching from a Tenprint repository. Definitions of all tags numbered in the 2.8xx and 2.8xxx ranges can be found in the NPS External ICD versions 1.7.8 and 2.1.1. Allowable code values for these numbered tags are also documented in the same NPS External ICD versions.

2.2.1 TENPRINT SEARCH REQUEST (TPRI)

This Type-2 record contains processing parameters and Tenprint descriptors needed by AFIS to process the Tenprint request.

TPRI Tenprint Search Request: Type-2 Record Definition									
Ident-ifier	Condition	Field Number	Field Name	Char-acter Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
LEN	M	2.001	Logical Record Length	N	2	7	1	1	This field is set to the total length of all bytes contained in the record
IDC	M	2.002	Image Designation Character	N	1	5	1	1	This field identifies a specific record occurrence within a transaction packet. Refer to the ANSI/NIST specification for details on its encoding.
SEX	M	2.807	Sex	A	1	1	1	1	
RIN	O	2.863	Regional Identifier Number	N	1	4	0	1	Reserved for RCMP use. Tag pertains to legacy data only.
BCID	O	2.889	Biometric Consent Image Designator	N	1	5	0	1	Contains the Image Designation Character of the Type-14 Record to be used for biometric consent when so required, typically in context of a MAP civil clearance request.
FQO	O	2.893	Fingerprint Quality Override				0	14	Specifies the fingerprint poor quality override reasons by finger position.
	M		Finger Number	N	2	2	1	1	
	M		Reason Code	N	2	2	1	1	

TPRI Tenprint Search Request: Type-2 Record Definition									
Identifier	Condition	Field Number	Field Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
	C		Description	ANS	1	50	0	1	
TOTR	M	2.1003	Type of Transaction Code Received	A	3	5	1	1	This tag identifies the type of transaction originally received by the NNS for which the TPRI was created. One of CAR, REF, MAP, IMM, ATS. When an enrolment is filed directly into a Tenprint repository through the AFIS UI using the TPRI transaction type, this tag may be set to one of CARI, REFI or MAPI.
FNUM	O	2.1009	Name Based File Number	N	12	12	0	100	File Numbers of subjects selected by the NNS on the basis of Name against which the TPRI will be searched. This could also refer to a File Number that is supplied by the contributor of the TP submission. When populated, a 1:1 match must be performed against all fingerprints for each of these file numbers.
SEF	M	2.1013	1:N Search Indicator	N	1	1	1	1	Indicates whether a one-to-many search is to be performed. This search type matches the TPRI against all Tenprint sets after filtering. Filtering might include File Type Code selection. Valid values: 0. Do not perform. 1. Perform.
CEF	M	2.1015	Manual Certification Indicator	N	1	1	1	1	Indicates whether Certification must be performed manually. If the value is set to '0' then auto certification is performed with no manual intervention. Valid values: 0. Do not perform. 1. Perform upon hit. 2. Certify candidate file numbers directly (reserved by the RCMP for future use).

TPRI Tenprint Search Request: Type-2 Record Definition									
Identifier	Condition	Field Number	Field Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
RSC	M	2.1022	Allowed to Auto Reject Indicator	N	1	1	1	1	Indicates that the transaction can be automatically rejected based on quality without the need for human intervention. 1. Yes 0. No
PCI	O	2.1023	Paper Certification Indicator	N	1	1	0	1	Reserved for RCMP use. Tag pertains to legacy data only.
TPSC	C	2.1028	Tenprint Target Set Codes	N	1	1	0	6	Indicates the Tenprint repositories that are to be searched for this transaction. Mandatory if the 1:N Search Indicator is set to positive. 1. Criminal 2. Refugee 3. Employee 4. Immigration 5. Repository 5 6. Repository 6
DADS	O	2.1038	Display ADS Flags at Certification Indicator	N	1	1	0	1	Reserved for RCMP use. Tag pertains to legacy data only.
FNA	O	2.1040	File Number to Assign	N	12	12	0	1	When encoded, specifies the File Number to assign upon enrolment of a TP set.
RDCN	M	2.1041	Contributor DCN	N	20	20	1	1	The Document Control Number value supplied on an external submission (CAR, IMM, MAP, etc) which uniquely identifies the submission.
RETCN	M	2.1052	Contributor TCN	ANS	10	40	1	1	The Transaction Control Number assigned by the originating agency to their submission.

TPRI Tenprint Search Request: Type-2 Record Definition									
Identifier	Condition	Field Number	Field Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
DTR	M	2.1053	Date/Time Received	T	12	18	1	1	The date/time that the submission was received by the RCMP. Going forward, the NNS shall provide a date/time value encoded at length 18. Shorter lengths pertain to legacy data only.
ERET	M	2.1138	Internal Retention Code	A	1	1	1	1	This field identifies whether this TPRI transaction is to be retained (enrolled on AFIS) or used for search only. Y – Yes N – No
FTC	O	2.1196	File Type Code	N	1	1	0	1	Represents the file type code to assign. Must be populated when the Internal Retention Code is "Y" (Yes). File type code equates to an AFIS Tenprint repository number. 1. Criminal 2. Refugee 3. Employee 4. Immigration 5. Repository 5 6. Repository 6
DOCID	O	2.1270	Document Identifier	N	20	20	0	1	Unique identifier associated with the specific fingerprint form.
TPPI	M	2.1291	ID Flats to TP Search Indicator	N	1	1	1	1	Indicates that the AFIS is to perform a search involving a set of Identification Flats against the specified Tenprint repositories. This will be set to Yes when an external submission contains Identification Flats within Type-14 records (organized in a 4-4-2 representation). Valid values: 0 – No 1 – Yes

TPRI Tenprint Search Request: Type-2 Record Definition									
Ident-ifier	Condition	Field Number	Field Name	Char-acter Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
URSI	M	2.1296	Urgent Reverse Search Indicator	N	1	1	1	1	Reserved for future use to indicate that this transaction is subject to urgent reverse search. The NNS will expect an STI indicating whether there are candidates or not. Valid values: 0 – No 1 – Yes Until such time that this functionality is required by the RCMP, the tag shall be set to 0 (No).
LTC	C	2.8018	Latent Type Code	N	1	1	0	2	Mandatory if a reverse search is requested in tag 2.8295. 1 – Finger 2 – Palm
AAI	M	2.8021	Added by Agency Identifier	AN	7	7	1	1	Represents the external contributor’s identifier (ORI).
DPR	M	2.8038	Date Fingerprinted	D	8	8	1	1	
MFR	O	2.8084	Missing Fingerprint Reason				0	14	
	M		Finger Position Code	N	2	2	1	1	
	M		Missing Fingerprint Reason Code	A	2	2	1	1	
	O		Missing Fingerprint Date	D	8	8	0	1	
RSTS	O	2.8295	Latent Reverse Search Target Set Code	N	1	1	0	6	Indicates latent repositories to search against: 1. ULF 2. Repository 2 3. Repository 3 4. Repository 4 5. Repository 5 6. Repository 6

2.2.2 TENPRINT SEARCH RESPONSE (TPREI)

The following table contains the contents of a Tenprint Search Response (TPREI). It includes the results of the Tenprint Request.

TPREI Tenprint Search Response: Type-2 Record Definition									
Ident-ifier	Condition	Field Number	Field Name	Char-acter Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
LEN	M	2.001	Logical Record Length	N	2	7	1	1	This field is set to the total length of all bytes contained in the record
IDC	M	2.002	Image Designation Character	N	1	5	1	1	This field identifies a specific record occurrence within a transaction packet. Refer to the ANSI/NIST specification for details on its encoding.
PLMRI	C	2.1011	Palms Retained Indicator	N	1	1	0	1	Indicates whether the palm prints were retained or not on AFIS. Valid values: 0 – No 1 – Yes Mandatory when palms (RT-15) are provided in the TPRI.
RDCN	M	2.1041	Contributor DCN	N	20	20	1	1	Set to the same Contributor DCN value as provided in the TPRI request transaction
RETCN	M	2.1052	Contributor TCN	ANS	10	40	1	1	Set to the same Contributor TCN value as provided in the TPRI request transaction
AOSR	O	2.1061	AFIS Search Results				0	100	Provides AFIS Search Results as a recurring set of candidates identified by unique AFIS Subject Identifier. Only distinct values of AFIS Subject Identifier are to be returned in this list. If a consolidation has occurred on AFIS, this list shall contain the candidate information as it existed prior to consolidation.

TPREI Tenprint Search Response: Type-2 Record Definition									
Identifier	Condition	Field Number	Field Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
	M		Candidate Rank	N	1	3	1	1	Represents the position in the list of AFIS candidates, starting at 1 and incrementing by 1 for each subsequent occurrence.
	M		AFIS Subject Identifier	AN	8	8	1	1	Represents the AFIS-assigned unique Subject Identifier of the candidate.
	M		Candidate Indicator	N	1	1	1	1	Indicates whether the system declared a hit or a candidate from the grey zone. Valid values are: 0 - System Declared Candidate (candidate from the grey zone) 1 - System Declared Hit (candidate found above the upper threshold)
	M		Match Score	N	1	10	1	1	Represents the AFIS match score used for ranking of the returned candidates, the list being organized from highest to lowest score.
	M		Manual Verification Disposition Code	N	1	1	1	1	Represents the outcome of manual verification of the candidate. 0 – No hit 1 – Hit 2 – Not viewed The AFIS must set the value to '2' (Not viewed) if the verifier has not taken any action on the candidate.
	M		System Declared Hit Overturned Indicator	N	1	1	1	1	Indicates whether a system declared hit was overturned by a verification analyst. 0 – No 1 – Yes

TPREI Tenprint Search Response: Type-2 Record Definition									
Identifier	Condition	Field Number	Field Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
	M		1:N Candidate Indicator	N	1	1	1	1	Indicates whether the candidate was identified as part of the one-to-many search. When the candidate is found as a result of the one-to-many search, set the tag value to 1 (Yes) Otherwise, set the tag value to 0 (No)
CERD	O	2.1064	Certification Disposition				0	100	This tag contains a subset of occurrences encoded in 2.1061 AFIS Search Results that have been subjected to a certification process (with positive or negative outcome). Identifies certification of multiple subjects in case of misses. Only distinct values of AFIS Subject Identifier are to be returned in the list. Must only include those subjects where the certifier has taken action or those subjects auto-certified in the case where manual certification is disabled. If a consolidation occurs on AFIS as a result of the TPRI search request, this list shall contain the candidate information as it existed prior to consolidation. Occurrences in this list to be organized from highest to lowest AFIS Match Score.
	M		AFIS Match Score	N	1	10	1	1	Represents the AFIS match score for the candidate.
	M		Cert Disposition Type Code	N	1	1	1	1	Represents the selection made by the certification technician or by the system if auto certification is performed. Applicable values include: 1. Certify 2. Not Identical 3. Unsuitable for Certification 4. Cancelled due to File Purge (pertains to legacy data only; no longer in use)

TPREI Tenprint Search Response: Type-2 Record Definition									
Identifier	Condition	Field Number	Field Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
	M		AFIS Subject Identifier	AN	8	8	1	1	Represents the AFIS-assigned unique Subject Identifier of the candidate.
	O		Manual Verification Disposition Code	N	1	1	0	1	Represents the outcome of manual verification/certification of the candidate. Only populated if the certifier performs a manual confirmation of the candidate. Must not be populated if the system auto-certifies the candidate and auto-certification is enabled. 0 – No hit 1 – Hit
	O		System Declared Hit Overturned Indicator	N	1	1	0	1	Indicates whether a system declared hit was overturned by the AFIS analyst. Only populated when the certifier performs a manual confirmation of the candidate. 0 – No 1 – Yes
	M		Consolidated to This Subject Indicator	N	1	1	1	1	Indicates that there was a consolidation into this specific subject. Valid values: 0 – No 1 – Yes
	M		Consolidated Indicator	N	1	1	1	1	Indicates that this subject is to be consolidated into another. Valid values: 0 – No 1 – Yes Only one of Consolidated to This Subject Indicator or Consolidated Indicator can be set to 1 (Yes), but not both.
RESC	O	2.1076	AFIS Search Result Code	N	1	1	0	1	Indicates the result of the AFIS search. Applicable values are: 0 – No Identification 1 – Identification

TPREI Tenprint Search Response: Type-2 Record Definition									
Identifier	Condition	Field Number	Field Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
ASI	O	2.1188	New AFIS Subject Identifier	AN	8	8	0	1	Contains the AFIS Subject Identifier assigned upon tenprint enrolment of a new subject.
AOFN	O	2.1243	AFIS Search Result File Numbers				0	600	Indicates the list of file numbers that correspond to each candidate found in 2.1061 AFIS Search Results. There can be up to 6 file numbers per candidate when the subject is populated in every AFIS tenprint repository. If there has been a consolidation then this tag represents the information as it was prior to consolidation.
	M		AFIS Subject Identifier	AN	8	8	1	1	Represents the AFIS-assigned Subject Identifier of the candidate. All values populated here shall also be populated in 2.1061 AFIS Search Results.
	M		File Type Code	N	1	1	1	1	Represents the file type code that applies to the candidate. File Type equates to AFIS Tenprint repository number. 1. Criminal 2. Refugee 3. Employee 4. Immigration 5. Repository 5 6. Repository 6
	M		File Number	N	12	12	1	1	Represents the File Number that is assigned to the candidate.
CONR	O	2.1244	Consolidation Results				0	30	This tag must be populated when a consolidation is performed on AFIS. It indicates how each entry on the AFIS has changed as a result of the consolidation.
	M		From AFIS Subject Identifier	AN	8	8	1	1	Represents the AFIS-assigned Subject Identifier prior to consolidation (the source Subject ID)
	M		From File Number	N	12	12	1	1	Represents the File Number prior to consolidation (the source File Number).

TPREI Tenprint Search Response: Type-2 Record Definition									
Identifier	Condition	Field Number	Field Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
	M		To AFIS Subject Identifier	AN	8	8	1	1	Represents the AFIS-assigned unique Subject Identifier after consolidation (the target Subject ID)
	M		To File Number	N	12	12	1	1	Represents the File Number after consolidation (the target File Number).
ACTL	M	2.1247	Activity Log				1	50	Describes the activities involved in the AFIS search including who performed the activity, when it was performed and on what device.
	M		HRMIS Operator Identifier	N	9	9	1	1	Operator who performed the activity.
	M		Activity Type Code	N	1	2	1	1	Represents an activity performed on AFIS. Valid values are documented in the appendix of this specification.
	M		Date/Time Start	T	18	18	1	1	Date/Time the activity was initiated.
	M		Date/Time End	T	18	18	1	1	Date/Time the activity was completed.
	M		Workstation / Device ID	AN	1	12	1	1	Workstation / Device ID upon which the activity took place.
FINS	C	2.8291	Fingerprint Sets Searched	N	1	10	0	1	Represents the number of fingerprint sets searched after filtering on a 1:N request. Mandatory if 1:N search performed by AFIS.

2.2.3 TENPRINT QUALITY CONTROL (TPQCI)

This transaction is sent by AFIS to the NNS, containing the outcome of the Quality Control review of images supplied in a TPRI request.

TPQCI Tenprint Quality Control: Type-2 Record Definition									
Ident-ifier	Condition	Field Number	Field Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
LEN	M	2.001	Logical Record Length	N	2	7	1	1	This field is set to the total length of all bytes contained in the record
IDC	M	2.002	Image Designation Character	N	1	5	1	1	This field identifies a specific record occurrence within a transaction packet. Refer to the ANSI/NIST specification for details on its encoding.
RDCN	M	2.1041	Contributor DCN	N	20	20	1	1	Set to the same Contributor DCN value as provided in the request transaction
RETCN	M	2.1052	Contributor TCN	ANS	10	40	1	1	Set to the same Contributor TCN value as provided in the request transaction
AQRC	M	2.1077	Quality Rejection Code	N	1	2	1	1	Indicates the codified reasons for the rejection. 0. Not rejected. 1. Automatic Quality Rejection 2. Manual Quality Rejection 3. Request for Rescan
MRRC	C	2.1082	Poor Quality Reason Codes	N	2	2	0	20	This tag becomes mandatory when 2.1077 Quality Rejection Code is 1 or 2. This tag can be encoded in the TPQCI even if the transaction is accepted for processing on AFIS (2.1077 Quality Rejection Code is 0) or rejected for Rescan (2.1077 Quality Rejection Code is 3). Valid values are documented in the appendix of this specification.
ACTL	M	2.1247	Activity Log				1	50	Describes the AFIS activities involved in processing the transaction.

TPQCI Tenprint Quality Control: Type-2 Record Definition									
Identifier	Condition	Field Number	Field Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
	M		HRMIS Operator Identifier	N	9	9	1	1	The identifier of the AFIS operator who performed the activity.
	M		Activity Type Code	N	1	2	1	1	Specifies the activity performed. Valid values are documented in the appendix of this specification.
	M		Date/Time Start	T	18	18	1	1	Date/Time the activity was initiated.
	M		Date/Time End	T	18	18	1	1	Date/Time the activity was completed.
	M		Workstation / Device ID	AN	1	12	1	1	Workstation / Device ID upon which the activity took place.
BIOPI	C	2.1267	Biometric Consent Passed Indicator	N	1	1	0	1	Indicates that the biometric consent passed or failed. Valid values: 1 – Yes 0 – No Mandatory if the Biometric Consent Image Designator (tag 2.889) in the TPRI is populated.

2.2.4 TENPRINT DELETE (TPDI)

This transaction is used by the NNS to request that a set of one or more fingerprints be deleted by AFIS from a Tenprint File.

TPDI Tenprint Delete: Type-2 Record Definition									
Ident- ifier	Condition	Field Number	Field Name	Char- acter Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
LEN	M	2.001	Logical Record Length	N	2	7	1	1	This field is set to the total length of all bytes contained in the record
IDC	M	2.002	Image Designation Character	N	1	5	1	1	This field identifies a specific record occurrence within a transaction packet. Refer to the ANSI/NIST specification for details on its encoding.
FND	M	2.1140	Images to Delete				1	100	Lists the prints to be deleted from the TPF. One of File Number or DCN or both must be specified for each tag occurrence provided.
	O		File Number	N	12	12	0	1	Specifies the File Number against which deletes will be performed. When DCN is not provided, then all fingerprints on file with this File Number will be deleted.
	O		DCN	N	20	20	0	1	Restricts the scope of the deletion to one specific set of fingerprints identified by DCN. If a File Number and DCN are specified then both must be used in combination to determine the images to be deleted.

2.2.5 TENPRINT DELETE RESPONSE (TPDRI)

This transaction is used by AFIS to return the results of a delete request to the NNS.

TPDRI Tenprint Delete Response: Type-2 Record Definition									
Identifier	Condition	Field Number	Field Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
LEN	M	2.001	Logical Record Length	N	2	7	1	1	This field is set to the total length of all bytes contained in the record
IDC	M	2.002	Image Designation Character	N	1	5	1	1	This field identifies a specific record occurrence within a transaction packet. Refer to the ANSI/NIST specification for details on its encoding.
DSTS	M	2.1100	Deletion Status				1	100	Indicates the results of processing deletion requests for images appearing in the Tenprint File. Must include all File Numbers and DCNs as specified in the originating TPDI.
	O		File Number	N	12	12	0	1	Specifies the File Number of the TP deletion requested.
	O		DCN	N	20	20	0	1	Specifies the DCN of the TP Deletion requested.
	M		Success Indicator	N	1	1	1	1	Indicates the outcome of the delete request. 1 – Successful 0 – Unsuccessful; prints could not be found

2.2.6 TENPRINT WORK IN PROGRESS DELETE (TPWDI)

This transaction is used by the NNS to request a submission be deleted from Work In Progress on AFIS.

TPWDI Tenprint WIP Delete: Type-2 Record Definition									
Ident-ifier	Condition	Field Number	Field Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
LEN	M	2.001	Logical Record Length	N	2	7	1	1	This field is set to the total length of all bytes contained in the record
IDC	M	2.002	Image Designation Character	N	1	5	1	1	This field identifies a specific record occurrence within a transaction packet. Refer to the ANSI/NIST specification for details on its encoding.
DCN	M	2.800	Document Control Number	N	20	20	1	1	The DCN identifier of the TPRI transaction to be deleted from Work In Progress on AFIS.
WPR	M	2.1102	WIP Region Number	N	1	1	1	2	Indicates which AFIS workflow region(s) are in scope of the request: 1. Tenprint 2. Latent 3. TRB (Immigration)

2.2.7 TENPRINT WIP DELETE RESPONSE (TPWDRI)

This transaction is used by AFIS to return the results of a WIP delete request to the NNS.

TPWDRI Tenprint WIP Delete Response: Type-2 Record Definition									
Ident-ifier	Condition	Field Number	Field Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
LEN	M	2.001	Logical Record Length	N	2	7	1	1	This field is set to the total length of all bytes contained in the record
IDC	M	2.002	Image Designation Character	N	1	5	1	1	This field identifies a specific record occurrence within a transaction packet. Refer to the ANSI/NIST specification for details on its encoding.
DCN	M	2.800	Document Control Number	N	20	20	1	1	The DCN identifier of the TPRI transaction to be deleted from Work In Progress on AFIS.
WPSTS	M	2.1101	WIP Purge Status				1	2	Indicates the status of the delete request for the DCN specified in the TPWDI.
	M		WIP Region Number	N	1	1	1	1	Indicates the AFIS workflow regions: 1. Tenprint 2. Latent 3. TRB (Immigration)
	M		Success Indicator	N	1	1	1	1	Indicates the outcome of the WIP delete request for the specific DCN and region. 0 – Unsuccessful; WIP data not found 1 – Successful

2.2.8 TENPRINT AMEND (TPAI)

This transaction is used by the NNS to set or amend certain Tenprint information on the AFIS or alter the priority of a transaction in service.

TPAI Tenprint Amend: Type-2 Record Definition									
Ident-ifier	Condition	Field Number	Field Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
LEN	M	2.001	Logical Record Length	N	2	7	1	1	This field is set to the total length of all bytes contained in the record
IDC	M	2.002	Image Designation Character	N	1	5	1	1	This field identifies a specific record occurrence within a transaction packet. Refer to the ANSI/NIST specification for details on its encoding.
FNA	O	2.1040	File Number to Assign	N	12	12	0	1	This field is used to assign a file number to a specified set of fingerprints on AFIS.
RDCN	M	2.1041	Contributor DCN	N	20	20	1	1	Identifies which set of fingerprints to amend.
CIP	O	2.1265	Change Internal Priority to	N	1	2	0	1	Used to change the internal priority of a TPRI transaction currently in AFIS WIP. This field is mutually exclusive with 2.1040 File Number to Assign. In other words, only one of internal priority or file number can be set by one transaction occurrence.

2.2.9 TENPRINT AMEND RESPONSE (TPARI)

This transaction is used by AFIS to return the results of an amendment request to the NNS.

TPARI Tenprint Amend Response: Type-2 Record Definition									
Ident-ifier	Condition	Field Number	Field Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
LEN	M	2.001	Logical Record Length	N	2	7	1	1	This field is set to the total length of all bytes contained in the record
IDC	M	2.002	Image Designation Character	N	1	5	1	1	This field identifies a specific record occurrence within a transaction packet. Refer to the ANSI/NIST specification for details on its encoding.
FNA	O	2.1040	File Number Assigned	N	12	12	0	1	The File Number assigned to a set of prints.
RDCN	M	2.1041	Contributor DCN	N	20	20	1	1	Set to the same Contributor DCN value as provided in the request transaction
SCI	M	2.1095	Success Indicator	N	1	1	1	1	Indicates the status of the amendment. 1 = Successful 0 = Unsuccessful: - prints could not be found for a File Number assignment request, or, - the Tenprint workflow identified by Contributor DCN could not be found in WIP for a priority amendment

2.2.10 IMAGE REQUEST (IRQI)

This transaction is used by the NNS to fetch image contents from an AFIS Tenprint File.

IRQI Image Request: Type-2 Record Definition									
Ident-ifier	Condition	Field Number	Field Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
LEN	M	2.001	Logical Record Length	N	2	7	1	1	This field is set to the total length of all bytes contained in the record
IDC	M	2.002	Image Designation Character	N	1	5	1	1	This field identifies a specific record occurrence within a transaction packet. Refer to the ANSI/NIST specification for details on its encoding.
RDCN	O	2.1041	Contributor DCN	N	20	20	0	1	Contains the DCN identifying a set of fingerprints to be fetched. If a DCN is not specified then the best composite set is returned for the specified File Number to Fetch. One of File Number to Fetch or Contributor DCN is mandatory.
FLN	O	2.1117	File Number of the Fetch	N	12	12	0	1	Specifies the File Number to fetch. One of File Number of the Fetch or Contributor DCN is mandatory. When both are supplied, the fetch shall proceed according to the supplied Contributor DCN value.
ITR	M	2.1118	Image Type Requested Code	N	1	2	1	3	Specifies which image types to return. Multiple types can be requested in one fetch transaction. Valid values: 1 - Fingerprints 2 - Palm prints 3 - Photos

2.2.11 IMAGE REQUEST RESPONSE (IRRI)

This transaction returns the fingerprint impressions, photo images, palm print images and data descriptors requested by an IRQI. AFIS shall also return Minutiae Records (RT-9) for all rolled finger positions 01 to 10 and palm images.

IRRI Image Request Response: Type-2 Record Definition									
Ident-ifier	Condition	Field Number	Field Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
LEN	M	2.001	Logical Record Length	N	2	7	1	1	This field is set to the total length of all bytes contained in the record
IDC	M	2.002	Image Designation Character	N	1	5	1	1	This field identifies a specific record occurrence within a transaction packet. Refer to the ANSI/NIST specification for details on its encoding.
FQO	O	2.893	Fingerprint Quality Override				0	14	Specifies fingerprint poor quality override reasons as originally provided when the tenprint image was enrolled on AFIS. Refer to the code definitions in the NPS External ICDs.
	M		Finger Number	N	2	2	1	1	
	M		Reason Code	N	2	2	1	1	
	C		Description	ANS	1	50	0	1	A description shall be returned when reason code is set to 99.
RDCN	O	2.1041	Contributor DCN	N	20	20	0	1	When the IRQI request contains 2.1041 Contributor DCN Set this response tag to the same value as provided in the IRQI request. When the IRQI request does not contain 2.1041 Contributor DCN (fetch composite set) Do not populate this response tag (null value).

IRRI Image Request Response: Type-2 Record Definition									
Ident-ifier	Condition	Field Number	Field Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
RETCN	O	2.1052	Contributor TCN	ANS	10	40	0	1	The contributor's Transaction Control Number as originally provided when the tenprint images were enrolled on AFIS. When the IRQI request contains 2.1041 Contributor DCN Set this response tag to 2.1052 Contributor TCN stored for this Tenprint, if available. When the IRQI request does not contain 2.1041 Contributor DCN (fetch composite set) Do not populate this response tag (null value).
SCI	M	2.1095	Success Indicator	N	1	1	1	1	Indicates whether the fetch was successful. 1. Successful – all of the images requested were found 0. Unsuccessful – meaning either: - the prints requested were not found - not all of the prints requested were found, however, the AFIS system still returns as many images of the types requested as possible.
FLN	O	2.1117	File Number of the Fetch	N	12	12	0	1	When File Number of the Fetch is supplied in IRQI, but not Contributor DCN, the File Number of the Fetch shall echo back that file number supplied in IRQI. When Contributor DCN is supplied in IRQI, but not File Number of the Fetch: If the Contributor DCN is found on AFIS this tag shall contain the File Number stored on AFIS for that tenprint set identified by Contributor DCN; Otherwise, if the Contributor DCN is not found on AFIS this tag shall echo back the file number supplied in IRQI.

IRRI Image Request Response: Type-2 Record Definition									
Ident-ifier	Condition	Field Number	Field Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
FTC	O	2.1196	File Type Code	N	1	1	0	1	Represents the file type code that applies to the fetched file. 1. Criminal 2. Refugee 3. Employee 4. Immigration 5. Repository 5 6. Repository 6
AAI	O	2.8021	Added by Agency Identifier	AN	7	7	0	1	Represents the identifier (ORI) of the external contributor of the prints. Only applicable when fetching by Contributor DCN.
DPR	O	2.8038	Date Fingerprinted	D	8	8	0	1	Indicates the date fingerprinted of the image set fetched. Only applicable when fetching by Contributor DCN.
MFR	O	2.8084	Missing Fingerprint Reason				0	14	Specifies the missing fingerprint reasons as originally provided when the tenprint images were enrolled on AFIS.
	M		Finger Position Code	N	2	2	1	1	
	M		Missing Fingerprint Reason Code	A	2	2	1	1	
	O		Missing Fingerprint Date	D	8	8	0	1	

2.2.12 TENPRINT PRE-CERTIFICATION (TPCI)

This transaction is used by AFIS to return to the NNS the File Numbers to which a transaction is about to be certified.

TPCI Tenprint Pre-Certification: Type-2 Record Definition									
Identifier	Condition	Field Number	Field Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
LEN	M	2.001	Logical Record Length	N	2	7	1	1	This field contains the length of the logical record specifying the total number of bytes, including every byte of all the fields contained in the record
IDC	M	2.002	Image Designation Character	N	1	5	1	1	This field identifies the image data contained in the record. The IDC contained in this field is a binary representation of the IDC found in the file content field of the Type-1 Record.
RDCN	M	2.1041	Contributor DCN	N	20	20	1	1	Set to the same Contributor DCN value as provided in the request transaction
RETCN	M	2.1052	Contributor TCN	ANS	10	40	1	1	Set to the same Contributor TCN value as provided in the request transaction
IFN	M	2.1141	Ident to TP File Number				1	30	Indicates the File Numbers that have been found as possible identifications (i.e., candidates declared as system hits and candidates confirmed 'yes' at verification); these will be subject to certification. If there are multiple occurrences with a different AFIS Subject Identifier then there is likely a missed consolidation condition in the AFIS database. If the subject has multiple file numbers then include all in this field.
	M		AFIS Subject Identifier	AN	8	8	1	1	Represents the AFIS assigned unique Subject Identifier to which the search prints were identified.

TPCI Tenprint Pre-Certification: Type-2 Record Definition									
Identifier	Condition	Field Number	Field Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
	M		File Type Code	N	1	1	1	1	Indicates the file type to which the search prints were identified. Each File Type equates to a TP repository. Valid values are: 1 – Criminal 2 – Refugee 3 – Employee 4 – Immigration Subject 5 – Repository 5 6 – Repository 6
	M		File Number	N	12	12	1	1	Indicates the file number to which the search prints were identified to. (e.g., FPS Number, Employee File Number, Refugee File Number, Immigration Identification Number).

2.2.13 IMAGE LIST RETRIEVAL (ILRI)

This transaction is used by the NNS to fetch a list of fingerprints enrolled on AFIS for a specified File Number.

ILRI Image List Retrieval: Type-2 Record Definition									
Ident- ifier	Condition	Field Number	Field Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
LEN	M	2.001	Logical Record Length	N	2	7	1	1	This field is set to the total length of all bytes contained in the record
IDC	M	2.002	Image Designation Character	N	1	5	1	1	This field identifies a specific record occurrence within a transaction packet. Refer to the ANSI/NIST specification for details on its encoding.
FLN	M	2.1117	File Number of the Fetch	N	12	12	1	1	Specifies the File Number for which the list shall be fetched.

2.2.14 IMAGE LIST RETRIEVAL RESPONSE (ILRRI)

This transaction enables AFIS to return a list of fingerprints available for a specified File Number to the NNS.

ILRRI Image List Retrieval Response: Type-2 Record Definition									
Identifier	Condition	Field Number	Field Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
LEN	M	2.001	Logical Record Length	N	2	7	1	1	This field is set to the total length of all bytes contained in the record
IDC	M	2.002	Image Designation Character	N	1	5	1	1	This field identifies a specific record occurrence within a transaction packet. Refer to the ANSI/NIST specification for details on its encoding.
SCI	M	2.1095	Success Indicator	N	1	1	1	1	Indicates whether the fetch was successful or not. 1. Successful 0. Unsuccessful; file could not be found
FLN	O	2.1117	File Number of the Fetch	N	12	12	0	1	File Number for which the list is fetched.
FTC	O	2.1196	File Type Code	N	1	1	0	1	Represents the file type code that applies to the fetched file. 1 – Criminal 2 – Refugee 3 – Employee 4 – Immigration 5 – Repository 5 6 – Repository 6
LPAF	O	2.1201	List of Prints Available on File	N			0	200	
	M		DCN	N	20	20	1	1	Document Control Number, the unique identifier for a set of fingerprints enrolled on AFIS with this File Number.
	O		Date Fingerprinted	D	8	8	0	1	Date on which the fingerprints were obtained by the contributor.

ILRRI Image List Retrieval Response: Type-2 Record Definition									
Ident- ifier	Condition	Field Number	Field Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
	O		Originating Agency Identifier	AN	7	7	0	1	Represents the identifier (ORI) of the external contributor of the prints.
	O		Contributor TCN	ANS	10	40	0	1	The Transaction Control Number provided by the contributor of the prints.
	M		Overall Fingerprint Quality	N	1	6	1	1	Overall fingerprint quality measurement for the complete set of prints associated to the specific DCN, as calculated by AFIS.
	O		Regional Identifier Number	N	1	4	0	1	Reserved for RCMP use. Sub-tag pertains to legacy data only.
	O		Palms Available Indicator	N	1	1	0	1	Set to: 0 – when the fingerprint set does not contain RT-15 occurrences representing palm images 1 – when the fingerprint set contains one or more RT-15 occurrences representing palm images
	O		Image Resolution	N	2	4	0	1	The resolution measured in PPI of those images constituting the TP set identified by sub-tag DCN. Typically contains value 500 (PPI).

2.2.15 TENPRINT TO UNSOLVED LATENT RESPONSE (TPULI)

This transaction is sent by AFIS to the NNS containing the results of a TP to Latent reverse search.

TPULI Tenprint to Unsolved Latent Response: Type-2 Record Definition									
Identifier	Condition	Field Number	Field Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
LEN	M	2.001	Logical Record Length	N	2	7	1	1	This field is set to the total length of all bytes contained in the record
IDC	M	2.002	Image Designation Character	N	1	5	1	1	This field identifies a specific record occurrence within a transaction packet. Refer to the ANSI/NIST specification for details on its encoding.
RDCN	M	2.1041	Contributor DCN	N	20	20	1	1	Set to the same Contributor DCN value as provided in the request transaction
RETCN	O	2.1052	Contributor TCN	ANS	10	40	0	1	Set to the same Contributor TCN value as provided in the request transaction
RIR	C	2.1186	Candidate Ident Rank	N	1	3	0	1	Rank in the candidate list of the ident. Mandatory when an identification is made.
FSRC	M	2.1214	Search Result Code	N	1	1	1	1	Valid values: 1. Ident 2. Non-Ident 3. Unsuitable (not applicable on TP to Latent) 4. Cancelled 5. Non-Disposition
CDULF	O	2.1246	Certification Disposition to ULF				0	300	Returns the certification results made by each certifier, up to 3 certifications for the same hit. Must be populated if there is an ident. Must only contain one entry per AFIS Subject Identifier for each certifier. Only include those candidates that were confirmed 'Yes' on each 'Verify 1 st Certify' activity. For subsequent certifications only include those candidates where the certifier has taken an action.

TPULI Tenprint to Unsolved Latent Response: Type-2 Record Definition									
Identifier	Condition	Field Number	Field Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
	M		Certification Operator Identifier	N	9	9	1	1	The identifier of the operator performing the certification.
	M		Cert Disposition Type Code	N	1	1	1	1	Represents the selection made by the certification technician. Applicable values include: 1. Certify 2. Not Identical 3. Unsuitable for Certification
	M		Latent Image Identifier	ANS	14	39	1	1	Represents the Latent Image Identifier of the candidate.
	O		Manual Verification Disposition Code	N	1	1	0	1	Represents the outcome of manual verification of the candidate. Must be populated if manual verification is performed by the certifier. 0 – No hit 1 – Hit
	O		Fingers Used to Certify	N	2	20	0	1	Represents the finger numbers used for certification as per the ANSI/NIST specifications. Each finger must be a two digit code, padded with a leading zero for finger positions 1 to 9. There are no separators used between finger numbers.
ACTL	M	2.1247	Activity Log				1	50	Describes the activities involved in the reverse search including: who performed the activity, when it was performed and on what device.
	M		HRMIS Operator Identifier	N	9	9	1	1	The identifier of the operator who performed the activity.
	M		Activity Type Code	N	1	2	1	1	Specifies the activity performed.
	M		Date/Time Start	T	18	18	1	1	Date/Time the activity was initiated.
	M		Date/Time End	T	18	18	1	1	Date/Time the activity was completed.
	M		Workstation/ Device ID	AN	1	12	1	1	Workstation / Device ID upon which the activity took place.

TPULI Tenprint to Unsolved Latent Response: Type-2 Record Definition									
Identifier	Condition	Field Number	Field Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
RIP	O	2.1258	Revised Internal Priority	N	1	1	0	1	Return the internal priority, if it was altered during AFIS processing.
RSL	O	2.1266	Candidate Size Limit	N	1	3	0	1	Specifies the candidate list limit if one was applied to the search.
RLTP	O	2.1285	AFIS TP to Latent Search Results				0	100	The candidate list for the search. Returns match data required by the NNS in order to produce a match report. Mandatory if there are Reverse Search candidates.
	M		Candidate Rank	N	1	3	1	1	Rank position in the candidate list.
	M		Match Score	N	1	10	1	1	Contains the AFIS match score for the candidate.
	M		Finger / Palm Position	N	2	2	1	1	Indicates the Finger Number or Palm Position of the candidate, encoded as per the ANSI/NIST specifications. Each finger must be a two digit code, padded with a leading zero for finger positions 1 to 9. Note that a Latent candidate may have been enrolled with position 00 (Unknown Finger) or 20 (Unknown Palm).
	M		Latent Image Identifier	ANS	14	39	1	1	Indicates the unique identifier of the candidate image.
	M		AFIS ULF Identifier	AN	3	20	1	1	Internal identifier assigned by AFIS to the latent image enrolled on the ULF.
	O		Latent File Number	ANS	4	32	0	1	Contains the Latent File Number of the candidate. Populated when available on the ULF. Certain older data may have been loaded to ULF without a Latent File Number.
	O		Ident Section File Number	ANS	1	24	0	1	Contains the contributor-assigned file identifier of the candidate. Populated if available on the ULF.

TPULI Tenprint to Unsolved Latent Response: Type-2 Record Definition									
Identifier	Condition	Field Number	Field Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
	O		Manual Verification Disposition Code	N	1	1	0	1	Represents the outcome of manual verification of the candidate. Must be populated if manual verification is performed. 0 – No hit 1 – Hit 2 – Not viewed The AFIS must set the value to '2 Not viewed' if the verifier has not taken any action on the candidate.
	O		Candidate FPCs	A	1	4	0	1	Reserved for RCMP use. Sub-tag pertains to legacy data only.
	O		Originating Agency Identifier	AN	7	7	0	1	The identifier (ORI) of the agency contributing the latent image. Must be populated if one exists on the ULF.
	M		Creation Date	D	8	8	1	1	Specifies the date the latent was added to the ULF.
	O		Offence Date	D	8	8	0	1	Specifies the date on which the crime occurred. Must be populated if one exists on the ULF.
	O		Latent Submission Crime Type Code	AN	4	4	0	1	Specifies the crime pertaining to the unsolved latent. Must be populated if one exists on the ULF.
	M		Authority to Release Indicator	N	1	1	1	1	Indicates that the latent information can be released to Tenprint contributors.
LTC	M	2.8018	Latent Type Code	N	1	1	1	1	Indicates whether the reverse search response applies to finger or palm. 1. Finger 2. Palm
FINS	M	2.8291	Fingerprints Searched	N	1	10	1	1	Represents the number of images (fingerprints or palm prints) searched by AFIS after filtering.

TPULI Tenprint to Unsolved Latent Response: Type-2 Record Definition									
Identifier	Condition	Field Number	Field Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
RSTS	O	2.8295	Latent Search Target Set Code	N	1	1	0	6	Indicates latent repositories that were searched against. (ULF, Special Repositories). 1 – ULF 2 – Latent Repository 2 3 – Latent Repository 3 4 – Latent Repository 4 5 – Latent Repository 5 6 – Latent Repository 6

2.2.16 TENPRINT CONSOLIDATION (TPCNI)

This transaction is sent by AFIS to the NNS when the prints associated to a Tenprint transaction have certified to more than one subject identifier and a consolidation action may be taken.

TPCNI Tenprint Consolidation: Type-2 Record Definition									
Ident-ifier	Condition	Field Number	Field Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
LEN	M	2.001	Logical Record Length	N	2	7	1	1	This field is set to the total length of all bytes contained in the record
IDC	M	2.002	Image Designation Character	N	1	5	1	1	This field identifies a specific record occurrence within a transaction packet. Refer to the ANSI/NIST specification for details on its encoding.
RDCN	M	2.1041	Contributor DCN	N	20	20	1	1	Set to the same Contributor DCN value as provided in the TPRI request transaction
RETCN	M	2.1052	Contributor TCN	ANS	10	40	1	1	Set to the same Contributor TCN value as provided in the TPRI request transaction
CTPFN	M	2.1294	Cert to TP File Number				2	30	Contains the File Numbers that have been found as certified identifications. There must be at least two occurrences within this tag having different AFIS Subject Identifiers, indicating that a missed identification is present in the AFIS database. If the subject has multiple file numbers then include all in this tag.
	M		AFIS Subject Identifier	AN	8	8	1	1	Represents the AFIS Subject Identifier to which the search prints were identified and certified. The first occurrence identifies the intended target Subject for the consolidation action.

TPCNI Tenprint Consolidation: Type-2 Record Definition									
Ident- ifier	Condition	Field Number	Field Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
	M		File Type Code	N	1	1	1	1	Indicates the file type to which the search prints were certified. Valid values are: 1. Criminal 2. Refugee 3. Employee 4. Immigration 5. Repository 5 6. Repository 6
	M		File Number	N	12	12	1	1	Indicates the file number to which the search prints were identified and certified. When two or more of the same File Type Code values are involved, the first occurrence identifies one of the intended target File Numbers for the consolidation action. (e.g., FPS Number, Employee File Number, Refugee File Number, Immigration Identification Number).

2.2.17 TENPRINT CONSOLIDATION RESPONSE (TPCNRI)

This transaction is sent from the NNS to the AFIS in response to a Tenprint Consolidation (TPCNI) transaction, containing a list of AFIS Subject Identifiers to include or exclude from a consolidation action.

TPCNRI Tenprint Consolidation Response: Type-2 Record Definition									
Identifier	Condition	Field Number	Field Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
LEN	M	2.001	Logical Record Length	N	2	7	1	1	This field is set to the total length of all bytes contained in the record
IDC	M	2.002	Image Designation Character	N	1	5	1	1	This field identifies a specific record occurrence within a transaction packet. Refer to the ANSI/NIST specification for details on its encoding.
RDCN	M	2.1041	Contributor DCN	N	20	20	1	1	Set to the same Contributor DCN value as provided in the request transaction
RETCN	M	2.1052	Contributor TCN	ANS	10	40	1	1	Set to the same Contributor TCN value as provided in the request transaction
CONI	M	2.1295	Consolidation Items				2	30	Contains a list of distinct AFIS Subject Identifier values that are populated in tag 2.1294 of the TPCNI transaction. The corresponding Consolidation Indicator sub-tag shall provide a directive to AFIS to include or exclude the AFIS Subject Identifier in a consolidation action.
	M		AFIS Subject Identifier	AN	8	8	1	1	Represents the AFIS Subject Identifier to which the search prints were identified and certified. The first occurrence having Consolidation Indicator set to 1 serves as the target Subject for the consolidation action.
	M		Consolidation Indicator	N	1	1	1	1	Indicates whether the AFIS Subject Identifier shall participate in the consolidation action: 0 – Exclude this subject from the consolidation 1 – Include this subject in the consolidation.

2.3 LATENT TRANSACTIONS

This section contains the data specifications for all latent transactions defined for use by the NNS when processing latent images. The NNS supports two distinct latent transaction streams:

- The Central Latent stream whereby the NNS initiates search requests through an online user interface.
- The Remote Latent stream whereby the NNS receives search, enrolment and maintenance transactions from distributed locations using latent-specific devices configured for remote latent operations. The NNS relays remote transactions to AFIS and returns response information to the remote sites according to result transactions returned by AFIS.

Central Latent transactions are submitted via the NNS UI containing latent fingers and palms and crime scene images by Police Services field officers and RCMP fingerprint technicians who process the crime scene prints. Central latent transactions are currently submitted by the NNS to AFIS as Latent Fingerprint Search (LFSI) transactions.

Remote Latent transactions are submitted by certified fingerprint technicians that process the crime scene prints using latent-specific devices configured for remote latent operations. All remote latent transactions, regardless of origin, are submitted from a remote device to the NNS, and in turn, the NNS relays the information to AFIS. All latent responses produced by AFIS are returned to the NNS and the NNS then relays the results to the contributor's remote latent device.

The US Electronic Biometric Transmission Specification (EBTS) shall serve as the reference document for transaction layouts sent to or received from the FBI NGI (IAFIS) System.

2.4 CENTRAL LATENT TRANSACTIONS

The Central Latent stream is constituted by these transaction types:

TOT	CENTRAL LATENT TRANSACTION NAME
LFSI	Latent Fingerprint Search
LSRI	Latent Fingerprint Search Response
LCANI	Latent Cancellation Response
LTCI	Latent Commit
LSRLI	Latent to ULF Search Response

There is no longer an in-service NPS External ICD version used by contributors to request a central latent search. All data required to assemble the LFSI search request is now captured through the NNS user interface.

2.4.1 LATENT FINGERPRINT SEARCH (LFSI)

This transaction is used by the NNS to transmit central latent search requests to the AFIS for processing. Each LFSI contains one latent image (finger or palm). Latent fingerprint analysts perform comparisons of the latent fingerprint image against candidates selected from the AFIS repositories. The results are dispositioned in AFIS. When requested, details of the latent request shall be saved to the AFIS ULF. The search results are returned to the NNS.

The types and quantities of logical records included are as follows:

- 1 Type-1 Header Record
- 1 Type-2 Record (Descriptor Record)
- 1 Type-13 Record (a Latent Finger or Palm Image)

Note: The Type-13 latent image must be captured at 1000ppi and be stored in uncompressed (raw) format.

The responses may include:

- 0 – N Latent Fingerprint Search Response (LSRI)
- 0 – N Latent Cancellation Requests (LCANI)
- 0 – N Latent to ULF Search Response (LSRLI)
- 0 – 1 Internal Error Transaction (ERRIN)
- 0 – N Status Transactions (STI)
- 0 – N Latent Commit Transaction (LTCI)

In the future, the LFSI search request may also involve the following:

0 – N Latent Search Foreign Reply (LSRFI)

0 – N US Latent Feature Search (US EBTS LFFS)

Note to reader: The future capability described above is not currently operational within the NNS environment.

2.4.2 LATENT FINGERPRINT SEARCH RESPONSE (LSRI)

This transaction is used by AFIS to send the results of a Latent Fingerprint Search request (LFSI) to the NNS. The AFIS will return a response of Identification or Non-Identification. Identifications are certified within AFIS. Certification details are added to the Latent Case on AFIS and returned to the NNS. Certification details will include a "screen image" that combines the latent search image and the matching Tenprint image as viewed at the time of certification.

The types and quantities of logical records included are as follows:

1 Type-1 Header Record

1 Type-2 Record (Data Descriptors)

0 – 20 Type-16 Records (Certification screen images)

2.4.3 LATENT CANCELLATION RESPONSE (LCANI)

This transaction is used by AFIS to indicate to the NNS that a latent image was found to be unsuitable for search or that the search was cancelled for other reason. Upon issuance of this transaction from AFIS, no further action can be taken with this image occurrence on AFIS.

The types and quantities of logical records included are as follows:

1 Type-1 Header Record

1 Type-2 Record (Data Descriptors)

2.4.4 LATENT COMMIT (LTCI)

This transaction is used by AFIS to indicate to the NNS that a latent image has been committed for search. This occurs after a copy of the original latent image as supplied by the contributor is created and clipped and/or adjusted in some way. A new minutiae set can also be plotted.

The types and quantities of logical records included are as follows:

1 Type-1 Header Record

1 Type-2 Record (Data Descriptors)

2.4.5 LATENT TO ULF SEARCH RESPONSE (LSRLI)

This transaction is used by AFIS to send the results of a Latent to ULF Fingerprint Search to the NNS. Depending on the results, the AFIS system will return a response of Identification or Non-Identification. Identification results are certified within AFIS and the certification details are returned to the NNS. Certification details will include a "screen image" that combines the latent search image and the matching image as viewed at the time of certification.

The types and quantities of logical records included are as follows:

1 Type-1 Header Record

1 Type-2 Record (Data Descriptors)

0 – 20 Type-16 Records (Certification screen image)

2.5 CENTRAL LATENT DETAILED LOGICAL RECORD FORMATS

2.5.1 LATENT FINGERPRINT SEARCH (LFSI)

The Latent Fingerprint Search transaction describes one latent finger or palm image to be searched against the AFIS repositories.

LFSI Latent Fingerprint Search: Type-2 Record Definition									
Ident- ifier	Condition	Field Number	Field Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
LEN	M	2.001	Logical Record Length	N	2	7	1	1	This field is set to the total length of all bytes contained in the record
IDC	M	2.002	Image Designation Character	N	1	5	1	1	This field identifies a specific record occurrence within a transaction packet. Refer to the ANSI/NIST specification for details on its encoding.
ODT	M	2.858	Offence Date	D	8	8	1	1	The date on which the offence is reported to have taken place.
LCT	M	2.861	Latent Submission Crime Type Code	AN	4	4	1	1	This tag represents the type of crime pertaining to a latent crime scene. See code values in the NPS External ICD 1.7.7.
TPSC	M	2.1028	Tenprint Target Set Codes	N	1	1	1	6	Indicates the Tenprint File Types to be searched for this transaction: 1. Criminal 2. Refugee 3. Employee 4. Immigration 5. Repository 5 6. Repository 6
RETCN	M	2.1052	Contributor TCN	ANS	10	40	1	1	The Transaction Control Number assigned by the originating agency to this latent search request.
LFN	M	2.8017	Latent File Number	ANS	4	32	1	1	An identifier of one specific latent case retained by the NNS, unique within contributor ORI.

LFSI Latent Fingerprint Search: Type-2 Record Definition									
Ident- ifier	Condition	Field Number	Field Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
LTC	M	2.8018	Latent Type Code	N	1	1	1	1	Indicates whether the latent image is a finger or a palm impression. 1. Finger 2. Palm
AAI	M	2.8021	Added by Agency Identifier	AN	7	7	1	1	The identifier (ORI) assigned to the external contributor.
ISF	M	2.8024	Ident Section File Number	ANS	1	24	1	1	An identifier assigned by the contributor to the latent file.
EXD	M	2.8142	Expiry Date	D	8	8	1	1	Expiry date after which the latent image is no longer retainable on the ULF. The NNS calculates Expiry Date according to the value of Latent Submission Crime Type Code.
LID	M	2.8144	Latent Identifier	ANS	5	36	1	1	An identifier of one specific latent image submitted by a contributor. Derived by the NNS as a composite of Contributor ORI + Latent File Number + three-digit sequence number 001, 002, etc. The sequence number suffix increases by one for the second and each subsequent latent image submitted within ORI and Latent File Number.
ARI	M	2.8289	Authority to Release Indicator	N	1	1	1	1	Indicates that the latent information can be released to a Tenprint contributor. Values are: 0 – Do not release 1 – Can be released
RSTS	O	2.8295	Latent Search Target Set Code	N	1	1	0	6	Indicates which AFIS repositories to search against (ULF, Repositories 2-6). When this tag is populated, a latent to latent search is requested. 1 – ULF 2 – Latent Repository 2 3 – Latent Repository 3 4 – Latent Repository 4 5 – Latent Repository 5 6 – Latent Repository 6

LFSI Latent Fingerprint Search: Type-2 Record Definition									
Ident- ifier	Condition	Field Number	Field Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
OID	M	2.8337	Operator Identifier	AN	6	9	1	1	The identifier of the NNS user that submitted the latent. This could be a numeric HRMIS ID or an alphanumeric value assigned to a non-RCMP user.

2.5.2 LATENT FINGERPRINT SEARCH RESPONSE (LSRI)

This transaction is sent to the NNS by AFIS and holds the results of a latent to TP search as requested by an occurrence of LFSI.

LSRI Latent Fingerprint Search Response: Type-2 Record Definition									
Identifier	Condition	Field Number	Field Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
LEN	M	2.001	Logical Record Length	N	2	7	1	1	This field is set to the total length of all bytes contained in the record
IDC	M	2.002	Image Designation Character	N	1	5	1	1	This field identifies a specific record occurrence within a transaction packet. Refer to the ANSI/NIST specification for details on its encoding.
TPSC	M	2.1028	Ten Print Target Set Codes	N	1	2	1	6	Indicates the Tenprint File Types (repositories) that were searched for this transaction: 1. Criminal 2. Refugee 3. Employee 4. Immigration 5. Repository 5 6. Repository 6
RETCN	O	2.1052	Contributor TCN	ANS	10	40	0	1	Set to the same Contributor TCN value as provided in the request transaction
LTP	O	2.1205	AFIS Latent Search Results				0	100	The list of candidate results for the search. Required by the NNS when preparing a match report. Must only contain distinct values of AFIS Subject Identifier. List to be ordered from highest to lowest match score. Mandatory when AFIS has found one or more candidates.
	M		Candidate Rank	N	1	3	1	1	Rank position in the candidate list.
	M		AFIS Subject Identifier	AN	8	8	1	1	Represents the AFIS Subject Identifier assigned to the candidate.
	M		Match Score	N	1	10	1	1	Contains the AFIS match score for the candidate.

LSRI Latent Fingerprint Search Response: Type-2 Record Definition									
Identifier	Condition	Field Number	Field Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
	M		Matched DCN	N	20	20	1	1	The Document Control Number identifying a tenprint set for the candidate. The Matched DCN value equates to the identifier found in TPRI tag 2.1041 Contributor DCN at time of Tenprint enrolment.
	O		Matched TCN	ANS	10	40	0	1	The Transaction Control Number identifying the transaction that enrolled the tenprint set for the candidate. The Matched TCN value equates to the identifier found in TPRI tag 2.1052 Contributor TCN at time of enrolment.
	M		Finger / Palm Position	N	2	2	1	1	Indicates the Finger Number or Palm Position of the candidate as per ANSI/NIST specifications.
	O		Manual Verification Disposition Code	N	1	1	0	1	Represents the outcome of manual verification of the candidate. This must be populated if manual verification is performed. 0- No hit 1 - Hit 2 - Not viewed AFIS must set the sub-tag to 2 (Not viewed) if the verifier has not taken any action on a candidate.
	M		Candidate FPCs	A	1	4	1	1	Reserved for RCMP use. Sub-tag pertains to legacy data only.
	O		Sex Code	A	1	1	0	1	Specifies the gender of the candidate. M - Male F - Female U - Unknown
	O		Originating Agency Identifier	AN	7	7	0	1	Identifies the contributor of the tenprint set. Must be populated when stored in the TPF.

LSRI Latent Fingerprint Search Response: Type-2 Record Definition									
Identifier	Condition	Field Number	Field Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
FSRC	M	2.1214	Search Result Code	N	1	1	1	1	Valid values: 1. Ident 2. Non Ident 3. Unsuitable 4. Cancelled 5. Non Disposition
AOFN	O	2.1243	AFIS Search Result File Numbers				0	600	Indicates the list of file numbers that correspond to each candidate in the AFIS Latent to TP Search. There can be up to 6 file numbers per candidate. Mandatory if there are search candidates.
	M		AFIS Subject Identifier	AN	8	8	1	1	Represents the AFIS Subject Identifier of the candidate.
	M		File Type Code	N	1	1	1	1	Represents the file type code that applies to the candidate: 1 – Criminal 2 – Refugee 3 – Employee 4 – Immigration 5 – Repository 5 6 – Repository 6
	M		File Number	N	12	12	1	1	Represents the File Number assigned to the candidate.
ACTL	M	2.1247	Activity Log				1	50	Describes the activities involved in the search including: who performed the activity, when it was performed, on what device.
	M		HRMIS Operator Identifier	N	9	9	1	1	The identifier of the operator who performed the activity.
	M		Activity Type Code	N	1	2	1	1	Specifies the activity performed. Valid values are documented in the appendices of this specification.
	M		Date/Time Start	T	18	18	1	1	Date/Time the activity was initiated.

LSRI Latent Fingerprint Search Response: Type-2 Record Definition									
Identifier	Condition	Field Number	Field Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
	M		Date/Time End	T	18	18	1	1	Date/Time the activity was completed.
	M		Workstation/Device ID	AN	1	12	1	1	Workstation/Device ID upon which the activity took place.
CDFL	C	2.1248	Certification Disposition Forward Latent				0	300	Returns the certification results of each certifier, up to 3 certifications for the same hit listed in chronological order when each certification takes place. Include those candidates that were confirmed 'Yes' on the 'Verify 1st Certify' activity. Include each subsequent certification where the certifier has taken action on a particular candidate. Mandatory if Final Search Result Code is 1.
	M		Certification Operator Identifier	N	9	9	1	1	The identifier of the operator performing the certification.
	M		Cert Disposition Type Code	N	1	1	1	1	Represents the selection made by the certification technician. Applicable values include: 1. Certify 2. Not Identical 3. Unsuitable for Certification
	M		AFIS Subject Identifier	AN	8	8	1	1	Represents the AFIS Subject Identifier of the candidate.
	M		Manual Verification Disposition Code	N	1	1	1	1	Represents the outcome of manual verification of the candidate by the certifier. 0 – No hit 1 – Hit
	M		Fingers Used to Certify	N	2	20	1	1	Represents the finger numbers used for certification, as per ANSI/NIST specifications. Each finger position must be encoded as a two digit value, with one leading zero when finger position is 1 to 9; no separators appearing between finger numbers.
RIP	O	2.1258	Revised Internal Priority	N	1	1	0	1	Returns the AFIS internal priority, if it was altered during processing.
RSL	O	2.1266	Candidate Size Limit	N	1	3	0	1	Specifies the candidate list limit applied on AFIS if one was set at the time of the search.

LSRI Latent Fingerprint Search Response: Type-2 Record Definition									
Ident-ifier	Condition	Field Number	Field Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
PFN	O	2.1286	Finger / Palm Position Filter	N	2	2	0	10	Indicates if the search was filtered by finger or palm position. Finger/palm codes are as per ANSI/NIST specifications, with the added provision that each finger position must be encoded as a two digit value, with one leading zero when finger position is 1 to 9.
GFC	O	2.1287	Sex Filter	A	1	2	0	1	The filter values will determine which subjects in the target set to include when performing the search. M - Male F - Female U - Unknown
LFN	M	2.8017	Latent File Number	ANS	4	32	1	1	Returns the value supplied in the LFSI request.
LTC	M	2.8018	Latent Type Code	N	1	1	1	1	Indicates whether the search image is a finger latent or a palm latent. 1. Finger 2. Palm
LID	M	2.8144	Latent Identifier	ANS	5	36	1	1	Returns the value supplied in the LFSI request.
NOM	M	2.8208	Number of minutiae	N	1	4	1	1	The number of minutiae plotted on the latent image at time of search including any that are system generated and any manually plotted.
FPC	O	2.8288	Fingerprint Classification Filters	A	1	4	0	5	Reserved for RCMP use. Tag pertains to legacy data only.
FINS	M	2.8291	Fingerprints Searched	N	1	10	1	1	Represents the number of fingerprints searched against after filtering.

LSRI Latent Fingerprint Search Response: Type-2 Record Definition									
Ident-ifier	Condition	Field Number	Field Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
RSTS	O	2.8295	Latent Search Target Set Code	N	1	1	0	6	Indicates latent repositories that were searched (ULF, Repositories 2-6). Valid values: 1 – ULF 2 – Repository 2 3 – Repository 3 4 – Repository 4 5 – Repository 5 6 – Repository 6
LCI	M	2.8336	Latent Image Identifier	ANS	14	39	1	1	The unique identifier assigned to one specific version of a latent image retained on AFIS. Constituted by AFIS as the Latent Identifier + two digit numeric suffix to uniquely identify image versions. Each version created by an AFIS technician can be submitted for search and each of the AFIS search results are returned to the NNS as a distinct occurrence of LSRI or LCANI.

2.5.3 LATENT CANCELLATION RESPONSE (LCANI)

This transaction is returned by AFIS to inform the NNS that a latent image is unsuitable for searching or cancelled for other reasons.

LCANI Latent Cancellation Response: Type- 2 Record Definition									
Ident-ifier	Condition	Field Number	Field Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
LEN	M	2.001	Logical Record Length	N	2	7	1	1	This field is set to the total length of all bytes contained in the record
IDC	M	2.002	Image Designation Character	N	1	5	1	1	This field identifies a specific record occurrence within a transaction packet. Refer to the ANSI/NIST specification for details on its encoding.
RETCN	O	2.1052	Contributor TCN	ANS	10	40	0	1	Set to the same Contributor TCN value as provided in the request transaction.
FSRC	M	2.1214	Search Result Code	N	1	1	1	1	Valid values: 1. Ident 2. Non Ident 3. Unsuitable 4. Cancelled 5. Non Disposition
LURC	M	2.1215	Latent Unsuitable / Cancelled Reason Code	N	2	2	1	10	Specifies the reason the latent image was determined to be unsuitable or cancelled. Refer to the code set defined in the Appendix of this specification.
ACTL	M	2.1247	Activity Log				1	50	Describes the activities involved in the search including: who performed the activity, when it was performed, on what device.
	M		HRMIS Operator Identifier	N	9	9	1	1	The identifier of the operator who performed the activity.
	M		Activity Type Code	N	1	2	1	1	Specifies the activity performed. Valid values are defined in the Appendix of this specification.

LCANI Latent Cancellation Response: Type- 2 Record Definition									
Ident-ifier	Condition	Field Number	Field Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
	M		Date/Time Start	T	18	18	1	1	Date/Time the activity was initiated.
	M		Date/Time End	T	18	18	1	1	Date/Time the activity was completed.
	M		Workstation/Device ID	AN	1	12	1	1	Workstation / Device ID upon which the activity took place.
LFN	M	2.8017	Latent File Number	ANS	4	32	1	1	Returns the same value supplied in the search transaction.
LID	M	2.8144	Latent Identifier	ANS	5	36	1	1	Returns the same value supplied in the search transaction.
LCI	M	2.8336	Latent Image Identifier	ANS	14	39	1	1	The unique identifier assigned to one specific version of a latent image retained on AFIS. Constituted by AFIS as the Latent Identifier + two digit numeric suffix to uniquely identify image versions. Each version created by an AFIS technician can be submitted for search and each of the AFIS search results are returned to the NNS as a distinct occurrence of LSRI or LCANI.

2.5.4 LATENT COMMIT (LTCI)

This transaction is sent by the AFIS to signal to the NNS that a latent image has now been committed for search.

LTCI Latent Commit: Type-2 Record Definition									
Identifier	Condition	Field Number	Field Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
LEN	M	2.001	Logical Record Length	N	2	7	1	1	This field is set to the total length of all bytes contained in the record
IDC	M	2.002	Image Designation Character	N	1	5	1	1	This field identifies a specific record occurrence within a transaction packet. Refer to the ANSI/NIST specification for details on its encoding.
RETCN	O	2.1052	Contributor TCN	ANS	10	40	0	1	Set to the same Contributor TCN value as provided in the request transaction
LTC	M	2.8018	Latent Type Code	N	1	1	1	1	Indicates whether the search image is a finger or a palm 1. Finger 2. Palm
REZ	M	2.8298	Resize Factor	NS	1	4	1	1	Represents the resize factor applied to the image from its original state.
ROT	M	2.8330	Rotation	N	1	3	1	1	Represents the rotation angle applied to the latent image from its original state. Valid values range from 0 to 360.
LCI	M	2.8336	Latent Image Identifier	ANS	14	39	1	1	The unique identifier assigned to one specific version of a latent image retained on AFIS. Constituted by AFIS as the Latent Identifier + two digit numeric suffix to uniquely identify image versions.

2.5.5 LATENT TO ULF SEARCH RESPONSE (LSRLI)

AFIS returns this transaction to the NNS containing the results of a ULF search in response to a latent-to-latent search request.

LSRLI Latent to ULF Search Response: Type-2 Record Definition									
Ident-ifier	Condition	Field Number	Field Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
LEN	M	2.001	Logical Record Length	N	2	7	1	1	This field is set to the total length of all bytes contained in the record
IDC	M	2.002	Image Designation Character	N	1	5	1	1	This field identifies a specific record occurrence within a transaction packet. Refer to the ANSI/NIST specification for details on its encoding.
RETCN	O	2.1052	Contributor TCN	ANS	10	40	0	1	Set to the same Contributor TCN value as provided in the request transaction.
LTLT	C	2.1206	AFIS Latent to Latent Search Results				0	100	The candidate list for the search. Returns match report data to the NNS. Mandatory if there are search candidates.
	M		Candidate Rank	N	1	3	1	1	Rank position in the candidate list.
	M		Match Score	N	1	10	1	1	Contains the AFIS match score for the candidate.
	O		Finger / Palm Position	N	2	2	0	1	Indicates the Finger Number or Palm Position of the candidate.
	M		Latent Image Identifier	ANS	14	39	1	1	Indicates the identifier number of the candidate image.
	M		AFIS ULF Identifier	AN	3	20	1	1	The identifier assigned by AFIS to uniquely identify the entry on the ULF.
	O		Ident Section File Number	ANS	1	24	0	1	Indicates the Ident Section File Number of the candidate. Populated if available on the ULF upon a latent to latent search.
	M		Manual Verification Disposition Code	N	1	1	1	1	Represents the outcome of manual verification of the candidate. 0- No hit 1 - Hit 2 - Not viewed AFIS must set the sub-tag value to 2 (Not viewed) if the verifier has not taken any action on the candidate.

LSRLI Latent to ULF Search Response: Type-2 Record Definition									
Identifier	Condition	Field Number	Field Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
	O		Candidate FPCs	A	1	4	0	1	Reserved for RCMP use. Sub-tag pertains to legacy data only.
	O		Originating Agency Identifier	AN	7	7	0	1	The identifier (ORI) of the agency contributing the print. Must be populated if stored in the ULF, however, the identifier may not be available within certain legacy data loaded to the ULF..
	M		Creation Date	D	8	8	1	1	The date the latent image was added to the ULF.
	O		Offence Date	D	8	8	0	1	The date on which the crime is reported to have occurred.
	O		Latent Submission Crime Type Code	AN	4	4	0	1	Represents a classification type of the crime pertaining to the unsolved latent. Sub-tag to be populated when stored in the ULF.
FSRC	M	2.1214	Search Result Code	N	1	1	1	1	Valid values: 1. Ident 2. Non Ident 3. Unsuitable 4. Cancelled 5. Non Disposition
CDULF	C	2.1246	Certification Disposition to ULF				0	300	Returns the certification results of each certifier, up to 3 certifications for the same hit listed in chronological order when each certification takes place. Include those candidates that were confirmed 'Yes' on the 'Verify 1 st Certify' activity. Include each subsequent certification where the certifier has taken action on a particular candidate. Mandatory if Final Search Result Code is 1.
	M		Certification Operator Identifier	N	9	9	1	1	The identifier of the operator performing the certification.
	M		Cert Disposition Type Code	N	1	1	1	1	Represents the selection made by the certification technician. Applicable values include: 1. Certify 2. Not Identical 3. Unsuitable for Certification

LSRLI Latent to ULF Search Response: Type-2 Record Definition									
Ident-ifier	Condition	Field Number	Field Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
	M		Latent Image Identifier	ANS	14	39	1	1	Indicates the identifier number of the candidate.
	O		Manual Verification Disposition Code	N	1	1	0	1	Represents the outcome of manual verification of the candidate. Must be populated if a manual verification is performed by the certifier. 0 – No hit 1 – Hit
	O		Finger(s) Used to Certify	N	2	20	0	1	Represents the finger numbers used for certification as per ANSI/NIST specifications. Each finger position must be a two digit value, with one leading zero being added to positions 1 to 9. There are no separators used between finger numbers.
ACTL	M	2.1247	Activity Log				1	50	Describes the activities involved in the search including: who performed the activity, when it was performed and on what device.
	M		HRMIS Operator Identifier	N	9	9	1	1	The identifier of the operator who performed the activity.
	M		Activity Type Code	N	1	2	1	1	Specifies the activity performed. Valid values are the same as those documented within transaction type TPRED.
	M		Date/Time Start	T	18	18	1	1	Date/Time the activity was initiated.
	M		Date/Time End	T	18	18	1	1	Date/Time the activity was completed.
	M		Workstation/Device ID	AN	1	12	1	1	Workstation / Device ID upon which the activity took place.
RIP	O	2.1258	Revised Internal Priority	N	1	1	0	1	Return the internal priority, if it was altered during AFIS processing.
RSL	O	2.1266	Candidate Size Limit	N	1	3	0	1	Specifies the candidate list limit if one was applied to the search.
PFN	O	2.1286	Finger/Palm Position Filter	N	2	2	0	10	Indicates if the search was filtered by finger number or palm code. Each finger position must be a two digit value, with one leading zero being added to positions 1 to 9.
LFN	M	2.8017	Latent File Number	ANS	4	32	1	1	Returns the value supplied in the LFSI request.

LSRLI Latent to ULF Search Response: Type-2 Record Definition									
Ident-ifier	Condition	Field Number	Field Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
LTC	M	2.8018	Latent Type Code	N	1	1	1	1	Indicates whether the search image is a finger latent or a palm latent. 1. Finger 2. Palm
LID	M	2.8144	Latent Identifier	ANS	5	36	1	1	Returns the value supplied in the LFSI request.
NOM	M	2.8208	Number of minutiae	N	1	4	1	1	The number of minutiae plotted on the latent image at time of search including those which are system generated and those manually plotted. Only those that remain at time of search shall be counted.
FPC	O	2.8288	Fingerprint Classification Filters	A	1	4	0	5	Indicates if the search was filtered by FPC. Saved on the ULF with the latent image if saved.
FINS	M	2.8291	Fingerprints Searched	N	1	10	1	1	Represents the number of fingerprints searched against after filtering.
RSTS	O	2.8295	Latent Search Target Set Code	N	1	1	0	6	Indicates repositories that were searched on a latent to latent search. (ULF, Special Repositories). Valid values: 1 – ULF 2 – Repository 2 3 – Repository 3 4 – Repository 4 5 – Repository 5 6 – Repository 6
LCI	M	2.8336	Latent Image Identifier	ANS	14	39	1	1	The unique identifier assigned to one specific version of a latent image retained on AFIS. Constituted by AFIS as the Latent Identifier + two digit numeric suffix to uniquely identify image versions. Each version created by an AFIS technician can be submitted for search and each of the AFIS search results are returned to the NNS as a distinct occurrence of LSRLI.

2.6 REMOTE LATENT TRANSACTIONS

The Remote Latent stream is constituted by these transaction types:

TOT	INTERNAL REMOTE LATENT TRANSACTIONS
LFFSI	Latent Fingerprint Feature Search
SRLI	Search Result Latent
LFSRDI	Latent Feature Search Response Disposition
LCLOI	Remote Latent Closure
LCANI	Latent Cancellation Response
LTCI	Latent Commit
LSRI	Latent Fingerprint Search Response
ULEI	Unsolved Latent Enrolment
ULERI	Unsolved Latent Enrolment Response
ULDI	Unsolved Latent Delete Request
ULDRI	Unsolved Latent Delete Response
ULAI	Unsolved Latent Amendment Request
ULARI	Unsolved Latent Amendment Response
ULRI	Unsolved Latent Retrieve
ULRRI	Unsolved Latent Retrieval Response

Refer to the NPS External ICD version 1.7.7 for details of the external transactions and tags numbered in the 2.8xx and 2.8xxx ranges sent to and received from remote latent contributors.

2.6.1 LATENT FINGERPRINT FEATURE SEARCH (LFFSI)

This transaction is sent by the NNS to AFIS requesting the search of a latent image received from a contributor in a latent fingerprint feature search (LFFS) submission . No manual editing of the contributor's search request will be performed by the RCMP.

The LFFSI transaction will include the following logical records:

- 1 Type-1 Header Record
- 1 Type-2 Record (Data Descriptors)
- 1 Type-9 Record (Minutiae Data)
- 1 Type-13 Record (Latent Finger/Palm Image)

Note: As currently built, RCMP remote latent devices have an implementation limit imposed for the size of Type-13 records which sets the maximum image dimensions at 5.5 inches by 5.5 inches.

The responses that may be received include:

Internal Transaction Error (ERRIN)

Search Result Latent (SRLI)

2.6.2 SEARCH RESULT LATENT (SRLI)

This transaction is the AFIS response sent to the NNS for a Latent Fingerprint Feature Search (LFFSI). It returns a candidate list comprised of Identifiers of each candidate and the corresponding fingerprint images of the candidate, their match scores and the finger positions of the images on file that matched. After verifying the prints, the remote sites respond with a Latent Feature Search Response Disposition (LFSRDI) to provide their search disposition results.

The types and quantities of logical records included are as follows:

1 Type-1 Header Record

1 Type-2 Record (Data Descriptors)

0 – N Type-4 Records (Fingerprint Images)

0 – N Type-9 Records (Minutiae Data)

0 – N Type-14 Records (Fingerprint Images)

0 – N Type-15 Records (Palm Images)

0 – N Type-13 Records (Latent Images)

The total quantity of records within the SRLI packet must not exceed the RCMP implementation limit of 99 occurrences. Additionally, the NNS currently constrains each NIST packet to a maximum size of 35MB. Any latent search result containing a mix of candidate images that exceeds the maximum packet size will give rise to an NNS workflow error.

2.6.3 LATENT FEATURE SEARCH RESPONSE DISPOSITION (LFSRDI)

This transaction is sent by the NNS to AFIS with disposition details received from a remote site in response to AFIS search results previously sent to that remote site. The remote site shall have received a Search Results Latent (SRL) transaction in response to an LFFS search request. The remote site shall disposition those search results. The disposition details are returned to the NNS and then relayed to AFIS in the LFSRDI transaction.

The types and quantities of logical records included are as follows:

1 Type-1 Header Record

1 Type-2 Record (Data Descriptors)

The responses that may be received include:

Internal Transaction Error (ERRIN)

If a request is made to retain an entry on the ULF with the same Latent Image Identifier as one that already exists then the AFIS will return an ERRIN.

2.6.4 REMOTE LATENT CLOSURE (LCLOI)

This transaction is the internal version of the LCLO, used by remote sites to indicate that the latent workflow has ended on the remote device, either through a cancellation or the conclusion of the workflow. The NNS shall send the LCLOI to AFIS to conclude the latent workflow.

LCLOI consists of one each of the following logical record types:

- Type-1 Header Record
- Type-2 Record (Data Descriptors)

The possible response transactions to the LCLOI include:

- 0 – 1 Status Transaction Internal (STI) with tag 2.1097 Transaction Status Code set to 11 (Latent Image Transaction End)
- 0 – 1 Internal Error (ERRIN)

2.6.5 LATENT CANCELLATION RESPONSE (LCANI)

This transaction is sent by AFIS to the NNS to indicate that a latent image was found to be unsuitable for search or that the search was cancelled for other reason.

The types and quantities of logical records included are as follows:

- 1 Type-1 Header Record
- 1 Type-2 Record (Data Descriptors)

This Remote Latent transaction shares the same layout specifications as documented previously for Central Latent. The details are not repeated here for Remote Latent.

2.6.6 LATENT COMMIT (LTCI)

This transaction is sent by AFIS to indicate to the NNS that a remote latent image has been committed for another search against Tenprint repositories (referred to as a "search re-launch"). This occurs after a copy of the original latent image as supplied by the contributor is created and clipped and/or adjusted in some way by an AFIS user of the RCMP Remote Network Services Coordinator (RNSC) workflow. A new minutiae set can also be plotted.

The types and quantities of logical records included are as follows:

- 1 Type-1 Header Record
- 1 Type-2 Record (Data Descriptors)

The LTCI transaction referenced here in context of Remote Latent shares the same layout specifications as documented previously for Central Latent. The details are not repeated here for Remote Latent.

2.6.7 LATENT FINGERPRINT SEARCH RESPONSE (LSRI)

Once the search results for a latent image re-launch are available, AFIS sends the results to the NNS as an LSRI transaction in the same layout as described earlier for Central Latent. The central RNSC support group is the customary initiator of this kind of search involving a latent image provisioned from a remote site within an LFFS submission. The RNSC search is initiated from the AFIS user interface without involvement of the NNS at time of re-launch. The types and quantities of logical records included are as follows:

- 1 Type-1 Header Record
- 1 Type-2 Record (Data Descriptors)
- 0 – 20 Type-16 Records (Certification screen images)

This transaction shares the same layout specifications as documented previously for Central Latent. The details are not repeated here for Remote Latent.

2.6.8 UNSOLVED LATENT ENROLMENT (ULEI)

This transaction is sent by the NNS to AFIS containing a latent image and its encoding for enrolment in a latent repository. If the Latent Image ID already exists in the RCMP latent repository then a ULERI with Success Indicator set to 'Unsuccessful' is returned indicating that the latent could not be enrolled.

The types and quantities of logical records included are as follows:

- 1 Type-1 Header Record
- 1 Type-2 Record (Data Descriptors)
- 1 Type-9 Logical Record (Minutiae)
- 1 Type-13 Logical Record (Latent Image)

The possible response transactions to the ULEI include:

- 0 – 1 Unsolved Latent Enrolment Response (ULERI)
- 0 – 1 Internal Error (ERRIN)

2.6.9 UNSOLVED LATENT ENROLMENT RESPONSE (ULERI)

This transaction is returned by the AFIS to the NNS in response to a ULEI transaction. It indicates whether the latent image was successfully enrolled in the requested RCMP latent repository or not.

The ULERI transaction includes the following logical records:

- Type-1 Header Record
- Type-2 Record (Data Descriptors)

2.6.10 UNSOLVED LATENT DELETE REQUEST (ULDI)

This transaction is used by the NNS to request the deletion on AFIS of one or more latent images in the ULF. Depending on the request, AFIS will delete images at one of three levels:

- all images associated with a Latent File Number;
- all images associated with a Latent Identifier for one LFFS submission;
- one image identified by a Latent Image Identifier.

A contributor agency can only delete those latent entries that they have added themselves. The AFIS shall verify that the contributor of a delete is also shown to be the contributor of the latent image to be deleted and shall disallow the request if this is not the case.

The types and quantities of logical records included are as follows:

- 1 Type-1 Header Record
- 1 Type-2 Record (Data Descriptors)

The response may include:

- Unsolved Latent Delete Response (ULDRI)
- Internal Error Transaction (ERRIN)

2.6.11 UNSOLVED LATENT DELETE RESPONSE (ULDRI)

AFIS sends the ULF Delete Response (ULDRI) to the NNS in response to a ULDI request. If a single image instance is being deleted and there are other image instances saved on the ULF related to the same image then the reply transaction will include an indication of this.

The types and quantities of logical records included are as follows:

- 1 Type-1 Header Record
- 1 Type-2 Record (Data Descriptors)

2.6.12 UNSOLVED LATENT AMENDMENT (ULAI)

Note to reader: The transaction described in this section is not currently operational within the NNS environment.

This transaction is used internally to amend the latent file descriptors or expiry date on the ULF. Depending on the request, AFIS will amend at three levels:

1. When only a Latent File Number is provided, AFIS will change all ULF entries associated with that specified Latent File Number;
2. When a Latent Identifier is specified, but no Latent Image Identifier, then all ULF entries pertaining to that Latent Identifier are modified;
3. When a Latent Image Identifier is specified then only the single image identified by that Latent Image ID is modified.

The types and quantities of logical records included are as follows:

1 Type-1 Header Record

1 Type-2 Record

The response may include:

ULF Amendment Response (ULARI)

Internal Error Transaction (ERRIN)

2.6.13 UNSOLVED LATENT AMENDMENT RESPONSE (ULARI)

Note to reader: The transaction described in this section is not currently operational within the NNS environment.

The ULF Amendment Response (ULARI) is sent from the AFIS to the NNS to confirm that the ULF has been updated.

The types and quantities of logical records included are as follows:

1 Type-1 Header Record

1 Type-2 Record (Data Descriptors)

2.6.14 UNSOLVED LATENT RETRIEVE (ULRI)

This transaction is used by the NNS to request the fetch of a specific image from the AFIS ULF.

The types and quantities of logical records included are as follows:

1 Type-1 Header Record

1 Type-2 Record (Data Descriptors)

The response may include:

Unsolved Latent Retrieval Response (ULRRI)

Internal Error Transaction (ERRIN)

2.6.15 UNSOLVED LATENT RETRIEVAL RESPONSE (ULRRI)

This transaction is used by AFIS to forward the requested latent image to the NNS in response to a ULRI.

The types and quantities of logical records included are as follows:

1 Type-1 Header Record

1 Type-2 Record (Data Descriptors)

0 – 1 Type-9 Record (Minutiae Data)

0 – 1 Type-13 Record (Latent Image)

2.7 REMOTE LATENT DETAILED LOGICAL RECORD FORMATS

Refer to the NPS External ICD version 1.7.7 for definitions of tags in the 2.8xx and 2.8xxx series. NPS External ICD version 1.7.7 also defines code table values and permissible special characters that apply.

2.7.1 LATENT FINGERPRINT FEATURE SEARCH (LFFSI)

This transaction is used by the NNS to submit a latent fingerprint search to AFIS, as requested by a contributor at a remote site.

LFFSI Latent Fingerprint Feature Search: Type-2 Record Definition									
Identifier	Condition	Tag Number	Tag Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
LEN	M	2.001	Logical Record Length	N	2	7	1	1	This field is set to the total length of all bytes contained in the record
IDC	M	2.002	Image Designation Character	N	1	5	1	1	This field identifies a specific record occurrence within a transaction packet. Refer to the ANSI/NIST specification for details on its encoding.
SEX	O	2.807	Sex Filter	A	1	1	0	1	
ODT	C	2.858	Offence Date	D	8	8	0	1	Mandatory when 2.8332 Add to Unsolved Latent Indicator is set to 1 (Yes).
LCT	M	2.861	Latent Submission Crime Type Code	AN	4	4	1	1	
FGP	O	2.8013	Finger / Palm Position Code	N	2	2	0	10	
LFN	M	2.8017	Latent File Number	ANS	4	32	1	1	
LTC	M	2.8018	Latent Type Code	N	1	1	1	1	
ISF	M	2.8024	Ident Section File Number	ANS	1	24	1	1	
EXD	O	2.8142	Expiry Date	D	8	8	0	1	

LFFSI Latent Fingerprint Feature Search: Type-2 Record Definition									
Identifier	Condition	Tag Number	Tag Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
LID	M	2.8144	Latent Identifier	ANS	5	36	1	1	
NOM	M	2.8208	Number of Minutiae	N	1	4	1	1	
FPC	O	2.8288	Fingerprint Classification Filters	A	1	4	0	10	
ARI	C	2.8289	Authority to Release Indicator	N	1	1	0	1	Mandatory when 2.8332 Add to Unsolved Latent Indicator is set to 1 (Yes)
RSTS	C	2.8295	Latent Search Target Set Code	N	1	1	0	6	Mandatory when 2.8311 Repository Files to Search Code is set to 0 (Latent repositories). Valid values are: 1 – ULF 2 – Repository 2 3 – Repository 3 4 – Repository 4 5 – Repository 5 6 – Repository 6
COI	M	2.8296	Certified Operator Indicator	N	1	1	1	1	
REZ	M	2.8298	Resize Factor	NS	1	4	1	1	
RTSF	C	2.8302	Record Type Search Filter	N	1	1	0	6	Mandatory when 2.8311 Repository File to Search Code is set to 1 (Tenprint repositories). Valid values are: 1 – Criminal 2 – Refugee 3 – Employee 4 – Immigration 5 – Repository 5 6 – Repository 6

LFFSI Latent Fingerprint Feature Search: Type-2 Record Definition									
Identifier	Condition	Tag Number	Tag Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
RFS	M	2.8311	Repository Files to Search Code	N	1	1	1	1	Valid values: 0 – Latent 1 – Tenprint
CLL	M	2.8313	Candidate List Limit	N	1	3	1	1	
CIL	M	2.8315	Candidate Image List Limit	N	1	2	1	1	
ROT	M	2.8330	Rotation	N	1	3	1	1	
AULF	M	2.8332	Add to Unsolved Latent File	N	1	1	1	1	
LTVN	M	2.8333	Latent Verification Node/Agency Device ID	AN	1	32	1	1	
LCI	M	2.8336	Latent Image Identifier	ANS	14	39	1	1	
OID	M	2.8337	Operator Identifier	AN	6	9	1	1	
TTI	O	2.8354	Transcoder Transaction Identifier	ANS	1	16	0	1	
NVN	M	2.8910	External ICD Version Number	N	3	3	1	1	
STV	M	2.8911	System Table Version Number	N	3	3	1	1	

2.7.2 SEARCH RESULT LATENT (SRLI)

This transaction is used by AFIS to return the results of a latent feature search to the NNS.

SRLI Search Result Latent: Type-2 Record Definition									
Identifier	Condition	Tag Number	Tag Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
LEN	M	2.001	Logical Record Length	N	2	7	1	1	This field is set to the total length of all bytes contained in the record
IDC	M	2.002	Image Designation Character	N	1	5	1	1	This field identifies a specific record occurrence within a transaction packet. Refer to the ANSI/NIST specification for details on its encoding.
RRES	O	2.875	RCMP-NPS Results	A	1	1	0	1	
CANL	O	2.1272	Candidate List				0	100	
	M		Candidate List File Number / Latent Image Identifier	ANS	12	39	1	1	When sub-tag File Type Code is populated, this sub-tag contains a tenprint File Number identifying the candidate subject. In this situation, tag 2.8311 Repository Files to Search Code in the corresponding LFFSI request shall have been set to 1 (Tenprint). When sub-tag File Type Code is not populated, this sub-tag contains a Latent Image Identifier for the candidate found in a latent repository. In this situation, tag 2.8311 Repository Files to Search Code in the corresponding LFFSI request shall have been set to 0 (Latent).
	M		Finger / Palm Position	N	2	2	1	1	
	M		Match Score	N	1	10	1	1	
	M		Rank	N	1	3	1	1	
	C		Document Control Number	N	20	20	0	1	Mandatory on a latent to TP search.
	C		Candidate FPCs	A	1	4	0	1	Reserved for RCMP use. Sub-tag pertains to legacy data only.
	O		Sex Code	A	1	1	0	1	Specifies the gender of the candidate. Only applicable on a search to Tenprint.

SRLI Search Result Latent: Type-2 Record Definition									
Identifier	Condition	Tag Number	Tag Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
	O		Originating Agency Identifier	AN	7	7	0	1	The identifier (ORI) of the agency contributing the print.
	C		Creation Date	D	8	8	0	1	Specifies the date the latent was added to the ULF. Mandatory on a search to latent.
	O		Offence Date	D	8	8	0	1	
	O		Latent Submission Crime Type Code	AN	4	4	0	1	Specifies the crime pertaining to the unsolved latent. Populated when searching a latent repository and the Crime Type Code is stored by AFIS for the latent candidate...
	O		Ident Section File Number	ANS	1	24	0	1	Indicates the section file number of the candidate. Populated when available on the ULF on a latent to latent search.
	O		File Type Code	N	1	1	0	1	Indicates the File Type Code of the candidate.
	C		Search Palm Area Center x	N	1	5	0	1	Mandatory for palm latent search. Expressed as number of pixels from image origin as per ANSI NIST standards.
	C		Search Palm Area Center y	N	1	5	0	1	Mandatory for palm latent search. Expressed as number of pixels from image origin as per ANSI NIST standards.
	C		Search Palm Area Rotation	NS	1	4	0	1	Mandatory for palm latent search. An upright image with no rotation is expressed as 0. Clockwise rotation is a positive number, and counter-clockwise rotation is negative number, measured in degrees. Maximum value is 360. Minimum value is -360.
	C		Search Palm Area Width	N	1	5	0	1	Mandatory for palm latent search. Expressed as number of pixels
	C		Search Palm Area Height	N	1	5	0	1	Mandatory for palm latent search. Expressed as number of pixels
	C		Candidate Palm Area Center x	N	1	5	0	1	Mandatory for palm print or palm latent candidate. Expressed as number of pixels
	C		Candidate Palm Area Center y	N	1	5	0	1	Mandatory for palm print or palm latent candidate. Expressed as number of pixels

SRLI Search Result Latent: Type-2 Record Definition									
Identifier	Condition	Tag Number	Tag Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
	C		Candidate Palm Area Rotation	NS	1	4	0	1	Mandatory for palm print or palm latent candidate. An upright image with no rotation is expressed as 0. Clockwise rotation is a positive number, and counter-clockwise rotation is negative number, measured in degrees. Maximum value is 360. Minimum value is -360.
	C		Candidate Palm Area Width	N	1	5	0	1	Mandatory for palm print or palm latent candidate. Expressed as number of pixels.
	C		Candidate Palm Area Height	N	1	5	0	1	Mandatory for palm print or palm latent candidate. Expressed as number of pixels.
NIMG	M	2.8001	Number of Images	N	1	2	1	1	
ICON	O	2.8002	Image Content				0	25	
	M		Candidate List File Number / Latent Image Identifier	ANS	12	39	1	1	When tag 2.8311 Repository Files to Search Code in the corresponding LFFSI request has been set to 1 (Tenprint), this sub-tag contains a tenprint File Number identifying the candidate subject. When tag 2.8311 Repository Files to Search Code in the corresponding LFFSI request has been set to 0 (Latent), this sub-tag contains a Latent Image Identifier for the candidate found in a latent repository.
	M		Image Designation Character	N	1	5	1	1	This IDC points to a Type-4, Type-14 or Type-13 image record that is included in the response packet.
	M		Finger / Palm Position	N	2	2	1	1	
	M		Rank	N	1	3	1	1	
LTC	M	2.8018	Latent Type Code	N	1	1	1	1	
LID	M	2.8144	Latent Identifier	ANS	5	36	1	1	Designates a specific unadjusted image, as originally submitted by a latent contributor.
FINS	O	2.8291	Fingerprints Searched	N	1	10	0	1	Represents the number of fingerprints searched against after filtering.

SRLI Search Result Latent: Type-2 Record Definition									
Identifier	Condition	Tag Number	Tag Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
RSL	O	2.8292	Candidate Size Limit	N	1	3	0	1	Specifies the candidate list limit if one was applied to the search.
AULF	M	2.8332	Add to Unsolved Latent File	N	1	1	1	1	Indicates whether or not AFIS has enrolled the latent image provided in the LFFSI search request transaction in the ULF repository.
NCR	M	2.8334	Number of Candidates	N	1	3	1	1	
LCI	M	2.8336	Latent Image Identifier	ANS	14	39	1	1	Identifies the specific latent image that has been sent to AFIS to be searched within transaction LFFSI.
OID	M	2.8337	Operator Identifier	AN	6	9	1	1	Echoes the Operator Identifier responsible for the search transaction.
TTI	O	2.8354	Transcoder Transaction Identifier	ANS	1	16	0	1	A unique identifier assigned by a remote latent device to the LFFS search request transaction.
NVN	M	2.8910	External ICD Version Number	N	3	3	1	1	

2.7.3 LATENT FEATURE SEARCH RESPONSE (LFSRDI)

This transaction is used by the NNS to return disposition details of the candidates selected by AFIS.

LFSRDI Latent Fingerprint Search Response: Type-2 Record Definition									
Identifier	Condition	Tag Number	Tag Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
LEN	M	2.001	Logical Record Length	N	2	7	1	1	This field is set to the total length of all bytes contained in the record
IDC	M	2.002	Image Designation Character	N	1	5	1	1	This field identifies a specific record occurrence within a transaction packet. Refer to the ANSI/NIST specification for details on its encoding.
ODT	C	2.858	Offence Date	D	8	8	0	1	Mandatory when 2.8332 Add to Unsolved Latent Indicator is set to 1 (Yes).
LCT	M	2.861	Latent Submission Crime Type Code	AN	4	4	1	1	
RER	O	2.8008	Remote Encoding Results				0	1	Mandatory when the encoding is altered by a technician on the remote device.
	M		Encoding Operator Identifier	AN	6	9	1	1	
	M		Start Date/Time of Encoding	T	14	14	1	1	
	M		End Date/Time of Encoding	T	14	14	1	1	
RVR	M	2.8009	Remote Verification Results				1	1	
	M		Verification by Operator Identifier	AN	6	9	1	1	
	M		Start Date/Time of Verification	T	14	14	1	1	

LFSRDI Latent Fingerprint Search Response: Type-2 Record Definition									
Ident- ifier	Condition	Tag Number	Tag Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
	M		End Date/Time of Verification	T	14	14	1	1	
FGP	O	2.8013	Finger Position / Palm Position Code	N	2	2	0	10	
LTC	M	2.8018	Latent Type Code	N	1	1	1	1	
LID	M	2.8144	Latent Identifier	ANS	5	36	1	1	
VRLD	M	2.8206	Candidate List Verification				1	25	
	M		Candidate List File Number / Latent Image ID	ANS	12	39	1	1	
	M		Manual Verification Disposition Code	N	1	1	1	1	Represents the outcome of manual verification of the candidate. 0 – No hit 1 – Hit 2 – Not viewed Must be set to value of 2 (Not viewed) if the verifier has not taken any action on the candidate.
	M		Finger / Palm Position	N	2	2	1	1	
	M		Match Score	N	1	10	1	1	
	M		Rank	N	1	3	1	1	
FPC	O	2.8288	Finger Classification Filters	A	1	4	0	10	
ARI	C	2.8289	Authority to Release Indicator	N	1	1	0	1	Mandatory when 2.8332 Add to Unsolved Latent Indicator (tag 2.8332) is set to 1 (Yes).
LCRTD	O	2.8293	Latent Certification Disposition				0	75	Returns the certification results of each certifier, up to 3 distinct certifications for the same hit.

LFSRDI Latent Fingerprint Search Response: Type-2 Record Definition									
Identifier	Condition	Tag Number	Tag Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
	M		Certification Operator Identifier	AN	6	9	1	1	User identifier of the operator performing the certification.
	M		Cert Disposition Type Code	N	1	1	1	1	Represents the selection made by the certification technician. Applicable values include: 1. Certify 2. Not Identical 3. Unsuitable for Certification
	M		Candidate List File Number / Latent Image ID	ANS	12	39	1	1	
	O		Manual Verification Disposition Code	N	1	1	0	1	Represents the outcome of manual verification of the candidate by the certifier. 0 – No hit 1 – Hit 2 – Not viewed Must be set to value of 2 (Not viewed) if the certifier has not taken any action on the candidate.
	C		Finger(s) Used to Certify	N	2	20	0	1	Represents the finger numbers used for certification. Each finger must be a two digit code. There are no separators used between finger numbers. Mandatory for certification to Tenprint, that is, when tag 2.8311 = 1 (Tenprint). As currently implemented, this optional sub-tag shall contain at most one finger position used for certification; all additional finger positions 2 to 10 are reserved for future use.
	M		Start Date/Time of Certification	T	14	14	1	1	
	M		End Date/Time of Certification	T	14	14	1	1	
	M		Rank	N	1	3	1	1	

LFSRDI Latent Fingerprint Search Response: Type-2 Record Definition									
Identifier	Condition	Tag Number	Tag Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
COI	M	2.8296	Certified Operator Indicator	N	1	1	1	1	
RNSC	O	2.8297	Forward to RNSC Reason Code	N	1	1	0	1	Indicates that the transaction is to be forwarded to the RNSC. Valid values: 1. Hit to Closed / Inactive File (this code pertains to legacy data only) 2. Hit to Archived File (this code pertains to legacy data only) 3. Hit to Employee (this code pertains to legacy data only) 4. Hit made by uncertified operator 5. Search by uncertified operator This tag is populated by the NNS.
RFS	M	2.8311	Repository File to Search	N	1	1	1	1	Indicates whether the search was against TP or UL repositories. 0 – Latent 1 – Tenprint
AULF	M	2.8332	Add to Unsolved Latent File	N	1	1	1	1	
LCI	M	2.8336	Latent Image Identifier	ANS	14	39	1	1	
OID	M	2.8337	Operator Identifier	AN	6	9	1	1	
TTI	M	2.8354	Transcoder Transaction Identifier	ANS	1	16	1	1	
NVN	M	2.8910	External ICD Version Number	N	3	3	1	1	

2.7.4 REMOTE LATENT CLOSURE (LCLOI)

This transaction is used by the NNS to indicate to AFIS that the latent workflow has ended on the remote device either through a cancellation or the conclusion of the workflow.

LCLOI Transaction: Type-2 Logical Record									
Identifier	Condition	Tag Number	Tag Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
LEN	M	2.001	Logical Record Length	N	2	7	1	1	This field is set to the total length of all bytes contained in the record
IDC	M	2.002	Image Designation Character	N	1	5	1	1	This field identifies a specific record occurrence within a transaction packet. Refer to the ANSI/NIST specification for details on its encoding.
LFN	M	2.8017	Latent File Number	ANS	4	32	1	1	
LTC	M	2.8018	Latent Type Code	N	1	1	1	1	
LID	M	2.8144	Latent Identifier	ANS	5	36	1	1	
COI	M	2.8296	Certified Operator Indicator	N	1	1	1	1	
LCI	M	2.8336	Latent Image Identifier	ANS	14	39	1	1	
OID	M	2.8337	Operator Identifier	AN	6	9	1	1	
TTI	M	2.8354	Transcoder Transaction Identifier	ANS	1	16	1	1	
NVN	M	2.8910	External ICD Version Number	N	3	3	1	1	

2.7.5 LATENT CANCELLATION RESPONSE (LCANI)

This Remote Latent transaction shares the same layout specifications as documented previously for Central Latent. The details are not repeated here for Remote Latent.

2.7.6 LATENT COMMIT (LTCI)

This Remote Latent transaction shares the same layout specifications as documented previously for Central Latent. The details are not repeated here for Remote Latent.

2.7.7 LATENT FINGERPRINT SEARCH RESPONSE (LSRI)

This Remote Latent transaction shares the same layout specifications as documented previously for Central Latent. The details are not repeated here for Remote Latent.

2.7.8 UNSOLVED LATENT ENROLMENT (ULEI)

This request transaction is sent by the NNS to AFIS containing a latent image and its encoding to be enrolled in a latent repository.

ULEI Transaction: Type-2 Logical Record									
Identifier	Condition	Tag Number	Tag Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
LEN	M	2.001	Logical Record Length	N	2	7	1	1	This field is set to the total length of all bytes contained in the record
IDC	M	2.002	Image Designation Character	N	1	5	1	1	This field identifies a specific record occurrence within a transaction packet. Refer to the ANSI/NIST specification for details on its encoding.
ODT	M	2.858	Offence Date	D	8	8	1	1	
LCT	M	2.861	Crime Type	AN	4	4	1	1	
RER	O	2.8008	Remote Encoding Results				0	1	
	M		Encoding Operator Identifier	AN	6	9	1	1	
	M		Start Date/Time of Encoding	T	14	14	1	1	

ULEI Transaction: Type-2 Logical Record									
Ident- ifier	Condition	Tag Number	Tag Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
	M		End Date/Time of Encoding	T	14	14	1	1	
FGP	O	2.8013	Finger / Palm Position Code	N	2	2	0	10	
LFN	M	2.8017	Latent File Number	ANS	4	32	1	1	
LTC	M	2.8018	Latent Type Code	N	1	1	1	1	
ISF	M	2.8024	Ident Section File Number	ANS	1	24	1	1	
EXD	O	2.8142	Expiry Date	D	8	8	0	1	
LID	M	2.8144	Latent Identifier	ANS	5	36	1	1	
FPC	O	2.8288	Fingerprint Classification	A	1	4	0	2	
ARI	M	2.8289	Authority to Release Indicator	N	1	1	1	1	
COI	M	2.8296	Certified Operator Indicator	N	1	1	1	1	
LCI	M	2.8336	Latent Image Identifier	ANS	14	39	1	1	
OID	M	2.8337	Operator Identifier	AN	6	9	1	1	
LRTC	M	2.8351	Latent Repository	N	1	1	1	1	
TTI	M	2.8354	Transcoder Transaction Identifier	ANS	1	16	1	1	
NVN	M	2.8910	External ICD Version Number	N	3	3	1	1	

2.7.9 UNSOLVED LATENT ENROLMENT RESPONSE (ULERI)

This transaction is returned by the AFIS to the NNS in response to a ULEI request to enrol a latent image and its encoding in a latent repository.

ULERI Transaction: Type-2 Logical Record									
Identifier	Condition	Tag Number	Tag Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
LEN	M	2.001	Logical Record Length	N	2	7	1	1	This field is set to the total length of all bytes contained in the record
IDC	M	2.002	Image Designation Character	N	1	5	1	1	This field identifies a specific record occurrence within a transaction packet. Refer to the ANSI/NIST specification for details on its encoding.
NMG	O	2.827	Narrative Message	ANS	1	1000	0	1	
LTC	M	2.8018	Latent Type Code	N	1	1	1	1	
SID	M	2.8046	Success Indicator	N	1	1	1	1	The result of the enrolment request: 1 – Successful 0 – Unsuccessful; an image already exists with the supplied Latent Image Identifier value
LID	M	2.8144	Latent Identifier	ANS	5	36	1	1	Echo of request.
LCI	M	2.8336	Latent Image Identifier	ANS	14	39	1	1	Echo of request.
OID	M	2.8337	Operator Identifier	AN	6	9	1	1	Echo of request.
TTI	M	2.8354	Transcoder Transaction Identifier	ANS	1	16	1	1	
NVN	M	2.8910	External ICD Version Number	N	3	3	1	1	Echo of request.

2.7.10 UNSOLVED LATENT DELETE (ULDI)

This transaction is sent by the NNS to request the deletion of entries on the AFIS ULF. Refer to the NPS External ICD 1.7.7 for definitions of tags originating in external transaction type ULD.

ULDI Unsolved Latent Delete: Type-2 Record Definition									
Ident-ifier	Condition	Tag Number	Tag Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
LEN	M	2.001	Logical Record Length	N	2	7	1	1	This field is set to the total length of all bytes contained in the record
IDC	M	2.002	Image Designation Character	N	1	5	1	1	This field identifies a specific record occurrence within a transaction packet. Refer to the ANSI/NIST specification for details on its encoding.
LFN	M	2.8017	Latent File Number	ANS	4	32	1	1	
LTC	M	2.8018	Latent Type Code	N	1	1	1	1	
LID	O	2.8144	Latent Identifier	ANS	5	36	0	1	
LCI	O	2.8336	Latent Image Identifier	ANS	14	39	0	1	
OID	M	2.8337	Operator Identifier	AN	6	9	1	1	
NVN	M	2.8910	External ICD Version Number	N	3	3	1	1	

2.7.11 UNSOLVED LATENT DELETE RESPONSE (ULDRI)

This transaction is used by AFIS to return the results of the delete request to the NNS. Refer to the NPS External ICD 1.7.7 for definitions of tags found in external transaction type ULDR.

ULDRI Unsolved Latent Delete Response: Type-2 Record Definition									
Ident-ifier	Condition	Tag Number	Tag Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
LEN	M	2.001	Logical Record Length	N	2	7	1	1	This field is set to the total length of all bytes contained in the record
IDC	M	2.002	Image Designation Character	N	1	5	1	1	This field identifies a specific record occurrence within a transaction packet. Refer to the ANSI/NIST specification for details on its encoding.
NMG	O	2.827	Narrative Message	ANS	1	1000	0	1	When 2.8046 Success Indicator is 0 (Unsuccessful) set tag 2.827 Narrative Message to "THE LATENT IMAGE IDENTIFIER REQUESTED DOES NOT EXIST IN THE SPECIFIED RCMP LATENT DATABASE UNDER YOUR AGENCY ID. L'IDENTIFICATEUR D'IMAGE D'EMPREINTE LATENTE DEMANDE N'EXISTE PAS DANS LA BASE DE DONNEES D'EMPREINTES LATENTES DE LA GRC PRECISEE POUR VOTRE ID D'ORGANISME."
LFN	M	2.8017	Latent File Number	ANS	4	32	1	1	
LTC	M	2.8018	Latent Type Code	N	1	1	1	1	
DLST	C	2.8026	Deleted Latent List				0	100	Mandatory when 2.8046 Success Indicator is 1 (Successful)
	M		Latent Identifier	ANS	5	36	1	1	
	M		Latent Image Identifier	ANS	14	39	1	1	
SID	M	2.8046	Success Indicator	N	1	1	1	1	Values are: 0 – Unsuccessful 1 – Successful An unsuccessful outcome may be indicated when the image is not found on the ULF or when the latent does not belong to the agency requesting the delete.

ULDRI Unsolved Latent Delete Response: Type-2 Record Definition									
Ident-ifier	Condition	Tag Number	Tag Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
LID	O	2.8144	Latent Identifier	ANS	5	36	0	1	
LCI	O	2.8336	Latent Image Identifier	ANS	14	39	0	1	
OID	M	2.8337	Operator Identifier	AN	6	9	1	1	
NVN	M	2.8910	External ICD Version Number	N	3	3	1	1	

2.7.12 UNSOLVED LATENT AMENDMENT (ULAI)

This transaction is used by the NNS to amend an entry stored on the AFIS ULF.

Note to reader: The transaction described in this section is not currently operational within the NNS environment.

ULAI Unsolved Latent Amendment: Type-2 Record Definition									
Ident- ifier	Condition	Field Number	Field Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
LEN	M	2.001	Logical Record Length	N	2	7	1	1	This field is set to the total length of all bytes contained in the record
IDC	M	2.002	Image Designation Character	N	1	5	1	1	This field identifies a specific record occurrence within a transaction packet. Refer to the ANSI/NIST specification for details on its encoding.
ODT	O	2.858	Offence Date	D	8	8	0	1	Can specify an amended date
LCT	O	2.861	Latent Submission Crime Type Code	AN	4	4	0	1	Optionally specifies an amended code value
PFN	O	2.1286	Finger/Palm Position	N	2	2	0	10	Optionally specifies an amended finger or palm position; how do we correlate multiples to the previously stored data?
CDT	O	2.8007	Creation Date	D	8	8	0	1	Holds the amended value.
LFN	M	2.8017	Latent File Number	ANS	4	32	1	1	When only Latent File Number is specified, all entries on the ULF pertaining to this particular latent file shall be amended.
LTC	M	2.8018	Latent Type Code	N	1	1	1	1	
AAI	O	2.8021	Added by Agency Identifier	AN	7	7	0	1	Can specify an amended ORI for the contributing agency
ISF	O	2.8024	Ident Section File Number	ANS	1	24	0	1	Can specify an amended file number
EXD	O	2.8142	Expiry Date	D	8	8	0	1	Can specify an amended value for expiry date.
LID	O	2.8144	Latent Identifier	ANS	5	36	0	1	If a Latent Identifier and Latent File Number are specified then all entries on the ULF pertaining to the particular image and file will be amended

ULAI Unsolved Latent Amendment: Type-2 Record Definition									
Ident- ifier	Condition	Field Number	Field Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
FPC	O	2.8288	Fingerprint Classifications	A	1	4	0	10	Holds the amended values.
ARI	O	2.8289	Authority to Release Indicator	N	1	1	0	1	Can specify an amended indicator value.
LCI	O	2.8336	Latent Image Identifier	ANS	14	39	0	1	If a Latent Image Identifier is specified then only one particular Latent Image instance is to be amended by the transaction.
OID	O	2.8337	Operator Identifier	AN	6	9	0	1	Can specify an amended identifier value.

2.7.13 UNSOLVED LATENT AMENDMENT RESPONSE (ULARI)

This transaction is used by AFIS to respond to the NNS with the results of the Unsolved Latent Amendment transaction.

Note to reader: The transaction described in this section is not currently operational within the NNS environment.

ULARI Unsolved Latent Amendment Response: Type-2 Record Definition									
Ident-ifier	Condition	Field Number	Field Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
LEN	M	2.001	Logical Record Length	N	2	7	1	1	This field is set to the total length of all bytes contained in the record
IDC	M	2.002	Image Designation Character	N	1	5	1	1	This field identifies a specific record occurrence within a transaction packet. Refer to the ANSI/NIST specification for details on its encoding.
SCI	M	2.1095	Success Indicator	N	1	1	1	1	Indicates whether the amendment was successful or not. 1 – Successful 0 – Unsuccessful; prints could not be found
DTA	M	2.1153	Date / Time Amended	T	18	18	1	1	Date and time on which the entry in the ULF was changed.
LFN	M	2.8017	Latent File Number	ANS	4	32	1	1	
LTC	O	2.8018	Latent Type Code	N	1	1	0	1	Echo of ULAI request.
LID	O	2.8144	Latent Identifier	ANS	5	36	0	1	Echo of ULAI request.
LCI	O	2.8336	Latent Image Identifier	ANS	14	39	0	1	Echo of ULAI request.

2.7.14 UNSOLVED LATENT RETRIEVAL REQUEST (ULRI)

This transaction is used by the NNS to fetch an image from the AFIS Unsolved Latent File

ULRI Unsolved Latent Retrieval Request: Type-2 Record Definition									
Ident-ifier	Condition	Tag Number	Tag Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
LEN	M	2.001	Logical Record Length	N	2	7	1	1	This field is set to the total length of all bytes contained in the record
IDC	M	2.002	Image Designation Character	N	1	5	1	1	This field identifies a specific record occurrence within a transaction packet. Refer to the ANSI/NIST specification for details on its encoding.
LTC	M	2.8018	Latent Type Code	N	1	1	1	1	
LCI	M	2.8336	Latent Image Identifier	ANS	14	39	1	1	
OID	M	2.8337	Operator Identifier	AN	6	9	1	1	
NVN	M	2.8910	External ICD Version Number	N	3	3	1	1	

2.7.15 UNSOLVED LATENT RETRIEVAL RESPONSE (ULRRI)

This transaction is used by AFIS to return a requested latent image to the NNS in response to a ULRI transaction.

ULRRI Unsolved Latent Retrieval Response: Type-2 Record Definition									
Ident-ifier	Condition	Tag Number	Tag Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
LEN	M	2.001	Logical Record Length	N	2	7	1	1	This field is set to the total length of all bytes contained in the record
IDC	M	2.002	Image Designation Character	N	1	5	1	1	This field identifies a specific record occurrence within a transaction packet. Refer to the ANSI/NIST specification for details on its encoding.
NMG	C	2.827	Narrative Message	ANS	1	1000	0	1	Mandatory when 2.8046 Success Indicator is set to 0 (Unsuccessful). If the image could not be found in the specified latent database, then return the following wording: "THE LATENT IMAGE IDENTIFIER REQUESTED DOES NOT EXIST IN THE SPECIFIED RCMP LATENT DATABASE UNDER YOUR AGENCY ID. L'IDENTIFICATEUR D'IMAGE D'EMPREINTE LATENTE DEMANDE N'EXISTE PAS DANS LA BASE DE DONNEES D'EMPREINTES LATENTES DE LA GRC PRECISEE POUR VOTRE ID D'ORGANISME."
ODT	O	2.858	Offence Date	D	8	8	0	1	
LCT	O	2.861	Latent Submission Crime Type Code	AN	4	4	0	1	
CDT	O	2.8007	Creation Date	D	8	8	0	1	
LFN	O	2.8017	Latent File Number	ANS	4	32	0	1	
LTC	M	2.8018	Latent Type Code	N	1	1	1	1	
AAI	O	2.8021	Added by Agency Identifier	AN	7	7	0	1	
ISF	O	2.8024	Ident Section File Number	ANS	1	24	0	1	

ULRRI Unsolved Latent Retrieval Response: Type-2 Record Definition									
Identifier	Condition	Tag Number	Tag Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
SID	M	2.8046	Success Indicator	N	1	1	1	1	Valid values: 1 – Successful 0 – Unsuccessful; image not found
EXD	O	2.8142	Expiry Date	D	8	8	0	1	
LID	O	2.8144	Latent Identifier	ANS	5	36	0	1	
FPC	O	2.8288	Fingerprint Classifications	A	1	4	0	10	
ARI	O	2.8289	Authority to Release Indicator	N	1	1	0	1	
LCI	O	2.8336	Latent Image Identifier	ANS	14	39	0	1	
OID	O	2.8337	Operator Identifier	AN	6	9	0	1	
COI	O	2.8296	Certified Operator Indicator	N	1	1	0	1	Indicates that the operator identified by 2.8337 Operator Identifier is certified as a latent analyst.
LRTC	O	2.8351	Latent Repository	N	1	1	0	1	Indicates the latent repository from which the latent image(s) were retrieved. 1 – ULF 2 – Latent Repository 2 3 – Latent Repository 3 4 – Latent Repository 4 5 – Latent Repository 5 6 – Latent Repository 6
TTI	O	2.8354	Transcoder Transaction Identifier	ANS	1	16	0	1	A unique identifier assigned by a remote device to the transaction that enrolled this latent image.
NVN	M	2.8910	External ICD Version Number	N	3	3	1	1	

3. MISCELLANEOUS TRANSACTIONS

This section describes two groupings of miscellaneous transactions created by AFIS, the first of which is sent to the NNS and the other that is not communicated to the NNS.

3.1 MISCELLANEOUS TRANSACTIONS SENT TO THE NNS

Listed below are those miscellaneous transactions created by AFIS and sent to the NNS to provide it with workflow status information.

TOT	INTERNAL REMOTE LATENT TRANSACTIONS
STI	Status Transaction Internal
ERRIN	Internal Error Transaction
LSRFI	Latent Search Foreign Reply

3.1.1 STATUS TRANSACTION INTERNAL (STI)

This transaction enables AFIS to send status information to the NNS. The STI is returned to the NNS upon completion of automated TP QC, upon a wait condition for any manual process and at other key decision points in the workflow.

The types and quantities of logical records required in a Status Transaction (STI) are as follows:

- 1 Type-1 Header Record
- 1 Type-2 Record (Data Descriptors)

3.1.2 INTERNAL ERROR TRANSACTION (ERRIN)

This transaction provides a generic error message structure. It enables AFIS to return an error condition to the NNS.

Upon receiving the ERRIN, the NNS invokes error handling processes and notifies the RCMP operational group responsible for monitoring NNS and AFIS workflows. The types and quantities of logical records required in an ERRIN are as follows:

- 1 Type-1 Header Record
- 1 Type-2 Record (Data Descriptors)

3.1.3 LATENT SEARCH FOREIGN REPLY (LSRFI)

Note to reader: The transaction described in this section is not currently operational within the NNS environment.

This transaction is used by AFIS to return the verification and certification results of an FBI search to the NNS. It will return the FBI number and FBI fingerprints of an identification. The types and quantities of logical records included are as follows:

- 1 Type 1 Header Record
- 1 Type 2 Record
- 0 – 10 Type-4 Records (respondent-selected fingerprint images)

3.2 MISCELLANEOUS TRANSACTIONS DETAILED LOGICAL RECORD FORMATS

3.2.1 STATUS TRANSACTION (STI)

This transaction is used to return the AFIS transaction status to the NNS.

STI Status Transaction: Type-2 Record Definition									
Ident-ifier	Condition	Field Number	Field Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
LEN	M	2.001	Logical Record Length	N	2	7	1	1	This field is set to the total length of all bytes contained in the record
IDC	M	2.002	Image Designation Character	N	1	5	1	1	This field identifies a specific record occurrence within a transaction packet. Refer to the ANSI/NIST specification for details on its encoding.
PALMI	C	2.1010	Palm Indicator	N	1	1	0	1	When set to positive this tag indicates that the STI pertains to a palm related search. Valid values: 1 – Yes 0 – No Mandatory for all reverse search-related and latent search-related STIs.
DBI	O	2.1012	DB Indicator	N	1	1	0	1	Indicates which database is being searched. Valid values: 0 – RCMP 1 – FBI 2 – Other
RDCN	C	2.1041	Contributor DCN	N	20	20	0	1	Set to the Contributor DCN value as provided in the related request transaction. Mandatory when the request transaction to which the STI applies is TPRI.
RETCN	O	2.1052	Contributor TCN	ANS	10	40	0	1	Set to the Contributor TCN value as provided in the related request transaction.
TSC	M	2.1097	Transaction Status Code	N	1	3	1	1	Indicates the status of the transaction. Refer to the

STI Status Transaction: Type-2 Record Definition									
Ident- ifier	Condition	Field Number	Field Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
									appendix of this document for the list of AFIS Status Codes and descriptions.
STDT	M	2.1098	Status Date/Time	T	18	18	1	1	Indicates the date/time the status of the internal transaction changed.
AULFI	O	2.1293	AFIS ULF Identifier	AN	3	20	0	1	Internal identifier used within the AFIS to identify a unique entry on the ULF. To be returned to the NNS when a latent is saved on the ULF.
LCI	C	2.8336	Latent Image Identifier	ANS	14	39	0	1	Reference to the latent image instance to which the status applies. If the initiating transaction is an LFSI or an LFFSI then this tag becomes mandatory.

3.2.2 INTERNAL ERROR TRANSACTION (ERRIN)

This transaction is used to report error conditions to the NNS from the AFIS or other interfaced services or applications.

ERRIN Internal Error Transaction: Type-2 Record Definition									
Ident- ifier	Condition	Field Number	Field Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
LEN	M	2.001	Logical Record Length	N	2	7	1	1	This field is set to the total length of all bytes contained in the record
IDC	M	2.002	Image Designation Character	N	1	5	1	1	This field identifies a specific record occurrence within a transaction packet. Refer to the ANSI/NIST specification for details on its encoding.
NMG	O	2.827	Narrative Message	ANS	1	1000	0	1	Narrative text that identifies where in the application the error was detected and sufficient details of why the error has occurred to allow the responsible support personnel to investigate and determine what corrective action needs to be taken.

3.2.3 LATENT SEARCH FOREIGN REPLY (LSRFI)

This transaction is used by AFIS to return the verification and certification results of a search performed at the FBI to the NNS.

Note to reader: The transaction described in this section is not currently operational within the NNS environment.

LSRFI Latent Search Foreign Reply: Type-2 Record Definition									
Ident- ifier	Condition	Field Number	Field Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
LEN	M	2.001	Logical Record Length	N	2	7	1	1	This field is set to the total length of all bytes contained in the record
IDC	M	2.002	Image Designation Character	N	1	5	1	1	This field identifies a specific record occurrence within a transaction packet. Refer to the ANSI/NIST specification for details on its encoding.
RETCN	O	2.1052	Contributor TCN	ANS	10	40	0	1	External Transaction Control Number
NFBI	M	2.1190	Number of FBI respondents examined	N	1	3	1	1	Number of respondents examined during verification of FBI verification packet.
FSRC	M	2.1214	Search Result Code	N	1	1	1	1	Valid values: 1. Ident 2. Non Ident 3. Unsuitable 4. Cancelled 5. Non Disposition
FSD	O	2.1217	FBI Search Details				0	1	Represents a set-up for searching a single latent image against the FBI IAFIS.
	O		Finger Position	N	1	2	0	1	Use 00 for a no-finger search. Use codes from Table 6 of ANSI-NIST-ITL-2000. Maps to FGP in US EBTS LFFS.
	O		Geographical Area of the Search	A	2	10	0	1	This field indicates the geographic area to be searched. Entry may be any valid code from Code Table POB in Part VI of the NCIC Code Manual. Maps to GEO in US EBTS. Five areas may be included of 2 characters each. No separators are used between each occurrence.

LSRFI Latent Search Foreign Reply: Type-2 Record Definition									
Ident-ifier	Condition	Field Number	Field Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
	O		Sex	A	1	1	0	1	This field is used to report the gender of the subject. Maps to SEX in the US EBTS LFFS.
	O		Hair Colour	A	3	3	0	1	Indicate the subject's color of hair. Maps to HAI in US EBTS.
	O		Eye Colour	A	3	6	0	1	Indicates the subject's color of eyes. Maps to EYE in the US EBTS. Two eye colors may be included of 3 characters each.
	O		Race Descent	A	1	1	0	1	This field is used to indicate the race of the subject. Maps to RAC in the US EBTS.
	O		Age Range	N	4	4	0	1	An estimated age range may be entered using a pair of two-digit numbers. The first two digits represent the minimum age, and the second two the maximum. There is no separator character used between the ages. Maps to AGR in US EBTS.
	O		Height Range	AN	6	6	0	1	If a range of height is given, it shall be expressed as two three-character values formatted as described for mnemonic HGT, indicating the shortest and tallest heights of the subject. There shall be no separator character used between the heights. The allowable range is 400 to 711. Heights outside this range will be clamped at these limits. Maps to HTR in US EBTS.
	O		Weight Range	N	6	6	0	1	If a range of weight is given, it shall be expressed as two 3-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 499 lbs (however, there is no minimum range limit for missing persons or unknown persons). Maps to WTR in US EBTS.
	O		Pattern Level Classifications	ANS	5	5	0	1	The tag must include a 2 digit finger number followed by a space and a 2 alpha pattern. E.g., "01 AU". Maps to PAT in US EBTS.
ACTL	M	2.1247	Activity Log				1	50	Describes the activities involved in the search including: who performed the activity, when it was performed and on what device.
	M		HRMIS Operator Identifier	N	9	9	1	1	Operator who performed the activity.

LSRFI Latent Search Foreign Reply: Type-2 Record Definition									
Identifier	Condition	Field Number	Field Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
	M		Activity Type Code	N	1	2	1	1	Specifies the activity performed. Valid values are the same as those documented within transaction type TPREI.
	M		Date/Time Start	T	18	18	1	1	Date/Time the activity was initiated.
	M		Date/Time End	T	18	18	1	1	Date/Time the activity was completed.
	M		Workstation / Device ID	AN	1	12	1	1	Workstation / Device ID upon which the activity took place. In the case of scan, the scanning device must be identified in this tag.
RIP	O	2.1258	Revised Internal Priority	N	1	1	0	1	Return the internal priority, if it was altered during AFIS processing.
CERTD	C	2.1273	Foreign Certification Disposition				0	300	Returns the certification results of each certifier. Only include those candidates that were confirmed 'yes' on the 'Verify 1 st Certify'. For subsequent certifications only include those candidates where the certifier has taken action. Mandatory if Final Search Result Code is 1.
	M		Certification Operator Identifier	N	9	9	1	1	User Identifier of the operator performing the certification.
	M		File Certified Date/Time	T	12	12	1	1	Date/Time the file was certified.
	M		Cert Disposition Type Code	N	1	1	1	1	Represents the selection made by the certification technician. Applicable values include: 1..Certify 2..Not Identical 3..Unsuitable for Certification
	M		FBI Number	N	1	12	1	1	The FBI Number to which the latent was certified.
	O		Manual Verification Disposition Code	N	1	1	0	1	Represents the outcome of manual verification of the respondent by the certifier. 0 – No hit 1 – Hit

LSRFI Latent Search Foreign Reply: Type-2 Record Definition									
Identifier	Condition	Field Number	Field Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
	M		Finger(s) Used to Certify	N	2	20	1	1	Represents the finger numbers used for certification. Each finger must be a two digit code. There are no separators used between finger numbers.
FLTP	O	2.1292	FBI Latent to TP Search Results				0	100	For Latent to TP search results. Mandatory if candidates are provided from FBI.
	M		Respondent Rank	N	1	3	1	1	Rank position in the respondent list.
	M		FBI Number	N	1	12	1	1	File number of the respondent.
	M		Match Score	N	1	10	1	1	Contains the AFIS match score for the respondent as reported by FBI. Maps to MSC in the US EBTS.
	O		Finger Position	N	2	2	0	1	Finger position of the respondent. Maps to FGP in the US EBTS.
	O		Manual Verification Disposition Code	N	1	1	0	1	Represents the outcome of manual verification of the respondent. 0 – No hit 1 – Hit 2 – Not viewed The AFIS must set the value to '2 Not viewed' if the verifier has not taken any action on the candidate.
LFN	M	2.8017	Latent File Number	ANS	4	32	1	1	This number corresponds to a police occurrence.
LTC	M	2.8018	Latent Type Code	N	1	1	1	1	Indicates whether the search image is a finger latent or a palm latent 1. Finger 2. Palm
LID	M	2.8144	Latent Identifier	ANS	5	36	1	1	This number designates a specific unadjusted image.
NOM	M	2.8208	Number of minutiae	N	1	4	1	1	The number of minutiae plotted on the latent image at the time of search including those that were system generated and those that were manually plotted.
LCI	M	2.8336	Latent Image Identifier	ANS	14	39	1	1	The identifier of the latent image for which the response applies.

3.3 MISCELLANEOUS TRANSACTIONS NOT SENT TO THE NNS

The following miscellaneous transaction type is created and logged by AFIS, but, is not sent to the NNS.

TOT	INTERNAL REMOTE LATENT TRANSACTIONS
TPSEI	Tenprint Direct Scan and File on AFIS

Note: A Tenprint Direct File capability also exists on AFIS that creates a TPRI transaction, however, the transaction is not sent to the NNS.

3.3.1 TENPRINT DIRECT SCAN AND FILE ON AFIS (TPSEI)

This transaction is logged by AFIS whenever a user-initiated event occurs via the AFIS UI to scan and file a set of Tenprint images directly to one of the configured Tenprint repositories, including any of the spare repositories held in reserve as described in this document.

The TPSEI transaction is not communicated by AFIS to the NNS.

The types and quantities of logical records that may be included in one TPSEI transaction are as follows:

1 Type-1 Header Record

1 Type-2 Record (Data Descriptors)

0 – 10 Type-10 Records (Photo Images)

0 – 6 Type-15 Records (Palm Print Image)

0 – 1 Type-16 Record (Document Image)

and one of:

2 – 14 Type-4 Records (10 Rolled Impressions and 4 sets of Plain Impressions), or,

2 – 14 Type-14 Records (10 Rolled Impressions and 4 sets of Plain Impressions)

3.4 MISCELLANEOUS TRANSACTIONS DETAILED LOGICAL RECORD FORMATS

3.4.1 TENPRINT DIRECT SCAN AND FILE ON AFIS (TPSEI)

This transaction is created through the AFIS UI whenever a set of Tenprint images is scanned from paper and filed directly into one of the available tenprint repositories.

TPSEI Tenprint Direct File on AFIS: Type-2 Record Definition									
Ident-ifier	Condition	Field Number	Field Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
LEN	M	2.001	Logical Record Length	N	2	7	1	1	This field is set to the total length of all bytes contained in the record
IDC	M	2.002	Image Designation Character	N	1	5	1	1	This field identifies a specific record occurrence within a transaction packet. Refer to the ANSI/NIST specification for details on its encoding.
FNA	M	2.1040	File Number to Assign	N	12	12	1	1	The supplied File Number may or may not already exist in one of the TP repositories containing some other set of TP images.
RDCN	M	2.1041	Contributor DCN	N	20	20	1	1	Set to the DCN value assigned to the contributor's submission. Since this is a unique identifier of the TP set, this value must not already exist in AFIS.
DTR	M	2.1053	Date/Time Received	T	12	12	1	1	The date/time that the submission was received by the RCMP for capture on AFIS.

TPSEI Tenprint Direct File on AFIS: Type-2 Record Definition									
Ident-ifier	Condition	Field Number	Field Name	Character Type	Field Size Per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
FTC	M	2.1196	File Type Code	N	1	1	0	1	Represents the file type code to assign. File type code equates to an AFIS Tenprint repository number where the TP set of images shall be filed: 1. Criminal 2. Refugee 3. Employee 4. Immigration 5. Repository 5 6. Repository 6
DOCID	O	2.1270	Document Identifier	N	20	20	0	1	Optional identifier associated with the specific fingerprint form.

4. PAPER CONVERSION SUBSYSTEM TRANSACTIONS

Listed below are internal transactions that were formerly created by the Paper Conversion Subsystem (PCS). The transactions populated by PCS were forwarded to the NNS for validation and processing as per the named submission type.

TOT	<u>PAPER CONVERSION TRANSACTION NAME</u>
CARI	Internal Criminal Paper Submission
MAPI	Internal Civil Clearance Paper Submission
REFI	Internal Refugee Paper Submission

All descriptions and details for these transactions are now situated in the AFIS ICD Addendum (RDIMS #42237). The CARI, MAPI and REFI transaction types are no longer relevant to the NNS-to-AFIS data interchange. These transaction types continue to be relevant only to the NNS for the purpose of completing the internal tenprint submission workflows.

5. NIST DETAILED RECORD DEFINITIONS

The sub-sections herein contain record layout specifications for all RCMP-implemented record types other than Type-2.

5.1 TYPE-1 LOGICAL RECORD – HEADER RECORD

The following describes the format of a Type-1 Header Record.

AFIS ICD Type-1 Logical Record									
Identifier	Condition	Tag Number	Tag Name	Character Type	Field Size per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
LEN	M	1.001	Logical Record Length	N	2	3	1	1	As defined by ANSI/NIST.
VER	M	1.002	Version Number	N	4	4	1	1	Valid values are: 0300 – ANSI/NIST version dating to 2000 0500 – ANSI/NIST version dating to 2011
CNT	M	1.003	File Content	N			2	99	As defined by ANSI/NIST.
	M		Information Item 1	N	1	2	1	1	
	M		Information Item 2	N	1	5	1	1	
TOT	M	1.004	Type of Internal Transaction	A	3	7	1	1	Represents the transaction acronym defined in the AFIS ICD. (example: TPRI)
DAT	M	1.005	Date	D	8	8	1	1	The local date on which the transaction is assembled and dispatched for processing.
PRY	M	1.006	Priority	N	1	2	1	1	Internal Priority setting for this Tenprint transaction. Valid values are 1 to 9, highest to lowest priority.
DAI	M	1.007	Destination Agency Identifier	AN	7	7	1	1	An identifier devised by the RCMP to represent the internal sub-system receiving the transaction. Identifiers representing AFIS and the NNS shall vary according to the system image (Production vs. Test) participating in the data interchange.

AFIS ICD Type-1 Logical Record									
Identifier	Condition	Tag Number	Tag Name	Character Type	Field Size per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
OAI	M	1.008	Originating Agency Identifier	AN	7	7	1	1	An identifier devised by the RCMP to represent the internal sub-system receiving the transaction.
TCN	M	1.009	Transaction Control Number	AN	10	20	1	1	Unique internal Transaction Control Number assigned by the sending subsystem.
TCR	O	1.010	Reference TCN	AN	10	20	0	1	A response transaction shall populate this tag with the value of 1.009 TCN taken from the corresponding request transaction.
NSR	M	1.011	Native Scanning Resolution	NS	5	5	1	1	As defined by ANSI/NIST. A transaction containing RT-4 or RT-7 images shall typically have this tag set to 19.69 (ppmm; the equivalent of 500 ppi) or 39.38 (ppmm = 1000 ppi). In all other cases, the tag is normally set to 00.00.
NTR	M	1.012	Nominal Transmitting Resolution	NS	5	5	1	1	As defined by ANSI/NIST. A transaction containing RT-4 or RT-7 images shall typically have this tag set to 19.69 (ppmm = 500 ppi) or 39.38 (ppmm = 1000 ppi). In all other cases, the tag is normally set to 00.00.
DOM	O	1.013	Domain Name	AN	1	8	0	1	Not implemented by the RCMP
GMT	O	1.014	Greenwich Mean Time	AN	15	15	0	1	As defined by ANSI/NIST, expressed in format YYYYMMDDhhmmssZ. While the tag is declared as an optional value, the RCMP shall require full (mandatory) coverage for all transactions originating from all new subsystems installed and certified after 2015.
DCS	O	1.015	Directory of Character Sets	AN	1	8	0	4	Not implemented by the RCMP; 7-bit ASCII to be used as the default character set

5.2 TYPE-4 LOGICAL RECORD – GRAYSCALE FINGERPRINT IMAGE

The following describes the format of a Type-4 Fingerprint Record, encoded in binary representation and commonly used to represent a rolled or plain image constituting a tenprint set of finger images.

AFIS ICD Type-4 Logical Record									
Identifier	Condition	Field Number	Field Name	Character Type	Field Size per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
LEN	M	4.001	Logical Record Length	B	4	4	1	1	This field is set to the total length of all bytes contained in the record
IDC	M	4.002	Image Designation Character	B	1	1	1	1	This field identifies a specific record occurrence within a transaction packet. Refer to the ANSI/NIST specification for details on its encoding.
IMP	M	4.003	Impression Type	B	1	1	1	1	One-byte binary representation of a finger impression code. Permissible values are 0 to 3, as per ANSI/NIST impression types.
FGP	M	4.004	Finger Number	B	6	6	1	1	Six one-byte binary values representing a finger position code 1 to 14, per ANSI/NIST Finger Position Codes. For a tenprint transaction, the left-most byte position shall contain the applicable code value.
ISR	M	4.005	Image Scanning Resolution	B	1	1	1	1	One byte binary representation of the Image Scanning Resolution as per ANSI/NIST.
HLL	M	4.006	Horizontal Line Length	B	2	2	1	1	The number of pixels contained in any one of the horizontal lines of the image data
VLL	M	4.007	Vertical Line Length	B	2	2	1	1	The number of horizontal lines contained in the image data
CGA	M	4.008	Grayscale Compression Algorithm	B	1	1	1	1	One byte binary representation of the numeric code defined by ANSI/NIST for the Compression Algorithm applied to the image data. The RCMP currently supports code 1 (WSQ) only. In the future, code 6 (PNG) shall also be supported.
DAT	M	4.009	Image Data	B	1		1	1	A fingerprint image conforming to a supported format (currently WSQ only). Maximum image sizes are described in the NPS External ICDs.

5.3 TYPE-7 LOGICAL RECORD – LATENT OBJECT PHOTO IMAGE

The following describes the format of a Type-7 Record, encoded in binary representation and commonly used to represent an object shot (photograph) containing one or more latent images.

AFIS ICD Type-7 Logical Record									
Ident- ifier	Condition	Field Number	Field Name	Character Type	Field Size per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
LEN	M	7.001	Logical Record Length	B	4	4	1	1	
IDC	M	7.002	Image Designation Character	B	1	1	1	1	
IMP	M	7.003	Impression Type	B	1	1	1	1	One-byte binary representation of an impression type code for the object shot. Permissible values are 6 and 14, as per ANSI/NIST impression types.
FGP	M	7.004	Finger Number	B	6	6	1	1	Six one-byte binary values each representing a finger or palm position code, per ANSI/NIST Finger Position Codes.
ISR	M	7.005	Image Scanning Resolution	B	1	1	1	1	One byte binary representation of the Image Scanning Resolution as per ANSI/NIST.
HLL	M	7.006	Horizontal Line Length	B	2	2	1	1	The number of pixels contained in any one of the horizontal lines of the image data
VLL	M	7.007	Vertical Line Length	B	2	2	1	1	The number of horizontal lines contained in the image data
CGA	M	7.008	Grayscale Compression Algorithm	B	1	1	1	1	One byte binary representation of the numeric code defined by ANSI/NIST for the Compression Algorithm applied to the image data. The RCMP currently accepts code 2 (JPEG lossy-format) only. In the future, code 6 (PNG) shall also be supported.
DAT	M	7.009	Image Data	B	1		1	1	A photo image of the physical object containing one or more latent images and conforming to a supported format (currently JPEG only). No maximum image size is described in the NPS External ICDs.

5.4 TYPE-9 LOGICAL RECORD – MINUTIAE DATA

The following table describes the layout of a Type-9 Record, describing minutiae for a finger or palm image. The RCMP currently recognizes data tags described by the ANSI INCITS 378-2004 standard as well as the legacy FBI IAFIS Feature Set.

AFIS ICD Type-9 Logical Record									
Identifier	Condition	Tag Number	Tag Name	Character Type	Field Size per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
LEN	M	9.001	Logical Record Length	N	4	8	1	1	
IDC	M	9.002	Image Designation Character	N	1	5	1	1	
IMP	M	9.003	Impression Type	N	1	2	1	1	
FMT	M	9.004	Minutia Format	A	1	1	1	1	
		9.013 to 9.030	FBI IAFIS Feature Set (multiple tags)						The current RCMP AFIS receives and sends certain Remote Latent transactions with this particular tag range encoded. In the future, the RCMP intends to discontinue usage of the FBI IAFIS Feature Set and replace it with one of the other feature sets documented below in this table.
		9.126 to 9.150	INCITS 378 Feature Set (multiple tags)						Only those INCITS tags required by the RCMP are defined below.
CBI	C	9.126	CBEFF Information				1	1	Mandatory when the INCITS Block is populated with Type-9 encoding.
	M		CBEFF Format Owner	N	2	2	1	1	
	M		CBEFF Format Type	N	3	3	1	1	
	M		CBEFF Product Identifier	AN	8	8	1	1	A hexadecimal string composed of numerics (0-9) and the first five alphas (A-F).
CEI	C	9.127	Capture Equipment Identifiers				1	1	Mandatory when the INCITS Block is populated with Type-9 encoding.
	M		Appendix F Status	A	4	4	1	1	

AFIS ICD Type-9 Logical Record									
Ident- ifier	Condition	Tag Number	Tag Name	Character Type	Field Size per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
	M		Capture Equipment ID	ANS	1	30	1	1	
HLL	C	9.128	Horizontal Line Length	N	2	5	1	1	Mandatory when the INCITS Block is populated with Type-9 encoding.
VLL	C	9.129	Vertical Line Length	N	2	5	1	1	Mandatory when the INCITS Block is populated with Type-9 encoding.
SLC	C	9.130	Scale Units	N	1	1	1	1	Mandatory when the INCITS Block is populated with Type-9 encoding.
THPS	C	9.131	Transmitted Horizontal Pixel Scale	N	1	5	1	1	Mandatory when the INCITS Block is populated with Type-9 encoding.
TVPS	C	9.132	Transmitted Vertical Pixel Scale	N	1	5	1	1	Mandatory when the INCITS Block is populated with Type-9 encoding.
FVW	C	9.133	Finger View	N	1	2	1	1	Mandatory when the INCITS Block is populated with Type-9 encoding.
FGP	C	9.134	Friction Ridge Generalized Position	N	1	2	1	1	Mandatory when the INCITS Block is populated with Type-9 encoding.
FQD	C	9.135	Friction Ridge Quality Data				1	9	Mandatory when the INCITS Block is populated with Type-9 encoding.
	M		Quality Value	N	1	3	1	1	
	O		Algorithm Vendor Identification	AN	4	4	0	1	A hexadecimal string composed of numerics (0-9) and the first five alphas (A-F).
	O		Algorithm Product Identification	N	1	5	0	1	
NOM	C	9.136	Number Of Minutiae	N	1	4	1	1	Mandatory when the INCITS Block is populated with Type-9 encoding.
FMD	C	9.137	Finger Minutiae Data				1	999	Mandatory when the INCITS Block is populated with Type-9 encoding.
	M		Minutia Index Number	N	1	4	1	1	
	M		X Coordinate	N	1	5	1	1	

AFIS ICD Type-9 Logical Record									
Ident- ifier	Condition	Tag Number	Tag Name	Character Type	Field Size per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
	M		Y Coordinate	N	1	5	1	1	
	M		Minutia Angle	N	1	3	1	1	
	M		Minutia Type	N	1	1	1	1	
	M		Quality of Minutia	N	1	3	1	1	
		9.300 to 9.399	Extended Feature Set						For future use.
		9.401 to 9.998	(multiple tags)						These tags are not required by the RCMP

5.5 TYPE-10 LOGICAL RECORD – FACIAL PHOTO IMAGE

The following table describes the layout of a Type-10 Record, containing a photo image. The RCMP currently implements facial photos only; photos of Scars, Marks and Tattoos are not supported at this time.

AFIS ICD Type-10 Logical Record									
Ident-ifier	Condition	Tag Number	Tag Name	Character Type	Field Size per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
LEN	M	10.001	Logical Record Length	N	4	8	1	1	
IDC	M	10.002	Image Designation Character	N	1	5	1	1	
IMT	M	10.003	Image Type	A	4	11	1	1	The RCMP accepts type "FACE" only
SRC	M	10.004	Source Agency Identifier	AN	7	7	1	1	
PHD	M	10.005	Photo Capture Date	D	8	8	1	1	
HLL	M	10.006	Horizontal Line Length	N	2	5	1	1	
VLL	M	10.007	Vertical Line Length	N	2	5	1	1	
SLC	M	10.008	Scale Units	N	1	1	1	1	
HPS	M	10.009	Horizontal Pixel Scale	N	1	5	1	1	
VPS	M	10.010	Vertical Pixel Scale	N	1	5	1	1	
CGA	M	10.011	Compression Algorithm	A	3	7	1	1	The RCMP currently accepts code JPEGB (lossy-format) only. In the future, code PNG shall also be supported.
CSP	M	10.012	Colour Space	A	3	4	1	1	Permissible values are: "GRAY", "RGB", "SRGB", "YCC".
SAP	O	10.013	Subject Acquisition Profile	N	1	2	0	1	The permissible code set appears in the appendix of this document.
FIP	O	10.014	Face Image Box Coordinates						Tag is not required by the RCMP
FPFI	O	10.015	Face Image Path Coordinates						Tag is not required by the RCMP
SHPS	O	10.016	Scanned Horizontal Pixel Scale						Tag is not required by the RCMP
SVPS	O	10.017	Scanned Vertical Pixel Scale						Tag is not required by the RCMP

AFIS ICD Type-10 Logical Record									
Identifier	Condition	Tag Number	Tag Name	Character Type	Field Size per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
DIST	O	10.018	Distortion						Tag is not required by the RCMP
LAF	O	10.019	Lighting Artifacts						Tag is not required by the RCMP
POS	O	10.020	Subject Pose	A	1	1	0	1	The RCMP accepts ANSI/NIST codes A, F, L and R. Code D (Determined 3D Pose) may be required as a future consideration.
POA	O	10.021	Pose Offset Angle	N	1	4	0	1	Special Character Allowed: One leading Minus Sign (Hyphen)
PXS	O	10.022	Photo Description	A	4	21	0	9	This tag is defined expressly for the purpose of interpreting legacy photo descriptions; all new Type-10 records shall make use of tag 10.026.
PAS	O	10.023	Photo Acquisition Source						Tag is not required by the RCMP
SQS	O	10.024	Subject Quality Scores						Tag is not required by the RCMP
SPA	O	10.025	Subject Pose Angles				0	1	As a future consideration, this tag is required at such time when 10.020 Subject Pose of "D" is implemented.
SXS	O	10.026	Subject Facial Description	ANS	3	20	0	50	
*	O	10.027 to 10.045	(multiple tags)						These tags are not required by the RCMP
COM	O	10.200	Comments	ANS	1	500	0	1	An optional RCMP-defined tag. Additional Special Characters Allowed: Carriage Return, Line Feed
	O	10.902 to 10.998	(multiple tags)						These tags are not required by the RCMP
DAT	M	10.999	Image Data	B	2		1	1	

5.6 TYPE-13 LOGICAL RECORD – LATENT FINGER/PALM IMAGE

The following table describes the layout of a Type-13 Record, containing a latent fingerprint or palmprint image.

AFIS ICD Type-13 Logical Record									
Identifier	Condition	Tag Number	Tag Name	Character Type	Field Size per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
LEN	M	13.001	Logical Record Length	N	4	8	1	1	
IDC	M	13.002	Image Designation Character	N	1	5	1	1	
IMP	M	13.003	Impression Type	N	1	2	1	1	The RCMP accepts ANSI/NIST codes 4, 7, 12 and 15.
SRC	M	13.004	Source Agency Identifier	AN	7	7	1	1	
LCD	M	13.005	Latent Capture Date	D	8	8	1	1	
HLL	M	13.006	Horizontal Line Length	N	2	5	1	1	
VLL	M	13.007	Vertical Line Length	N	2	5	1	1	
SLC	M	13.008	Scale Units	N	1	1	1	1	
HPS	M	13.009	Horizontal Pixel Scale	N	1	5	1	1	
VPS	M	13.010	Vertical Pixel Scale	N	1	5	1	1	
CGA	M	13.011	Compression Algorithm	A	3	7	1	1	The RCMP currently accepts code NONE (no compression) only. In the future, code PNG shall also be supported.
BPX	M	13.012	Bits Per Pixel	N	1	2	1	1	
FGP	M	13.013	Finger / Palm Position	N	1	2	1	6	
SPD	O	13.014	Search Position Descriptors						Tag is not required by the RCMP
PPC	O	13.015	Print Position Coordinates						Tag is not required by the RCMP
SHPS	O	13.016	Scanned Horizontal Pixel Scale						Tag is not required by the RCMP
SVPS	O	13.017	Scanned Vertical Pixel Scale						Tag is not required by the RCMP
COM	O	13.020	Comment	ANS	2	126	0	1	

AFIS ICD Type-13 Logical Record									
Identifier	Condition	Tag Number	Tag Name	Character Type	Field Size per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
LQM	O	13.024	Latent Quality Metric						Tag is not required by the RCMP
INM	O	13.200	Image Name	ANS	1	12	0	1	An optional RCMP-defined tag.
COM	O	13.201	Comments	ANS	1	1000	0	1	An optional RCMP-defined tag. Additional Special Characters allowed: Carriage Return, Line Feed
	O	13.902 to 13.998	(multiple tags)						These tags are not required by the RCMP
DAT	M	13.999	Image Data	B	1		1	1	Maximum image sizes are described in the NPS External ICD 1.7.7.

5.7 TYPE-14 LOGICAL RECORD – GRAYSCALE FINGERPRINT IMAGE

A Type-14 Record may contain the image of a single finger (as required for rolled finger impressions or for a civil biometric consent) or multiple fingers imaged simultaneously as plain finger impressions. In context of Identification Flats, this record may contain up to four fingers imaged simultaneously and segmented through coordinate positions into individual finger image components.

AFIS ICD Type-14 Logical Record									
Identifier	Condition	Tag Number	Tag Name	Character Type	Field Size per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
LEN	M	14.001	Logical Record Length	N	4	8	1	1	
IDC	M	14.002	Image Designation Character	N	1	5	1	1	
IMP	M	14.003	Impression Type	N	1	2	1	1	The RCMP accepts ANSI/NIST codes 0, 1, 2 and 3.
SRC	M	14.004	Source Agency Identifier	AN	7	7	1	1	
TCD	M	14.005	Fingerprint Capture Date	D	8	8	1	1	
HLL	M	14.006	Horizontal Line Length	N	2	5	1	1	
VLL	M	14.007	Vertical Line Length	N	2	5	1	1	
SLC	M	14.008	Scale Units	N	1	1	1	1	
HPS	M	14.009	Horizontal Pixel Scale	N	1	5	1	1	
VPS	M	14.010	Vertical Pixel Scale	N	1	5	1	1	
CGA	M	14.011	Compression Algorithm	AN	3	7	1	1	The RCMP currently accepts codes WSQ and WSQ20 representing WSQ compression only. In the future, code PNG shall also be supported.
BPX	M	14.012	Bits Per Pixel	N	1	3	1	1	
FGP	M	14.013	Finger Position	N	2	2	1	6	The RCMP accepts codes 01 to 15, the equivalents of ANSI/NIST codes 1 to 15, with all single digit codes padded with one leading zero.
PPD	O	14.014	Print Position Descriptors						Tag is not required by the RCMP
	O	14.015	Print Position Coordinates						Tag is not required by the RCMP

AFIS ICD Type-14 Logical Record									
Ident- ifier	Condition	Tag Number	Tag Name	Character Type	Field Size per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
	O	14.016	Scanned Horizontal Pixel Scale						Tag is not required by the RCMP
	O	14.017	Scanned Vertical Pixel Scale						Tag is not required by the RCMP
	O	14.018	Amputated or Bandaged						Tag is not required by the RCMP; refer to tag 2.8084 Missing Fingerprint Reason for the encoding of an amputated or bandaged finger.
COM	O	14.020	Comment	ANS	1	126	0	1	
SEG	O	14.021	Segment Position				0	5	
	M		Finger Number	N	1	2	1	1	The RCMP accepts any of ANSI/NIST codes 1 to 10.
	M		Left Coordinate	N	1	4	1	1	
	M		Right Coordinate	N	1	4	1	1	
	M		Top Coordinate	N	1	4	1	1	
	M		Bottom Coordinate	N	1	4	1	1	
IQM	O	14.022	NIST Quality Metric				0	5	
	M		Finger Number	N	1	2	1	1	
	M		NIST Quality Score	N	1	3	1	1	
SQM	O	14.023	Segmentation Quality Metric						Tag is not required by the RCMP
FQM	O	14.024	Fingerprint Quality Metric						Tag is not required by the RCMP
	O	14.025 to 14.031	(multiple tags)						These tags are not required by the RCMP

AFIS ICD Type-14 Logical Record									
Identifier	Condition	Tag Number	Tag Name	Character Type	Field Size per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
IMTC	M	14.200	Image Type Contained	N	1	1	1	1	A mandatory RCMP-defined tag classifying the type of image found in this record. Values are: 1 – An image belonging to a rolled and plain tenprint set (normally 14 images per set; plain thumbs taken as separate images) 2 – An image belonging to a set of Identification Flats (normally 3 images in a 4-4-2 arrangement) 3 – A plain fingerprint image designated as a “biometric consent” image 4 – An image belonging to a rolled and plain tenprint set (normally 13 images per set; plain thumbs taken together in one image)
	O	14.902 to 14.998	(multiple tags)						These tags are not required by the RCMP
DAT	M	14.999	Image Data	B	1		1	1	Maximum image sizes are described in the NPS External ICDs.

5.8 TYPE-15 LOGICAL RECORD – GRAYSCALE PALMPRINT IMAGE

The following table describes the layout of a Type-15 Record, containing one palmprint image.

AFIS ICD Type-15 Logical Record									
Ident-ifier	Condition	Tag Number	Tag Name	Character Type	Field Size per Occurrence		Occurrences		Notes
					Min	Max	Min	Max	
LEN	M	15.001	Logical Record Length	N	4	8	1	1	
IDC	M	15.002	Image Designation Character	N	1	5	1	1	
IMP	M	15.003	Impression Type	N	2	2	1	1	The RCMP accepts ANSI/NIST codes 10 and 11.
SRC	M	15.004	Source Agency	AN	7	7	1	1	
PCD	M	15.005	Palmprint Capture Date	D	8	8	1	1	
HLL	M	15.006	Horizontal Line Length	N	2	5	1	1	
VLL	M	15.007	Vertical Line Length	N	2	5	1	1	
SLC	M	15.008	Scale Units	N	1	1	1	1	
HPS	M	15.009	Horizontal Pixel Scale	N	1	5	1	1	
VPS	M	15.010	Vertical Pixel Scale	N	1	5	1	1	
CGA	M	15.011	Compression Algorithm	AN	3	7	1	1	The RCMP currently accepts codes WSQ and WSQ20 representing WSQ compression only. In the future, code PNG shall also be supported.
BPX	M	15.012	Bits Per Pixel	N	1	2	1	1	
PLP	M	15.013	Palmprint Position	N	2	2	1	1	The RCMP accepts ANSI/NIST codes 21 to 28.
CMT	O	15.020	Comment	ANS	1	1000	0	1	Additional Special Characters allowed: Carriage Return, Line Feed
	O	15.024 to 15.998	(multiple tags)						These tags are not required by the RCMP
DAT	M	15.999	Image Data	B	1		1	1	Maximum image sizes are described in the NPS External ICDs.

5.9 TYPE-16 LOGICAL RECORD – DOCUMENT/SCREENSHOT IMAGE

The following table describes the layout of a Type-16 Record, used for RCMP purposes to contain the image of one side of a paper document page, or, one computer screen image depicting information about an event of significance to RTID. In context of this AFIS ICD, the image type of relevance to AFIS is the screen image containing information about the decision taken upon certification of a finger/palm image identification. The screen image is captured by AFIS and returned to the NNS, to be preserved in the audit record of the decision taken.

AFIS ICD Type-16 Logical Record									
Ident- ifier	Condition	Tag Number	Tag Name	Character Type	Field Size Per Occurrence		Occurrence		Notes
					Min	Max	Min	Max	
LEN	M	16.001	Logical Record Length	N	4	8	1	1	
IDC	M	16.002	Image Designation Character	N	1	5	1	1	
UDI	O	16.003	User Defined Image Type	ANS	1	35	0	1	
SRC	O	16.004	Source Agency Identifier	AN	7	7	0	1	
UTD	O	16.005	User Defined Testing Date	D	8	8	0	1	
HLL	M	16.006	Horizontal Line Length	N	2	5	1	1	
VLL	M	16.007	Vertical Line Length	N	2	5	1	1	
SLC	M	16.008	Scale Units	N	1	1	1	1	
HPS	M	16.009	Horizontal Pixel Scale	N	1	5	1	1	
VPS	M	16.010	Vertical Pixel Scale	N	1	5	1	1	
CGA	M	16.011	Compression Algorithm	AN	3	7	1	1	The RCMP currently accepts code JPEGB (lossy-format) only.
BPX	M	16.012	Bits Per Pixel	N	2	3	1	1	
PGN	M	16.013	Page Number	N	1	3	1	1	Page Number of the document, where all pages belong to the same submission. This RCMP-defined tag does not agree with the ANSI/NIST 2011 tag definition.
DTP	M	16.015	Document Type Code	N	1	2	1	1	The type of document of relevance to AFIS: 15 - Certification Screen Image (CSI) This RCMP-defined tag does not agree with the ANSI/NIST 2011 specifications.
CMT	O	16.016	Comment	ANS	0	1000	0	1	Free text comment. This RCMP-defined tag does not

AFIS ICD Type-16 Logical Record									
Identifier	Condition	Tag Number	Tag Name	Character Type	Field Size Per Occurrence		Occurrence		Notes
					Min	Max	Min	Max	
									agree with the ANSI/NIST 2011 tag definition.
DOCID	O	16.017	Document Identifier	N	20	20	0	1	The document identifier attached as a barcode to the physical document. In the case of CREMMDES submissions, this is the DCN barcode for page 1 (i.e., the C216) only. This RCMP-defined tag does not agree with the ANSI/NIST 2011 tag definition.
ACTL	O	16.018	Activity Log				0	50	An optional tag that pertains to legacy data formerly captured by the paper conversion subsystem. This RCMP-defined tag does not agree with the ANSI/NIST 2011 specifications.
	M		HRMIS Operator Identifier	N	9	9	1	1	Operator who performed the activity.
	M		Activity Type Code	N	1	2	1	1	An activity performed during paper conversion. Valid values are: <ol style="list-style-type: none"> 1. Barcode 2. Scan 3. QC / Segmentation 4. Text Conversion 5. Text QC 6. Exception Handling
	M		Date/Time Start	T	18	18	1	1	Date/Time the activity was initiated.
	M		Date/Time End	T	18	18	1	1	Date/Time the activity was completed.
	M		Workstation / Device ID	AN	1	12	1	1	Workstation / Device ID upon which the activity took place. In the case of scan, the scanning device must be identified in this tag.
SEG	O	16.019	Image Position				0	14	To be populated when fingerprint or palm print images have been captured from the document. This RCMP-defined tag does not agree with the ANSI/NIST 2011 specifications.
	M		Finger / Palm Position	N	1	2	1	1	
	M		Center x	N	1	4	1	1	

AFIS ICD Type-16 Logical Record									
Identifier	Condition	Tag Number	Tag Name	Character Type	Field Size Per Occurrence		Occurrence		Notes
					Min	Max	Min	Max	
	M		Center y	N	1	4	1	1	
	M		Rotation	N	1	3	1	1	
	M		Width	NS	1	5	1	1	Expressed in pixels.
	M		Height	NS	1	5	1	1	Expressed in pixels.
CDIM	M	16.020	Card Dimension				1	1	This RCMP-defined tag does not agree with the ANSI/NIST 2011 tag definition.
	M		Card width	NS	1	5	1	1	Expressed in pixels.
	M		Card height	NS	1	5	1	1	Expressed in pixels.
	M		Card Resolution	N	1	4	1	1	
DS	M	16.021	Document Side	N	1	1	1	1	Indicates the side of the document to which the image pertains. Valid values are: 1 – Front Side 2 – Back Side This RCMP-defined tag does not agree with the ANSI/NIST 2011 specifications.
	O	16.024 to 16.998	(multiple tags)						These tags are not required by the RCMP
DAT	M	16.999	Image Data	B	2		1	1	

6. APPENDIX – CODE TABLES

6.1 AFIS ACTIVITY TYPE CODES

The following codes describe specific types of activities completed in any AFIS workflow.

Activity Type Codes		
Code	Description EN	Description FR
1	Automated Ten Print QC	CQ automatisé de décadactylogrammes
2	Manual Ten Print QC	CQ manuel de décadactylogrammes
3	Ten Print Verification	Vérification de décadactylogrammes
4	Ten Print Certification	Certification de décadactylogrammes
5	1:1 TP Match (for RCMP use; pertains to legacy data)	Correspondance DD 1:1 - obsolète
6	Ten Print Search	Recherche de DD
7	TP Enrol	Enregistrement des DD
8	Latent Review (for RCMP use; pertains to legacy data)	Révision d'empreintes latentes - obsolète
9	Latent Automated Encoding	Codage automatique d'empreintes latentes
10	Latent Manual Encoding	Codage manuel d'empreintes latentes
11	Latent Verification	Vérification d'empreintes latentes
12	Latent Certification	Certification d'empreintes latentes
13	Latent to TP Search	Recherche d'empreintes latentes parmi les empreintes DD
14	Latent To Latent Search	Recherche d'empreintes latentes parmi les empreintes latentes
15	Latent Enrol	Enregistrement des empreintes latentes
16	Reverse Search	Recherche inversée
17	Reverse Search Verification	Vérification de la recherche inversée

Activity Type Codes		
Code	Description EN	Description FR
18	Reverse Search Certification	Certification de la recherche inversée
19	FBI Latent Encoding	Codage d'empreintes latentes du FBI
20	FBI Latent Verification	Vérification d'empreintes latentes du FBI
21	FBI Latent Certification	Certification d'empreintes latentes du FBI
22	Automated Certification	Certification automatique
23	Manual Cut	Découper manuellement
24	Lasso	Lasso
25	Latent Cancel	Annuler Latente
26	PL Lasso	Lasso de PL
27	PL Review (for RCMP use; pertains to legacy data)	Réviser PL - obsolète
28	PL Auto Encoding	Codage PL
29	PL Manual Encoding	Codage manuel du PL
30	PL to TP Search	Recherche PL à DD
31	PL to UL Search	Recherche PL à TNI
32	PL Enrol	Enregistrement PL
33	Manual Palm Check	Vérification manuelle de la paume
34	Palm Certify - Yes	Paume certifiée - Oui
35	Palm Certify - No	Paume certifiée - Non

6.2 AFIS ACTIVITY TYPE CODES BY TRANSACTION TYPE

The following table defines AFIS activity types to be reported by AFIS in a response transaction type which returns activity event data to the NNS within tag 2.1247 Activity Log. For those table cells annotated as "Yes", the NNS requires the activity details to be logged in tag 2.1247 when the related activity type is performed on AFIS. For each cell shown as empty, the related activity type does not apply to the indicated response transaction type.

AFIS Activity Type Codes by Transaction Type		AFIS Response Transaction Type				
Activity Code	Description EN	TPREI	TPQCI	TPULI	LSRI	LCANI
1	Automated Ten Print QC	Yes*	Yes*			
2	Manual Ten Print QC	Yes*	Yes*			
3	Ten Print Verification	Yes				
4	Ten Print Certification	Yes				
5	1:1 TP Match (pertains to legacy data only)					
6	Ten Print Search	Yes				
7	TP Enrol	Yes				
8	Latent Review (pertains to legacy data only)					
9	Latent Automated Encoding				Yes	
10	Latent Manual Encoding				Yes	
11	Latent Verification				Yes	
12	Latent Certification				Yes	
13	Latent to TP Search				Yes	
14	Latent To Latent Search				Yes	
15	Latent Enrol				Yes	
16	Reverse Search			Yes		
17	Reverse Search Verification			Yes		
18	Reverse Search Certification			Yes		
19	FBI Latent Encoding (reserved for future use)					
20	FBI Latent Verification (reserved for future use)					
21	FBI Latent Certification (reserved for future use)					

AFIS Activity Type Codes by Transaction Type		AFIS Response Transaction Type				
Activity Code	Description EN	TPREI	TPQCI	TPULI	LSRI	LCANI
22	Automated Certification	Yes				
23	Manual Cut	Yes				
24	Lasso				Yes	
25	Latent Cancel					Yes
26	PL Lasso				Yes	
27	PL Review (pertains to legacy data only)					
28	PL Auto Encoding				Yes	
29	PL Manual Encoding				Yes	
30	PL to TP Search				Yes	
31	PL to UL Search				Yes	
32	PL Enrol				Yes	
33	Manual Palm Check	Yes				
34	Palm Certify - Yes	Yes				
35	Palm Certify - No	Yes				

***Note:** As currently implemented, Activity Codes 1 (Automated Ten Print QC) and 2 (Manual Ten Print QC) are replicated redundantly in TPREI and TPQCI.

6.3 TENPRINT POOR QUALITY REASON CODES

The following codes describe the assessed reasons accounting for a set of poor quality tenprint images.

Tenprint Poor Quality Reasons		
Code	Description EN	Description FR
01	Ink too dark	Encre trop foncée
02	Ink too light	Encre trop pâle
03	Mirrored print	Empreinte miroir
04	Uneven ink	Encre inégale
05	Hands very dry	Mains très sèches
06	Hands very wet	Mains très moites
07	Incomplete impressions	Empreintes incomplètes
08	Impressions distorted	Empreintes distordues
09	Impressions not positioned correctly	Positionnement des empreintes incorrect
10	Uneven pressure	Pression inégale
11	Impressions smudged	Empreintes maculées
12	Fingerprints not in correct sequence	Ordre de placement des empreintes incorrect
13	Ridge detail indistinct	Particularités des crêtes indistinctes
14	Poor Quality Photocopy or Other Reproduction	Photocopie ou autre reproduction de faible qualité
15	Plain impressions taken separately	Empreintes plaquées prélevées séparément
16	Plain impressions not provided	Empreintes plaquées non fournies
17	Best attainable	Meilleur possible
18	Unsuitable	Impropres
19	Pixelated Image	Pixelated Image (FR)
20	No Fingerprints Provided	No Fingerprints Provided (FR)

6.4 LATENT UNSUITABLE REASON CODES

The following codes describe the reasons accounting for the cancellation of a latent search request.

Latent Unsuitable Reasons		
Code	Description EN	Description FR
01	Insufficient minutiae for encoding	Particularités insuffisantes aux fins du codage.
02	Insufficient contrast between ridges and background. If better contrast can be obtained, re-photograph and return.	Contraste insuffisant entre les crêtes et l'arrière-plan. Si un meilleur contraste est possible, rephotographier et retourner.
03	Impressions superimposed	Empreintes superposées.
04	Impressions appear out of focus. Re-photograph and return.	Les empreintes semblent floues. Rephotographier et retourner.
05	Impressions appear to be reduced or enlarged; recalibrate and/or re-photograph 1:1 and return.	Les empreintes semblent avoir été réduites ou agrandies. Recalibrer et (ou) rephotographier au taux 1:1, puis retourner
06	Ridge detail indistinct	Détail des crêtes imprécis.
07	Impression not likely within rolled impression of database	Les empreintes ne se trouvent sûrement pas parmi les empreintes roulées de la base de données.
08	Cancelled to an FPS	Annulé - FPS.
09	Cancelled to a non-FPS	Annulé - non-FPS.
10	Cancelled by the contributor	Annulé par le contributeur.
11	Duplicate deleted	Double supprimé.
12	Cancelled by RNSC	Annulé par le CRRD

6.5 AFIS STATUS CODES

The following codes describe specific transaction status codes originating on AFIS and conveyed to the NNS within an internal STI transaction type.

AFIS Status Codes		
Code	Description EN	Description FR
1	Wait for TP QC	Attendre CQ des DD
2	TP-TP Wait for Verify	Attendre Vérification des DD
3	TP-TP Wait for Certify	Attendre Certification des DD
4	LT Wait for Edit	Attendre Codage des empreintes latentes
5	LT-TP Wait for Verify 1st Certify	Attendre Vérification des empreintes latentes
6	LT-TP Wait for 2nd Certify	Attendre Certification des empreintes latentes
7	TP-UL Wait for Verify 1st Certify	Attendre Vérification de la RI
8	TP-UL Wait for 2nd Certify	Attendre Certification de la RI
9	TP-UL Wait for Urgent Verify 1st Certify (for RCMP use; pertains to legacy data only)	Attendre Vérification de la RI urgente - obsolète
10	TP-UL Wait for Urgent 2nd Certify (for RCMP use; pertains to legacy data only)	Attendre Certification de la RI urgente - obsolète
11	Latent Image Transaction End	Image d'empreinte latente - Fin de la transaction
12	Wait for Lasso	Attendre le lasso
13	Saved to ULF	Sauvegardé dans le TNI
14	Not Saved to ULF	Non sauvegardé dans le TNI
15	No Urgent RS Candidates (for RCMP use; pertains to legacy data only)	Aucun candidat de RI urgente - obsolète
16	Urgent RS Candidates (for RCMP use; pertains to legacy data only)	Candidats de RI urgentes - obsolète
17	No RS Candidates	Aucun candidat de RI
18	Wait for Manual Cut	Attendre le découpage manuel
19	TP-UL Wait for 3rd Certify	Correspondance DD-TNI/Attente la 3e certification

AFIS Status Codes		
Code	Description EN	Description FR
20	LT-TP Wait for 3rd Certify	Correspondance EL-DD/Attendre 3e certification
21	TP-UL Wait for Urgent 3rd Certify (for RCMP use; pertains to legacy data only)	Correspondance DD-TNI/Attendre la 3e certification urgente - obsolète
22	LT-UL Wait for Verify 1st Certify	Correspondance EL-TNI/Attendre 1re certification
23	LT-UL Wait for 2nd Certify	Correspondance EL-TNI/Attendre 2e certification
24	LT-UL Wait for 3rd Certify	Correspondance EL-TNI/Attendre 3e certification
25	Wait for Palm Certify	Attendre la certification des empreintes palmaires
26	Wait for Insert	Attendre insertion
27	Wait for UL Search	Attendre recherche de latente
28	Wait for PL Search	Attendre la recherche PL
29	Wait for Palm Check	Attendre vérification de la paume
30	PL Wait for Lasso	Attendre le lasso de la paume latente
31	PL Wait for Edit	Attendre codage de la paume latente
32	PL-TP Wait for Verify 1st Certify	Correspondance PL-DD / Attendre vérification 1ère certification
33	PL-TP Wait for 2nd Certify	Correspondance PL-DD / Attendre 2e certification
34	PL-TP Wait for 3rd Certify	Correspondance PL-DD / Attendre 3e certification
35	PL-UL Wait for Verify 1st Certify	PL-UL Correspondance PL-TNI / Attendre vérification 1ère certification
36	PL-UL Wait for 2nd Certify	Correspondance PL-TNI / Attendre 2e certification)
37	PL-UL Wait for 3rd Certify	Correspondance PL-TNI / Attendre 3e certification

Legend:

PL – Palm Latent
 RS – Reverse Search
 TP – Tenprint
 UL – Unsolved Latent

6.6 SUBJECT ACQUISITION PROFILE CODES

The following codes describe the permissible subject acquisition methods available for a Type-10 facial photo image.

Subject Acquisition Profile Codes		
Code	Description EN	Description FR
0	Unknown Acquisition Profile	tbd
1	Surveillance Facial Image	tbd
10	Driver's Licence Image	tbd
11	ANSI Full Frontal Facial Image (ANSI 385)	tbd
12	ANSI Token Facial Image (ANSI 385)	tbd
13	ISO Full Frontal Facial Image (ISO/IEC 19794-5)	tbd
14	ISO Token Facial Image (ISO/IEC 19794-5)	tbd
15	Personal Identity Verification Facial Image (NIST SP 800-76)	tbd
20	Legacy Mugshot	tbd
30	Best Practice Application – Level 30	tbd
32	Mobile Id Best Practice – Level 32	tbd
40	Best Practice Application – Level 40	tbd
42	Mobile Id Best Practice – Level 42	tbd
50	Best Practice Application – Level 50	tbd
51	Best Practice Application – Level 51	tbd
52	Mobile Id Best Practice – Level 52	tbd