

Overview

This document applies to those items that are electronically presented for deposit and forward collections purposes.

It is to be used by the customer as a specification to create a X9.37 - 2003 DSTU version file of MICR checks and associated images to be delivered to PNC Operations for forward presentment of the items and images through the Image Exchange process. Unless specifically stated the standards and values of the X9.37 – 2003 DSTU version should be used.

Any failure to adhere to the X9.37 DTSU standards and/or standards established by PNC Bank will result in the file being rejected for processing.

This document addresses the ANSI X9.37 –2003 DSTU Specifications for Electronic Exchange of Check and Image Data. It is the current format supported by PNC.

The standard for an Image Exchange File is evolving. The industry is in the process of implementing the Post Pilot version, however, and ANSI X100.180 is in process of being planned.

The customer, as a provider of X9.37 files for introduction into the exchange networks, is expected to adhere to the industry standards. PNC will notify the customer of our schedules for conforming to new formats. Additionally, PNC will require a full test cycle to be accepted. We anticipate significant lead-time will be provided both for the final conversion date and the date PNC will be able to begin to accept test files.

Processing Standards

Check Images captured at the customer's site must be present for each 25 record included in the file.

Physical checks at the customer site must be retained for 14 business days. These items must be secured in such a way as to prevent accidental reprocessing. It should also be noted that PNC Bank, through its Adjustment's function, may request that an original item be retrieved and re-processed because:

- The quality of the image was deemed to be unacceptable (either by PNC Bank, a processing bank such as the Fed, or the Paying Bank.
- The deposited item was not eligible for Check 21 or Image Exchange, e.g. foreign or Canadian items and US Savings Bonds.
- The image was missing.

All transactions rejected or returned will be charged back to the originating deposit account.

The File format must be EBCDIC or ASCII, according to PNC Standards.

Each X9.37 file must include a header record (01 – field 5) that includes a pre-assigned Customer identifier. Failure to include this pre-assigned number will result in file rejection.

A single X9.37 file should not exceed 40,000 items.

A cash letter may contain multiple deposits. If the customer wants to include multiple deposits within a cash letter, there are different rules for placement of the Type 61 records and the customer must discuss this with PNC.

Each bundle (type 20 record equivalent to a batch) may contain approximately up to 300 transactions. Every Bundle (Type 20 record) must have a credit (type 61 or type 25-7) immediately following the Bundle record. Items that offset the credit must immediately follow the credit and must balance to the dollar value of the credit. A bundle can have multiple credits however all offsets for that credit must also be in that bundle

PNC Operations will accept transmitted files 24 hours a day (with the exception of the normal Saturday night/Sunday morning maintenance windows).

PNC Operations will accept multiple files a day from each source.

Files to be posted same day must be accepted by PNC Operations by 8 P.M. EST

Operations is expecting at least one file a day per source, however, PNC will not hold up processing if a file is not received.

Transmissions into PNC must be via Internet FTP with PGP encryption.
PNC will provide specific Landing Zone information for both Production and Test files.

All images sent to PNC Operations must be Black and White TIFF Group 4 compression 200 DPI minimum. Clipping of image is not acceptable.

Files delivered to Operations with its own credit records must have:

- A type 61 or type 25-7 record or multiple Type 61 or Type 25-7 records that added together equal the amount of the Cash Letter Record.
- The sum of the Type 25 records must equal the offsetting Type 61 or Type 25-7 record(s).
- Type 25 transactions must balance to the bundle (batch) Totals records Type 70
- Bundle records equal to Cash Letter Totals Record Type 90.
- The Credit Record (Type 61(s) or Type 25-7) amount will not be added (summed) in the bundle (batch) control record (Type 70) or the Cash Letter Control Record (Type 90) or the File Control Record (Type 99).
- The Credit Record (Type 61 or Type 25-7) will not be counted in the Type 70 record, the Type 90 Record nor the File Control Record (Type 99) item count fields.
The Credit Records (Type 61 or Type 25-7) will be counted in the File Control Record (Type 99) Total Record Count.

Other Considerations

PNC will require three different successful tests unless, during the testing process, both parties agree that testing has been successful and no further testing is required.

Any change at the customer including:

- application upgrades
- scanning hardware upgrades
- scanning application and drivers
- Transmission Protocol

The changes must be tested with PNC Bank. Testing must be scheduled 2 weeks prior to the proposed test date. Again, three successful tests will be required.

Following is a Key for Usage Type

M	Mandatory. The data element shall always be present.
C	Conditional. The data element shall be present unless omitted under clearing arrangements.
O	Optional. The data element does not have to be present.

Following is a Key for Data Type

A	Alphabetic. The alphabetic characters are upper & lower case (Aa) – (Zz).
N	Numeric. The numeric characters are the numbers zero (0) through nine (9)
AN	Alphanumeric. An alphanumeric character is any of the alphabetic or numeric
ANS	Alphanumeric/ Special. An alphanumeric/ special character is any of the alphabetic, numeric or special characters.
NB	Numeric blank. A numeric blank character is any numeric character or blank space.
NS	Numeric/ Special. A numeric / Special character is any of the numeric or special characters.
NBS	Numeric blank/ Special. A numeric blank/ special character is any of the numeric, blank or special characters.

File Structure (Single Deposit Example)

Record Type	Description
01	File Header Record
10	Cash Letter Header Record
20	Bundle Header Record
61 or 25-7	Credit Record
50	Image View Detail Record front (credit)
52	Image View Data Record front (credit)
25	Check Detail Record
26	Bank of First Deposit Record
50	Image View Detail Record front
52	Image View Data Record front
50	Image View Detail Record back
52	Image View Data Record back
25	Check Detail Record
26	Bank of First Deposit Record
50	Image View Detail Record front
52	Image View Data Record front
50	Image View Detail Record back
52	Image View Data Record back
70	Bundle Control Record
90	Cash Letter Control Record
99	File Control Record

File Structure (Multiple Deposit Example)

Record Type	Description
01	File Header Record
10	Cash Letter Header Record
20	Bundle Header Record
61 or 25-7	Credit Record
50	Image View Detail Record front (credit)
52	Image View Data Record front (credit)
25	Check Detail Record
26	Bank of First Deposit Record
50	Image View Detail Record front
52	Image View Data Record front
50	Image View Detail Record back
52	Image View Data Record back
25	Check Detail Record
26	Bank of First Deposit Record
50	Image View Detail Record front
52	Image View Data Record front
50	Image View Detail Record back
52	Image View Data Record back
61 or 25-7	Credit Record
50	Image View Detail Record front (credit)
52	Image View Data Record front (credit)
25	Check Detail Record
26	Bank of First Deposit Record
50	Image View Detail Record front
52	Image View Data Record front
50	Image View Detail Record back
52	Image View Data Record back
70	Bundle Control Record
90	Cash Letter Control Record
99	File Control Record

File Header Record (Type 01)

Field	Field Name	Usage	Position	Size	Type	Value / Source
1	Record Type	M	01 - 02	2	N	01
2	Standard Level	M	03 - 04	2	N	03
3	Test File Indicator	M	05	1	A	T – Test P- Production
4	Immediate Destination Routing Number	M	06 – 14	9	N	031000053
5	Immediate Origin Routing Number	M	15 – 23	9	N	413000024
6	File Creation Date	M	24 - 31	8	N	YYYYMMDD
7	File Creation Time	M	32 – 35	4	N	HHMM Eastern Time
8	Resend Indicator	M	36	1	A	N
9	Immediate Destination Name	O	37 - 54	18	A	PNC PGH
10	Immediate Origin Name	O	55 - 72	18	A	IDOR
11	File ID Modifier	M	73	1	AN	A - If multiple files are created at the same time, each file must have a unique FILE ID Modifier.
12	Country Code	M	74 – 75	2	A	US
13	User Field	M	76 – 79	4	AN	CR61 (61 record included in file or else blank)
14	Reserved	M	80	1		Blank

Cash Letter Header Record (Type 10)

Field	Field Name	Usage	Position	Size	Type	Value / Source
1	Record Type	M	01 - 02	2	N	10
2	Collection TYPE Indicator	M	03 - 04	2	N	01 – (Forward Presentment file)
3	Destination Routing Number	M	05 -13	9	N	031000053
4	ECE Institution Routing Number	M	14 - 22	9	N	413000024
5	Cash Letter Business Date	M	23 - 30	8	N	YYYYMMDD (This must be the current business date or current +1 Business date)
6	Cash Letter Creation Date	M	31 - 38	8	N	YYYYMMDD
7	Cash Letter Creation Time	M	39 - 42	4	N	HHMM Eastern Time
8	Cash Letter Record Type Indicator	M	43	1	A	I (file includes images)
9	Cash Letter Documentation Type Indicator	C	44	1	A	G (no paper provided)
10	Cash Letter ID	M	45 - 52	8	AN	This field can not duplicate within a day
11	Originator Contact Name	O	53 - 66	14	AN	Blank
12	Originator Contact Phone Number	O	67 - 76	10	N	Blank
13	Fed Work Type	C	77	1		Blank
14	Return Indicator	C	78 - 79	2		Blank
15	User Field	M	80	1		Blank

Field 10 – This value must be unique for the entire day from this source. A duplicate number will reject the file.

Bundle Header Record (Type 20)

Field	Field Name	Usage	Position	Size	Type	Value / Source
1	Record Type	M	01 - 02	2	N	20
2	Collection Type Indicator	M	03 - 04	2	N	01
3	Destination Routing Number	M	05 - 13	9	N	031000053
4	ECE Institution Routing Number	M	14 - 22	9	N	413000024
5	Bundle Business Date	M	23 - 30	8	N	YYYYMMDD (This must be the current business date or current + 1 Business date)
6	Bundle Creation Date	M	31 - 38	8	N	YYYYMMDD
7	Bundle ID	C	39 - 48	10	AN	Assigned by customer and cannot duplicate within the same file.
8	Bundle Sequence Number	C	49 - 52	4		Blank
9	Cycle Number	C	53 - 54	2		Blank
10	Return Location Routing Number	C	55 - 63	9	N	031000053
11	User Field	C	64 - 68	5		Blank
12	Reserved	M	69 - 80	12		Blank

Credit Record (Type 61)

Note: The Standard credit is type 61, however a type 25 (with a 7 in field 9) record can be used instead. All validations and controls are identical when processing a type 25 (with a 7) or a type 61.

Field	Field Name	Usage	Position	Size	Type	Value / Source
1	Record Type	M	01 - 02	2	N	61
2	Auxiliary On-Ups	C	03 - 17	15	NB	Blank
3	External Processing Code	C	18	1	NS	Blank (position 44)
4	Posting Bank Routing Number	M	19 - 27	9	N	640030579
5	Credit Account Number	M	28 - 47	20	N	The depositing account number at PNC (9014424) 10 positions numeric followed by a "/" right justified leading spaces
6	Item Amount	M	48 - 57	10	N	Dollar value of credit
7	ECE Institution Item Sequence Number	M	58 - 72	15	AN	Unique sequence number assigned by sending application
8	Documentation Type Indicator	C	73	1	A	G (no paper provided)
9	Type of Account Code	C	74	1		Blank
10	Source of Work Code	C	75	1	N	3 (remote customer scanned)
11	Work Type	C	76	1		Blank
12	Debit Credit Indicator	C	77	1	N	2 (credit)
13	Reserved	M	78 - 80	3		Blank

- The credit record must be offset by the accumulated Check Detail Record (type 25) amounts. The offsetting records will be delimited by either the next type 61 record or the Cash Letter Control Record (Type 90).
- The Credit Record Item Amount will not be summed in the 70 (field 3), Type 90 (field 4) or Type 99 (field 5) Total Amount fields.
- The Credit Records will be counted in the Type 70 (field 2) Item Count Field.
- The Credit Records will be counted in the Type 90 (field 3) or Type 99 (field 4) Item Count Fields.
- The Credit Records will be counted in the File Control Record Type 99 (field 3) Total Record Count.
- Credit Records are required to be followed by front and back image records (Type 50 and Type 52). This can be an actual image or a virtual image with data relating to Customer MICR information, or minimally Customer Contact information (customer name and contact phone number).

Detail Record (Type 25) As A Credit

Field	Field Name	Usage	Position	Size	Type	Value / Source
1	Record Type	M	01 - 02	2	N	25
2	Auxiliary On-Us	C	03 - 17	15	NB	Aux On-Us field of check
3	External Processing Code	C	18	1	NS	Position 44
4	Posting Routing Number	M	19– 26	8	N	64003057
5	Posting Bank Routing Number Check Digit	M	27	1	N	9
6	On-Us Field	M	28 – 47	20	N	All MICR data between the Routing Transit and Amount
7	Item Amount	M	48 – 57	10	N	Dollar value
8	ECE Institution Item Sequence Number	M	58 – 72	15		Unique sequence number assigned by sending application. Must be a minimum length of 10 numeric digits left justified spaces following
9	Documentation Type Indicator	M	73	1	N	'7' identifies this 25 record as a credit
10	Return Acceptance Indicator	C	74	1		Any value ignored
11	MICR Valid indicator	C	75	1	N	Blank
12	BOFD Indicator	C	76	1	A	Y
13	Check Detail record Addendum Count	C	77 – 78	2	N	00
14	Correction Indicator	M	79	1		Blank
15	Archive Type Indicator	M	80	1		Blank

- The credit record must be offset by the accumulated Check Detail Record (Type 25) amounts. The offsetting records will be delimited by either the next Type 61 record or the Cash Letter Control Record (Type 90). The Credit Record Item Amount will not be summed in the Type 7 (field 3), Type 90 (field 4) or Type 99 (field 5) Total Amount fields.
- The Credit Records will be counted in the Type 70 (field 2) Item Count Field.
- The Credit Records will be counted in Type 90 (field 3) or Type 99 (field 4) Item Count Fields.
- The Credit Records will be counted in the File Control Record (Type 99 field 3) Total Record Count.
- Credit Records are required to be followed by front and back image records (Type 50 and Type 52). This can be actual image or a virtual image with data relating to Customer MICR information or minimally Customer Contact information (customer name and contact phone number).

Detail Record (Type 25) as a Check

Field	Field Name	Usage	Position	Size	Type	Value / Source
1	Record Type	M	01 -02	2	N	25
2	Auxiliary On-Uss	C	03- 17	15	NB	Aux On-Uss field of check
3	External Processing Code	C	18	1	NS	Position 44
4	Payor Bank Routing Number	M	19 – 26	8	N	MICR Routing Transit Number
5	Payor Bank Routing Number Check Digit	M	27	1	N	Required
6	On-Uss Field	M	28 – 47	20	N	All MICR data between the Routing Transit and Amount
7	Item Amount	M	48 – 57	0	N	Dollar value
8	ECE Institution Item Sequence Number	M	58 – 72	15	N	Unique sequence number assigned by sending application Must be a minimum length of 10 numeric digits left justified spaces following
9	Documentation Type Indicator	M	73	1	A	G (includes images, no paper provided)
10	Return Acceptance Indicator	O	74	1		Any value ignored
11	MICR Valid indicator	C	75	1	N	Blank
12	BOFD Indicator	M	76	1	A	Y
13	Check Detail record Addendum Count	M	77– 78	2	N	01
14	Correction Indicator	C	79	1		Blank
15	Archive Type Indicator	C	80	1		Blank

Check Detail Addendum Record (Type 26)

Bank of First Deposit (BOFD) record is required and will be used to identify the actual depositing account for preceding check record.

Field	Field Name	Usage	Position	Size	Type	Value / Source
1	Record Type	M	01 - 02	2	N	26
2	Check Detail Addendum A Record Number	M	03	1	N	1
3	Bank of First Deposit Routing Number	C	04 - 12	9	N	031000053
4	BOFD Endorsement Date	C	13 - 20	8	N	YYYYMMDD
5	BOFD Item Sequence Number	C	21 - 35	15	N	Same as corresponding type 25 record ECE Institution Item Sequence Number Field
6	Deposit Account Number at BOFD	O	36 - 53	18	N	Same account number on the Type '61' or Type 25-7 record.
7	BOFD Deposit Branch	O	54 - 58	6		Blank
8	Payee Name	O	59 - 73	15		Blank
9	Truncation Indicator	M	74	1	A	'Y' (identifies customer has physical document)
10	BOFD Conversion Indicator	C	75	1		Blank
11	BOFD Correction Indicator	C	76	1		Blank
12	User Field	C	77	1	N	3 (Customer Captured)
13	Reserved	C	78 - 80	3		Blank

Image View Detail Record (Type 50)

- PNC requires record Type 50 for each front image and back image
- This includes both credit and debit items.

Field	Field Name	Usage	Position	Size	Type	Value / Source
1	Record Type	M	01 - 02	2	N	50
2	Image Indicator	M	03	1	N	1 image available actual check
3	Image Creator Routing Number	M	04 - 12	9	N	031000053
4	Image Creator Date	M	13 - 20	8	N	YYYYMMDD
5	Image View Format Indicator	M	21 - 22	2	N	00 - TIFF
6	Image View Compression Algorithm Identifier	M	23 - 24	2	N	00 - group 4 compression
7	Image View Data Size	M	25 - 31	7	N	Total number of bytes in the related View Data Record
8	View Side Indicator	M	32	1	N	0 - Front 1 - Back
9	View Descriptor	M	33 - 34	2	N	00 - Full view
10	Digital Signature Indicator	M	35	1	N	0
11	Digital Signature Method	C	36 - 37	1		Blank
12	Security Key Size	C	38 - 42	5		Blank
13	Start of Protected Data	C	43 - 49	7		Blank
14	Length of Protected Data	C	50 - 56	7		Blank
15	Image Recreate Indicator	C	57	1		Blank
16	Image Test Override	O	58 - 58	1		Blank
17	User Field	C	59 - 65	7		Blank
18	Reserved	M	66 - 80	15		Blank

Image View Data Record (Type 52)

This is the image of the document either the front or back

Field	Field Name	Usage	Position	Size	Type	Value / Source
1	Record Type	M	01 – 02	2	N	52
2	ECE Institution Routing Number	M	03 - 11	9	N	413000024
3	Bundle Business Date	M	12 – 19	8	N	YYYYMMDD (This must be the current business date or current +1 Business date)
4	Cycle Number	C	20 – 21	2		Blank
5	ECE Institution Item Sequence Number	M	22 – 36	15	N	Same as corresponding type 25 record ECE Institution Item Sequence Number Field
6	Security Originator Name	C	37 – 52	16		Blank
7	Security Authenticator Name	C	53 – 68	16		Blank
8	Security Key Name	C	69 – 84	16		Blank
9	Clipping Origin	M	85	1	N	0
10	Clipping Coordinate h1	C	86 – 89	4		Blank
11	Clipping Coordinate h2	C	90 – 93	4		Blank
12	Clipping Coordinate v1	C	94 – 97	4		Blank
13	Clipping Coordinate v2	C	98 – 101	4		Blank
14	Length of Image Reference Key	M	102 – 105	4	N	0000
15	Image Reference Key	C	106 -	X		Blank
16	Length of Digital Signature	M		5	N	00000
17	Digital Signature	C		Y		Blank
18	Length of Image Data	M		7	N	Number of bytes in the Image Data
19	Image Data	M		Z		Image

Bundle Control Record (Type 70)

Field	Field Name	Usage	Position	Size	Type	Value / Source
1	Record Type	M	01 - 02	2	N	70
2	Items within Bundle Count	M	03 - 06	4	N	Total number of credit and debit records
3	Bundle Total Amount	M	07 – 18	12	N	Total dollar value of Type 25 debit records
4	MICR Valid Total Amount	M	19 – 30	12		Blank
5	Images Within Bundle Count	M	31 – 35	5	N	Total number of Type 50/52 pairs for credits and debits in bundle
6	User Field	M	36 – 55	20		Blank
7	Reserved	M	56 – 80	25		Blank

Cash Letter Control Record (Type 90)

Field	Field Name	Usage	Position	Size	Type	Value / Source
1	Record Type	M	01 - 02	2	N	90
2	Bundle Count	M	03 - 08	6	N	Total Number of Type 20 records in Cash Letter
3	Items Within Cash letter Count	M	09 – 16	8	N	Total Number of credit and debit records in Cash Letter.
4	Cash Letter Total Amount	M	15 – 30	14	N	Dollar value of all Type 25 debit in Cash Letter
5	Images Within Cash Letter Count	M	31 – 39	9	N	Total number of Type 50/52 pairs for credits and debits in Cash Letter.
6	ECE Institution Name	M	40 – 57	18	A	“Add company or institution name here”
7	Settlement Date	M	58 – 65	8	N	YYYYMMDD
8	Reserved	M	66 - 80	15		Blank

File Control Record (Type 99)

Field	Field Name	Usage	Position	Size	Type	Value / Source
1	Record Type	M	01 - 02	2	N	99
2	Cash Letter Count	M	03 - 08	6	N	Total number of Type 10 records in file
3	Total Record Count	M	09 – 16	8	N	Total number of all record types including Types 50 and Types 52 in file including this record.
4	Total Item Count	M	17 - 24	8	N	Total number of credit and debit records in file. (Does not include Type 50 and Type 52)
5	File Total Amount	M	25 – 40	16	N	Dollar value of all Type 25 debit records in file.
6	Immediate Origin Contact Name	M	41 - 54	14		Blank
7	Immediate Origin Contact Phone Number	M	55 - 64	10		Blank
8	Reserved	M	65 - 80	16		Blank

Must be last record on file.