NPP Mapping from BECS Direct Entry

Guidance for third parties

Version 1.0

New Payments Platform

NPP Mapping from BECS Direct Entry

Guidance for bank corporate/government customers and their vendors

Currently the most frequently used method for corporate and government customers to provide payment files to their financial institution is to use the BECS Direct Entry File (DE/aba file). The BECS Direct Entry (**Direct Entry**) file format is a fixed length format with limitations on the amount of data that can be captured and passed between the parties involved in the payment. The NPP uses the ISO 20022 payment messaging standard, which provides a set of comprehensive xml formatted messages, rich in both structured and unstructured data. The ISO 20022 standard provides the ability for extended data to be captured and passed on in a payment message, including all the data captured in the Direct Entry file. A Direct Entry file can consist of a number of individual records which are then processed as individual payments. The NPP processes single payments continuously in real-time with each payment being settled real time in central bank money. Payment instructions for NPP payments can be submitted using an ISO 20022 payment initiation message (pain.001 - Customer Credit Transfer Initiation message) or via API version of this message[1].

Comparison of BECS Direct Entry and NPP:

BECS Direct Entry	NPP
• Fixed length format – 18 characters	• ISO 2022 message with extensive structured and unstructured data capabilities
• Payment instructions typically submitted in batch in the DE/aba file format	• Payment instructions can be submitted via ISO 20022 pain.001 messages or via API version
• Payments processed in one of five daily processing cycles, typically taking 1-2 days for funds to clear	• Payments processed in real-time as individual single payments, with funds immediately available

Corporate and government payer customers may be interested in converting their existing payment instructions currently provided to their financial institution in the Direct Entry file format into the NPP ISO 20022 - Customer Credit Transfer Initiation message format (pain.001) for their payments to be processed on the NPP (where that service is offered by their Financial Institution[2]) as illustrated below:

---
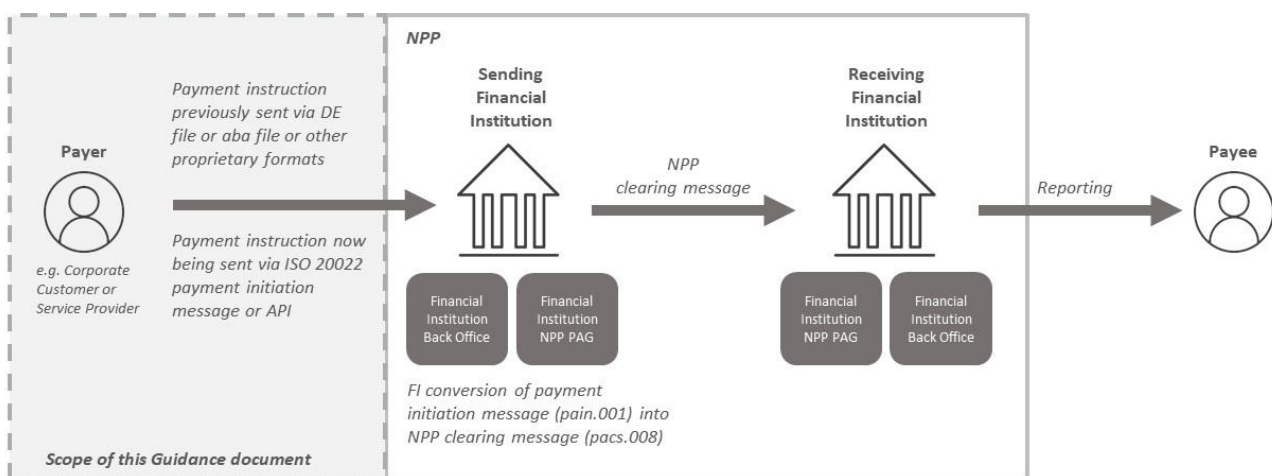
[1] Some NPP participating financial institutions may also provide translation services, taking existing DE or aba files and translating each record to an NPP payment for processing. Third parties should check with their financial institution to see if they are offering such services

[2] Third parties should check with their Financial Institution to see if they are offering such payment services

To assist third parties with this conversion process, NPPA has developed this guidance regarding creating NPP ISO 20022 pain.001 messages from Direct Entry files. An NPP financial institution's acceptance of pain.001 messages from such corporate and government payer customers is proprietary and at its discretion. The guidelines provided in this document are based on publicly available ISO message schema guidance and are subject to any additional proprietary requirements financial institutions may determine necessary or appropriate. Nothing in this document should be construed as a representation or warranty by NPPA or any NPP participating financial institution in relation to corporate or government payment services offered by those participating financial institutions.

The following assumptions and conditions should be considered when using this mapping guidance:

- For an NPP pain.001 message the preferred version of the ISO20022 message definition is pain.001.001.06. The mapping contained in this guidance document is based on a general Direct Entry File to a pain.001.001.06;

- The pain.001 message should be created using the current available version of the pain.001 message used by the NPP (currently pain.001.001.06 as stated above) . This mapping guidance will be updated as newer versions of the NPP pain.001 message are adopted for use;

- A single Direct Entry/aba file submitted by a corporate or government payer to its financial institution for processing may contain payment instructions or 'records' for multiple individual payments. These individual records within the Direct Entry file need to be used to generate individual NPP pain.001 messages (i.e. the Direct Entry file may have a *one to many* relationship with the NPP pain.001 message);

- The processing date in the Direct Entry file header record will represent the date for the payment to be processed and will be carried through to the NPP pain.001 message. The acceptance and processing of the pain.001 and the date and time associated with the NPP payment is dependent on the processing conditions determined by the FI.

- Trace records (Bank Accounts) which may be used in the processing of payments under BECS Direct Entry are not included in the mapping.

- Mapping of a Direct Entry record to an NPP pacs.008 - FI to FI Customer Credit Transfer payment message is not included as part of this guidance as the pacs.008 message is only exchanged between NPP financial institutions[3]. The mapping outlined in this guidance document does not reflect the minimum data elements required for the FI to FI Customer Credit Transfer which will be determined by the processing FI. Processing SLAs for the creation of the pacs.008 message upon receipt of the pain.001 message will be at the discretion of the processing FI.

Note: This Guidance is based on the data elements required for a native NPP single credit transfer message. Further guidance, including any data elements used specifically by any NPP overlays, are available from your NPP FI.

---

[3] The pacs.008 message may contain additional data elements not contained in the pain.001 message

Guidance for mapping a Direct Entry file to an NPP ISO 20022 pain.001 message:

DE File Descriptive Record (0)				pain.001	
Char Pos	Field Size	Field Description	Specification	pain.001.001.06 Element	NPP Guidance
1	1	Record Type 0	Fixed value "0"	N/A	
2-18	17	Reserved	Blank filled	N/A	
19-20	2	Reel Sequence Number	Format: Numeric, zero filled. Commence at 01 E.g. "01"	N/A	
21-23	3	Payer FI's Abbreviated Institution Name.	Format: Text. Upper Case only.	If applicable, may be used to determine the Payer FI's BICFI for /AppHdr/To/FIId/FinInstnId/BICFI.	Payer Financial Institution
24-30	7	Reserved	Blank filled	N/A	
31-56	26	User Preferred Specification	Format: Text, left justified, blank (trailing) filled. All blanks not allowed.	· /AppHdr/Fr/OrgId/Nm · /CstmrCdtTrfInitn/GrpHdr/InitgPty/Nm	Payer Name as registered with the Payer FI
57-62	6	User Identification Number	Format: Numeric, right justified, zero filled.	N/A	May be used to determine the linked bank account for use in Detail Record (1).
63-74	12	Description of entries on file	Format: Text, left justified, blank filled. All blanks not allowed E.g. "PAYROLL"	N/A	At Payer FI's discretion, can be used for description.
75-80	6	Date to be processed (i.e. the date transactions are released to all Financial Institutions)	Format: Numeric, zero filled Pattern: DDMMYY. Must be a valid date. E.g. "300415"	/CstmrCdtTrfInitn/PmtInf/ReqdExctnDt	May be an agreed arrangement that this date will represent the scheduled date of payment. Note: Date needs to be converted to YYYY-MM-DD format
81-120	40	Reserved	Blank filled	N/A	

DE File Detail Record (1)				pain.001	
Char Pos	Field Size	Field Description	Specification	pain.001.001.06 Element	NPP guidance
1	1	Record Type 1	Must be '1'	N/A	
2-8	7	Bank/State/Branch Number	BSB in format xxx-xxx	/CstmrCdtTrfInitn/PmtInf/CdtTrfTxInf/CdtrAcct/Id/Othr/Issr Set the following to "BBAN": /CstmrCdtTrfInitn/PmtInf/CdtTrfTxInf/CdtrAcct/Id/Othr/SchmeNm/Cd	Payee's BSB Note: Remove Hyphen
9-17	9	Account number to be credited	Format: Numeric, alpha (26 letters of the alphabet), hyphens and spaces, right justified, blank filled.	Concatenate Payee's BSB (excluding the " "character) and Account Number into: /CstmrCdtTrfInitn/PmtInf/CdtTrfTxInf/CdtrAcct/Id/Othr/Id	Payee's Account Number

DE File Detail Record (1)				pain.001	
Char Pos	Field Size	Field Description	Specification	pain.001.001.06 Element	NPP guidance
18	1	Indicator	"N" – for new or varied Bank/State/Branch number or name details, otherwise blank filled. Withholding Tax Indicators: "W" – dividend paid to a resident of a country where a double tax agreement is in force. "X" – dividend paid to a resident of any other country. "Y" – interest paid to all non-residents. The amount of withholding tax is to appear in character positions 113-120. Note: Where withholding tax has been deducted the appropriate Indicator as shown above is to be used and will override the normal indicator.	N/A	
19-20	2	Transaction Code	As defined by Direct Entry	/CstmrCdtTrfInitn/PmtInf/PmtTpInf/CtgyPurp/Cd	Where the transaction code 53 is identified it is recommended that the Code SALA is used. Other specific payment codes may be used where payments represent the following[4]: • Superannuation – PENS • Tax - TAXS
21-30	10	Amount	Only numeric valid. Must be greater than zero. Shown in cents (in DE file) without punctuations. Right justified, zero filled. Unsigned.	InstdAmt is represented in dollars therefore requires the decimal place to be included: /CstmrCdtTrfInitn/PmtInf/CdtTrfTxInf/Amt/InstdAmt Set the Currency Code ("Ccy") attribute for InstrdAmt to "AUD"	Payment Amount
31-62	32	Title of Account to be credited	Format: Surname followed by given names each separated by a space. E.g. CITIZEN John James	/CstmrCdtTrfInitn/PmtInf/CdtTrfTxInf/Cdtr/Nm	Payee Name
63-80	18	Lodgement Reference	Reference as submitted by the User, indicating details of the origin of the entry, e.g. Payroll Number, Invoice, Unique Customer Identifier or PRN.	/CstmrCdtTrfInitn/PmtInf/CdtTrfTxInf/PmtId/EndToEndId (Mandatory) /CstmrCdtTrfInitn/PmtInf/CdtTrfTxInf/RmtInf/Ustrd (Optional)	End-to-End ID Where applicable the Lodgement Reference may be optionally replicated in the Unstructured Remittance information.

---

[4] https://nppa.com.au/wp-content/uploads/2020/11/NPP-message-usage_structured-data-.pdf

DE File Detail Record (1)				pain.001	
Char Pos	Field Size	Field Description	Specification	pain.001.001.06 Element	NPP guidance
81-87	7	Trace Record (Bank State Branch)	BSB in format xxx-xxx. Used to enable retracing of the entry to its source if necessary.	/CstmrCdtTrfInitn/PmtInf/DbtrAcct/Id/Othr/Issr Set the following Account Scheme Type to "BBAN" in: /CstmrCdtTrfInitn/PmtInf/DbtrAcct/Id/Othr/SchmeNm/Cd	Payer BSB Note: Remove Hyphen
88-96	9	Trace Record (Account Number)	Right justified, blank filled.	/CstmrCdtTrfInitn/PmtInf/DbtrAcct/Id/Othr/Id	Payer Account Note: Concatenate Payer's BSB (excluding the ""character) and Account Number
97-112	16	Name of Remitter	Name of originator of the entry. This may vary from Name of the User. Must not contain all blanks. Left justified, blank filled.	/CstmrCdtTrfInitn/PmtInf/Dbtr/Nm	Payer Name - In the NPP Procedures this is defined as the Payer Customer.
113-120	8	Amount of Withholding Tax	Numeric only valid. Show in cents without punctuation. Right justified, zero filled. Unsigned.	N/A	

DE File Total Record (7)				pain.001	
Char Pos	Field Size	Field Description	Specification	pain.001.001.06 Element	NPP Comment
1	1	Record Type 1	Must be '1'	N/A	
2-8	7	BSB Format Filler	Must be '999-999'	N/A	
9-20	12	Blank	Must be blank filled.	N/A	
21-30	10	File (User) Net Total Amount	Numeric only valid. Must equal the difference between File Credit & File Debit Total Amounts. Show in cents without punctuation. Right justified, zero filled. Unsigned.	N/A	
31-40	10	File (User) Credit Total Amount	Numeric only valid. Must equal the accumulated total of credit Detail Record amounts. Show in cents without punctuation. Right justified, zero filled. Unsigned.	/CstmrCdtTrfInitn/GrpHdr/CtrlSum	Note: where pain.001 represents more than one transaction. CtrlSum is represented in dollars therefore requires the decimal place to be included.
41-50	10	File (User) Debit Total Amount	Numeric only valid. Must equal the accumulated total of debit Detail Record amounts. Show in cents without punctuation. Right justified, zero filled. Unsigned.	N/A	
51-74	24	Blank	Must be blank filled.	N/A	
75-80	6	File (user) count of Records Type 1	Numeric only valid. Must equal accumulated number of Record Type 1 items on the file. Right justified, zero filled.	/CstmrCdtTrfInitn/GrpHdr/NbOfTxs	Note: where pain.001 represents more than one transaction. NbOfTxs is represented in dollars therefore requires the decimal place to be included.

DE File Total Record (7)				pain.001	
Char Pos	Field Size	Field Description	Specification	pain.001.001.06 Element	NPP Comment
81-120	40	Blank	Must be blank filled.	N/A	

ability
elopment

Capab
deve

22 November 2019

NPP AUSTRALIA LIMITED
ABN: 68 601 428 737