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Global PAYplus Version 4.6.3

Fndt Message Format

Technical Guide

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Version Control

Version	Date	Summary of Changes
1.0		Document creation
2.0	Apr 2014	Added additional attributes to support Posting, Account Lookup and Balance Inquiry Interfaces
3.0	May 2014	Added additional parent tag to wrap Contact information
4.0	June 2014	Updated these fields to be Integer format: • F_CDT_ACCT_STOPFLAGCR • F_CDT_ACCT_STOPFLAGDR • F_DBT_ACCT_STOPFLAGCR • F_DBT_ACCT_STOPFLAGDR
5.0	August 2014	Added F_BI_INFO_BOOKING_ENT into M_BI_INFO_LINE
6.0	October 2015	Updated formatting and renamed Fndt Message
7.0	June 2016	Updated with marking of subtrees that the order of their child elements is not mandatory + some rephrasing and the change of the name of the tag F_POSTING_INFO_POSTING_STS (in MsgPosting extension) to F_POSTING_INFO_STATUS

Table of Contents

1   Overview

1.1   Introduction

Note: This document has not yet been certified for GPP V4.6; therefore, there may be inaccuracies in this document that may require amendments in the future. For more information, please contact your D+H Project Manager.

GPP has two proprietary message structures:

- A single transaction structure known as the Fndt (FuNDs Transfer) message

- A batch transaction structure known as the Fndt batch message

Both structures contain all the message attributes of the PAIN and PACS ISO standards, plus an extension that contains additional attributes that are not in the ISO standards but are essential for the effective communication of complex financial information.

The structure extension contains a number of system-wide fields that implement GPP's core extensions for rules, Queue view filter criteria, and data represented by a column in a queue view.

The structure extension also contains a financial institution's own Custom Message Fields (CMF) aka user-defined fields (UDF). These CMFs extend the GPP data model without requiring any changes in GPP code or table structures. This enables GPP to remain stable and unchanged, even though each financial institution adds its own specific attributes to the core data structure. In some cases, the code for a financial institution's specific interface may refer to that financial institution's CMFs.

For an example of how to use CMFs in a request or response, see Extn section.

1.2   About This Guide

This document is aimed at operational team members who need to create and maintain interfaces based on GPP's proprietary message structure, so that the financial institution's special procedures can be easily performed by GPP.

1.3   Background

Standard interfaces were defined based on the Fndt Message structure to streamline the process of integrating GPP with various existing systems in a bank or financial institution. In addition to providing additional fields for GPP processing, this structure supports the use of ISO 20022 messages embedded in the structure.

1.4   Scope

This document provides a description of the GPP structures that support handling single and multiple messages.

1.5   References

For information about defining custom fields, see Creating Custom Fields Overview in the GPP User Guide.

2   Interface Structures

2.1   Overview

When interfacing with a financial institution's systems, various structures are supported for the exchange of messages. These include:

1. Standard industry structures based on ISO 20022 that are defined and controlled by ISO.

    Note: With the Fndt (FuNDs Transfer) message, changes in the ISO and also in GPP attributes do not require changes in the message structure since the creation of the transaction XML is database driven (LOGICAL_FIELDS_XPATH) and is constructed according to the required ISO structure per message.

2. Extension fields which are attributes that are not part of the ISO transaction but are required for transaction processing, transaction hand-off and business rules assessment.

This document provides a description of the GPP specific structures used for message interchange.

Note: Throughout this document when a sub-tree tag is marked with * - the elements underneath it can appear in any order. That is the XSD definition of the list of elements is 'all' and not 'sequence.'

2.2   Structure Types

2.2.1   FndtMsg

Level 1	Level 2	Level 3	Level 4	Description
FndtMsg				
	Header			General identifying attributes
	Msg			Transaction message and extension
		Pmnt		Pmnt quotes the transaction (whether it is ISO based pain/pacs or a SWIFT message embedded within the GPP proprietary XML structure (see structure examples and SQL in C.1 Structure of the Fndt SWIFT XML).
		Extn*		GPP proprietary transaction attributes
			MsgFees	Message Fees. Multiple transaction fee details.
			MsgNotes*	Message Notes. Operator internal notes
			MsgRates	Message Rates. Multiple transaction contract/dealer rate details used for this transaction, if FX was involved in its processing.
			Advising	Advising. Multiple transaction advices
			MsgErrors	Message Errors. Multiple transaction processing errors
			AuditTrail	Audit Trail. Multiple transaction processing audit lines
			PostingRestrictions	Posting Restrictions. Multiple posting restrictions entries per this transaction
			SpecialInstructions	Special Instructions. Multiple special instructions entries caught per this transaction
			ProcessingPersistentInfo*	Processing Persistent Info. Transaction derived attributes relevant to the transaction information

Level 1	Level 2	Level 3	Level 4	Description
			XMLPersistentInfo*	XML Persistent Info. Relevant persistent data stored in XML format, either original as received or enriched for sending out, (as opposed to MINF columns for the information in ProcessingPersistentInfo).
			CutoffInfo*	Cut-off Info.
			OperationalSection*	Operational Section. Action attributes to perform on transactions by services.
			BalanceCheckInf	Balance Check Information. Multiple entries for the transaction (on different accounts and per different debit type – Principal or Fee)
			Memopost	Memo Post (aka Posting Information – Older Design)
			MsgPosting	Message Posting (aka Posting Information – New Design). Multiple posting entries per this transaction.
			UserDefinedFields*	User Defined Fields aka custom message fields. System level and client/financial institution-defined message fields.
			InterfacesSection	Interface specific elements.
			QaInfo	Internal QA department information.
			WsResult	Web Services Result. GPP Web services result information.
			ProcessingTransientInfo*	Processing Transient Info. Internal transient or temporary transaction attributes.
			Monitors*	Monitors. User/Services/Interface tracking monitors.
			ReferenceData*	Reference Data. Transaction-related profile reference data.
			BinrayContent	Binary Content. Any type of an image that may be associated with the transaction such as fax, agreement etc. The image is deconstructed into base 64 encoding (so that it will have a character presentation). It is also possible to reconstruct it into the original image file when required. Note that mimeType element describes the targeted image format (for example TIFF, JPEG)
	OrigMsg			Original message (whether it is pain or pacs or even SWIFT within the GPP proprietary XML structure (see structure examples and SQL in Appendix C: Additional Fndt Message Related Information).
	Response Details			Applicable for Interface Responses

The FndtMsgBatch consists of the following sections:

- FndtHeader – Base header that includes context information and credentials

- BatchHeader – Header that contains the Pain's GrpHdr element

- PmntTxInfo –Transaction Information that can include one debit (in the header) with multiple credit transfers that logically correspond to the /Document/CstmrCdtTrfInitn/PmtInf.

  Note: This section can be repeated multiple times.

- PmntHeader – One debit wrapper that contains a /Document/CstmrCdtTrfInitn/PmtInf element but excludes the CdtTrfTxInf elements

- TxInf – A multiple credits section that contains a list of FndtMsg elements, one for each credit CdtTrfTxInf element.

Population instructions:

- Create an FndtMsg element for each CdtTrfTxInf element in the ISO document.

The above is the full structure and set of sections of the Fndt Message. There is an option in GPP to configure per each usage of the Fndt Message structure – per interface type – a subset of the full structure.

The Inclusion and exclusion of specific tags and/or sub-tees of the full Fndt Message per such specific usage is done using system configuration in the XML_FORMAT_TYPE_RELATIONS table.

For Example:

In a Posting Request – the configuration may exclude all the sub-trees under the Ext section, but the MsgPosting sub-tree – the section that includes the posting entries details.

2.3   Structure Components

2.3.1   Header

The header section has these optional components:

Field Name	Taken From
contextName	Generic optional field to add information regarding the specific usage, for example, whether the Fndt Message is used in the context of a Balance Inquiry. The contextName can be populated with the string BalanceInquiry.
contextLocalName	Generic optional field to add regarding the specific usage, but using the financial institution system terminology naming, in case such a local name exists and is required for the identification on the financial institution side
Credentials	User ID and its GPP credentials when required
D_SKIP_PERSIST_ON_ERROR	An indication whether to store the transaction details where an error or errors were found.
Workflow	Defined for mass processing. The valid values are Template, File or Swift
P_MID	The MID of the related message for which this request/response was invoked. Can be added to header to uniquely identify the transaction related to the request/response. Can be used for matching between request and response
deliveryTimestamp	The Timestamp when the request/response was created
P_INIT_SRC_ID	The ID of the source system initiating the request/response
EventID	Unique 16 character event ID generated for each interface request This ID is used to identify a resent request (EventID is as in the original request), from a new request issued due to force or retry (EventID quotes a new value).

Field Name	Taken From
	This ID is generated only for interface requests that are configured to be stored in MESSAGE_EXTERNAL_INTERACTION, and only for those for which the INTERFACE_TYPES.EVENT_ID_GENERATION is configured with 1 in the INTERFACE_TYPE entry defined for this request

2.3.2   Pmnt

In this section, GPP includes the transaction (whether it is ISO based pain or pacs with all its tags, or whether it is a SWIFT message embedded within the GPP proprietary XML structure (see structure examples and SQL in Appendix C: Additional Fndt Message Related Information).

In the case of a SWIFT message, the GPP proprietary XML structure includes:

- The /Original_Swift/Message tag - quoting the original text of the SWIFT message as it was received into the system

- Additional specific tags holding specific attributes from within this SWIFT message to allow direct access to them, rather than searching within the full text. Examples of such attributes are:
  - F57a/Identifier_Code – holding the BIC quoted in field 57
  - F32A/Amount – holding the amount quoted in field 32A

Note: The text of the SWIFT message is available when an incoming SWIFT transaction is received, or if a SWIFT format in an Outgoing message from Feeder is received. For an outgoing message, the full SWIFT text string is only available after GPP performs the formatting outgoing to a SWIFT transaction (when a transaction is created by the user via the user interface, it is created as a pacs message).

The definition of the XML structure is based on the following three system tables:

1. XML_DOCUMENT_TYPES - Defines the available Xml Document Types supported by the GPP Application.

2. XML_FORMAT_TYPE_RELATIONS - Used as an extension of the LOGICAL_FIELDS_XPATH table for SWIFT parsing, to identify which logical fields are included or excluded from the parsing from the different Swift message types. In this case, the XML_Type is SWIFT and the Format_Type is the SWIFT message type.

3. LOGICAL_FIELDS_XPATH - Defines the physical location of the logical fields for different XML document types.

   SWIFT example:

   F57 in SWIFT message has its correlated logical field X_CDTR_AGT.

   For each component of F57 there is a specific logical field such as, X_CDTR_AGT_ACCT, X_CDTR_AGT_BIC_2AND.

   These fields are defined in the LOGICAL_FIELDS table.

   To know where in the XML of a SWIFT MT103 this field is mapped to, look in the LOGICAL_FIELDS_XPATH table:

   *select * from logical_fields_xpath t where t.field_logical_id like 'X_CDTR_AGT%' and t.xml_type = 'SWIFT'*

In the result of this query, the field FIELD_PATH provides the path to each of F57 components in the XML of SWIFT transactions.

Note: Some attributes are defined as tree hierarchy (for example, all the Creditor Agent (57) IBAN and account details are defined under the tree of X_CDTR_AGT_ACCT, and the path retrieved in the FIELD_PATH from this query is the relative path from the parent tag.

To see all the logical fields that are included in the parsing of MT103 (and in the GPP proprietary XML structure included in the pmnt tag for a SWIFT 103 message), see the XML_FORMAT_TYPE_RELATIONS table (using the SQL in Appendix C: Additional Fndt Message Related Information).

2.3.3 Extn

In this section, the sub-sections are available as an extension to the transaction details.

2.3.3.1 Message Fees

Field Name	Description	Occurrences
M_MSG_FEES_LINE	Message fees record. See **Error! Not a valid bookmark self-reference.**	{0..n}

2.3.3.1.1 Message Fees Line

Field Name	Taken From
MANUAL_FEE	F_MSG_FEES_MANUAL_FEE
DEDUCT_FROM	F_MSG_FEES_DEDUCT_FROM
FEE_ACC_AMOUNT	F_MSG_FEES_FEE_ACC_AMOUNT
FEE_AMOUNT	F_MSG_FEES_FEE_AMOUNT
FEE_AMOUNT_IN_PMT_CCY	F_MSG_FEES_FEE_AMT_IN_PMT_CCY
APPLY	F_MSG_FEES_FEE_APPLY
FEE_BASE_AMOUNT	F_MSG_FEES_FEE_BASE_AMOUNT
FEE_CURRENCY	F_MSG_FEES_FEE_CURRENCY
FEE_FORMULA_UID	F_MSG_FEES_FEE_FORMULA_UID
FEE_MONITOR	F_MSG_FEES_FEE_MONITOR
FEE_PNL_ACCOUNT_CURRENCY	F_MSG_FEES_FEE_PNL_ACC_CUR
FEE_PNL_ACC_NO	F_MSG_FEES_FEE_PNL_ACC_NO
FEE_PNL_AMOUNT	F_MSG_FEES_FEE_PNL_AMOUNT
FEE_TYPE_UID	F_MSG_FEES_FEE_TYPE_UID
ORIG_FEE_AMOUNT	F_MSG_FEES_ORIG_FEE_AMOUNT
PAYING_PARTY	F_MSG_FEES_PAYING_PARTY
FEE_PNL_ACC_OFFICE	F_MSG_FEES_PNL_ACC_OFFICE
PNL_POSTING_STS	F_MSG_FEES_PNL_POSTING_STS
UNWIND_FEE	F_MSG_FEES_UNWIND_FEE
TAX_AMOUNT	TAX_AMOUNT
TAX_PNL_AMOUNT	F_MSG_FEES_TAX_AMT_PNL_CCY
TAX_ACC_AMOUNT	F_MSG_FEES_TAX_ACC_AMOUNT

Field Name	Taken From
TAX_PNL_ACCOUNT_NO	F_MSG_FEES_TAX_PNL_ACCT
TAX_PNL_ACCOUNT_CURRENCY	F_MSG_FEES_TAX_PNL_ACCT_CCY
TAX_PNL_ACCOUNT_OFFICE	F_MSG_FEES_TAX_PNL_ACCT_OFFICE
TAX_BASE_AMOUNT	F_TAX_BASE_AMOUNT
TAX_ON_TAX_AMOUNT	F_TAX_ON_TAX_AMOUNT
TAX_ON_TAX_ACC_AMOUNT	F_TAX_ON_TAX_ACC_AMOUNT
TAX_ON_TAX_PNL_AMOUNT	F_TAX_ON_TAX_PNL_AMOUNT

2.3.3.2   Message Notes

Field Name	Description	Occurrences
M_MSG_NOTES_GRID*	Message notes record. See Message Rates Line	{0..n}

2.3.3.2.1   Message Notes Line

Field Name	Taken From
TIME_STAMP	F_MSG_NOTES_TIMESTAMP
USER_ID	F_MSG_NOTES_USER_ID
CREATE_DATE	F_MSG_NOTES_CREATE_DATE
TEXT	F_MSG_NOTES_TEXT
EXTERNAL_NOTE_IND	F_MSG_NOTES_EXTERNAL_NOTE_IND
REC_STATUS	F_MSG_NOTES_REC_STATUS
UPDATED_USER_ID	F_MSG_NOTES_UPDATED_USER_ID
UPDATED_DATE	F_MSG_NOTES_UPDATED_DATE
UPDATED_DATE_ZONE_CODE	F_MSG_NOTES_UPDATED_DATE_ZONE_CODE
ATTACHED_FILE_LINK	F_MSG_NOTES_ATTACHED_FILE_LINK

2.3.3.3   Message Rates

Field Name	Description	Occurrences
M_FC_LINE	Forward contract line record.	{0..n}

2.3.3.3.1   Message Rates Line

Field Name	Taken from
CONTRACT	F_FC_CONTRACT
AMOUNT	F_FC_AMOUNT
RATE	F_FC_RATE
CCY1	F_FC_CURRENCY1
CCY2	F_FC_CURRENCY2

Field Name	Taken from
SPREAD	F_FC_SPREAD
SPREAD_UNITS	F_FC_SPREAD_UNITS
MID	F_FC_MID
CONVERSION_TYPE	F_FC_CONVERSION_TYPE
FORWARD_CONTRACT	F_FC_FORWARD_CONTRACT
CUSTOMER_ID	F_FC_CUSTOMER_ID
MANUAL_SPREAD	F_FC_MANUAL_SPREAD
TARGET_RATE	F_FC_TARGET_RATE

2.3.3.4   Advising

Field Name	Description	Occurrences
M_ADVISING_LINE	Advising Record. See Advising Line	{0..n}

2.3.3.4.1   Advising Line

Field Name	Taken from
UID_ADVISING	F_ADVISING_UID_ADVISING
CONTACT_DETAILS	F_ADVISING_CONTACT_DETAILS
CONTACT_TYPE	F_ADVISING_CONTACT_TYPE
CONTACT_NAME	F_ADVISING_CONTACT_NAME
MIN_AMT	F_ADVISING_MIN_AMT
ADVICE_SUB_TYPE	F_ADVISING_ADVICE_SUB_TYPE
ADVICE_TYPE	F_ADVISING_ADVICE_TYPE
FEE_ADVICE_IND	F_ADVISING_FEE_ADVICE_IND
CR_ADVICE_IND	F_ADVISING_CR_ADVICE_IND
DR_ADVICE_IND	F_ADVISING_DR_ADVICE_IND
TEMP_ID	F_ADVISING_TEMP_ID
ADVC_VEHICLE	F_ADVISING_ADVC_VEHICLE

2.3.3.5   Message Errors

Field Name	Description	Occurrences
M_MSGERR_LINE	Message error records. See Message Errors Line	{0..n}

2.3.3.5.1   Message Errors Line

Field Name	Description	Occurrences
F_MSGERR_CODE	Error code	{1..1}
F_MSGERR_TIME_STAMP	Time stamp	{1..1}

Field Name	Description	Occurrences
F_MSGERR_SEVERITY	Severity	{0..1}
F_MSGERR_CREATE_DAT E	Create date	{1..1}
F_MSGERR_TIME_ZONE	Time zone	{1..1}
F_MSGERR_FAULT	Fault indicator	{0..1}
F_MSGERR_PARAMS	Binding parameters	{0..1}
F_MSGERR_DISPLAY	Display	{0..1}
F_MSGERR_FIELD_LOGIC AL_ID	Field ID	{0..1}

2.3.3.6   Audit Trail

Field Name	Description	Occurrences
M_AUDIT_TRAIL	Audit Trail Record. See Audit Trail Line	{0..n}

2.3.3.6.1   Audit Trail Line

Field Name	Description	Occurrences
F_AUDIT_ERROR_CODE	Error code	{1..1}
F_AUDIT_USER_NAME	Name of the Audit user. If received via an external service, the audit user is part of the input data.	{1..1}
F_AUDIT_TIME_STAMP	Audit occurrence time	{1..1}
F_AUDIT_END_DATE	Audit occurrence end time	{0..1}
F_AUDIT_UPDATE_DATE	Audit occurrence update time	{0..1}
F_AUDIT_ZONE_CODE	Audit occurrence time zone	{0..1}
F_AUDIT_HIT_INFO	Audit zoon info indication	{0..1}
F_AUDIT_ERROR_PARAMS	Audit binding parameters	{0..1}
F_AUDIT_RELATED_FIELDS_DATA	For Compliance and Fraud only	{0..1}

2.3.3.7   Posting Restrictions

Field Name	Description	Occurrences
M_MSG_STOP_FLAGS_LINE	Posting restriction record. See Posting Restrictions Line	{0..n}

2.3.3.7.1   Posting Restrictions Line

Field Name	Description	Occurrences
F_STOP_FLAGS_UID	Stop flag unique identification	{1..1}
F_STOP_FLAGS_STATUS	Stop flag status	{1..1}

Field Name	Description	Occurrences
F_STOP_FLAGS_OBJECT_TYPE	Stop flag associated object	{1..1}
F_STOP_FLAGS_DIR	Stop flag directory	{1..1}
F_STOP_FLAGS_OBJCET_UID	Stop flag object unique ID	{1..1}

2.3.3.8   Special Instructions

Field Name	Description	Occurrences
M_MSG_SPECIAL_INSTR_LINE	Special instruction Record. See Special Instructions Line	{0..n}

2.3.3.8.1   Special Instructions Line

Field Name	Description	Occurrences
F_SI_ERROR_CODE	Special instruction entry error code	{1..1}
F_SI_ERROR_PARAMS	Special instruction entry binding parameters	{1..1}
F_SI_STATUS	Special instruction entry status	{1..1}
F_SI_PARTY_TYPE	Special instruction entry party type (whether associated with a Dr or Cr party)	{1..1}
F_SI_OBJECT_ID		{1..1}
F_SI_CREATE_DT	Special instruction entry create date	{1..1}
F_SI_ZONE_CODE	Special instruction entry time zone	{1..1}
F_SI_TIME_STAMP	Special instruction entry time stamp	{1..1}
F_SI_PREVENT_STP_UID	Special instruction entry unique ID	{1..1}

2.3.3.9   Processing Persistent Info*

Field Name	Comment	Occurrences
P_OFFICE	Selection of a valid office	String{0..1}
P_DEPARTMENT		String {0..1}
P_MSG_CLASS		String {0..1}
P_TEMPLATE_MID	Length : 16	String {0..1}
P_PRODUCT_CD		String {0..1}
P_MSG_TYPE		String {0..1}
P_USER_MSG_TYPE		Boolean{0..1}
P_DISPLAY_MSG_TYPE		String {0..1}
P_MSG_SUB_TYPE		String {0..1}
P_BATCH_MSG_TP		String {0..1}
P_BASE_MSG_STS		String {0..1}
P_MSG_STS	Length : 25	String {0..1}

Field Name	Comment	Occurrences
P_ORIG_MSG_SUB_TYPE		String {0..1}
P_CHRG_BR	Possible values: • DEBT • CRED • SHAR • SLEV	String {0..1}
P_ORIG_MSG_TYPE		String {0..1}
P_ORIG_STTLM_CCY		String {0..1}
P_ORIG_STTLM_AMT		String {0..1}
P_ORIG_STTLM_DT		String {0..1}
P_CHARGES_PAID		Boolean{0..1}
P_BA_CD		String {0..1}
P_BASE_AMT		Amount {0..1}
P_BASE_CCY		Currency{0..1}
P_BASE_RATE_USAGE_NM		String {0..1}
P_PREFERRED_CDT_MOP		String {0..1}
P_PRIORITY		long {0..1}
P_BULKING_PROFILE		String {0..1}
P_IN_BULK_MSGID		String {0..1}
P_OUT_BULK_MSGID		String {0..1}
P_IN_INTERNAL_FILEID		String {0..1}
P_CHUNK_ID		String {0..1}
P_FC_INFO_IND		Integer {0..1}
P_TIME_STAMP		String {0..1}
P_NON_ACC		Boolean {0..1}
P_IS_HISTORY	0 - Active 1 - Historical 2 - Templates	Integer {0..1}
P_PAYMENT_TP	Length: 25	String {0..1}
P_TEMPLATE_NM	Length: 30	String {0..1}
P_TEMPLATE_CD	Length: 20	String {0..1}
P_TEMPLATE_TYPE	Template type • P for Partial repetitive • F for Fully Repetitive • S for Standing Order • A for Associated (standing order)	String {0..1}
P_PROC_DT		ISO date {0..1}
DebitSide*	See Debit Side Persistent Info	{0..1}
CreditSide*	See Credit Side Persistent Info	{0..1}

2.3.3.9.1   Debit Side Persistent Info*

Field Name	Comment	Occurrences
P_DBT_MOP		String {0..1}
P_DBT_AMT		Amount {0..1}
P_DBT_ACCT_NB		String {0..1}
P_DBT_FEE_ACCT_NB		String {0..1}
P_DBT_FEE_ACCT_CCY		String {0..1}
P_DBT_FEE_ACCT_OFFICE		String {0..1}
P_DBT_CROSS_CONV		Boolean {0..1}
P_DBT_CUST_CD		String {0..1}
P_DBT_FEE_ACCT_OFFICE		String {0..1}
P_DBT_FEE_PMT_CCY		Currency {0..1}
P_DBT_FEE_POSTING_STS		String {0..1}
P_DBT_MID_RATE		Rate {0..1}
P_DBT_RATE		Rate {0..1}
P_DBT_RATE_USAGE_NM		String {0..1}
P_DBT_SPREAD		Decimal {0..1}
P_DBT_TX_CD		String {0..1}
P_DBT_AMT_STEP1		Amount {0..1}
P_DBT_FEE_ACCT_CCY		String {0..1}
P_DBT_RATE_STEP1		Rate {0..1}
P_DBT_ACCT_CCY		Currency {0..1}
P_DBT_RATE_STEP2		Rate {0..1}
P_DBT_ACCT_OFFICE		String {0..1}
P_DBT_TRIANGULATION_CCY		Currency {0..1}
P_DBT_VD		ISO date {0..1}

2.3.3.9.2   Credit Side Persistent Info*

Field Name	Comment	Occurrences
P_CDT_FEE_ACCT_NB		String {0..1}
P_CDT_FEE_ACCT_CCY		Currency {0..1}
P_CDT_FEE_ACCT_OFFICE		String {0..1}
P_CDT_FEE_PMT_CCY		Currency {0..1}
P_CDT_FEE_POSTING_STS		String {0..1}
P_CDT_AMT_STEP1		Amount {0..1}
P_CDT_ACCT_NB		String {0..1}
P_CDT_ACCT_OFFICE		String {0..1}
P_CDT_RATE_USAGE_NM		String {0..1}
P_CDT_RATE		Rate {0..1}
P_CDT_MOP		String {0..1}

Field Name	Comment	Occurrences
P_CDT_APPLY_FEE		String {0..1}
P_CDT_CROSS_CONV		Boolean {0..1}
P_CDT_MID_RATE		Rate {0..1}
P_CDT_POSTING_STS		String {0..1}
P_CDT_SPREAD		Decimal {0..1}
P_CDT_TX_CD		String {0..1}
P_CDT_RATE_STEP1		Rate {0..1}
P_CDT_RATE_STEP2		Rate {0..1}
P_CDT_TRIANGULATION_CCY		Currency {0..1}
P_CDT_ACCT_CCY		Currency {0..1}
P_CDT_AMT		Amount {0..1}
P_CDT_CUST_CD		String {0..1}
P_CDT_VD		ISO date {0..1}

2.3.3.10 XML Persistent Info

Field Name	Comment	Occurrences
X_MSG_USER_REF		String {0..1}
X_DBT_CDT_IND		String {0..1}
X_EPMT_REF		String {0..1}
D_FIRST_IN_CDT_CHAIN_BIC		BIC {0..1}
D_DIRECT_RECEIVER		String {0..1}
InstrNxtAgtOtherCodes	X_INSTR_NXT_AGT_OTHER_CD and X_INSTR_NXT_AGT_OTHER_INF	Following its specific definition{0..1}

2.3.3.11 Cut-off Info*

Field Name	Comment	Occurrences
P_TREASURY_CUTOFF_TM	Treasury cut-off time	Date time {0..1}
P_TREASURY_CUTOFF_NM	Treasury cut-off name	String {0..1}
P_TREASURY_CUTOFF_STS	Treasury cut-off status	String {0..1}
P_CLEARING_CUTOFF_TM	Clearing cut-off time	Date time {0..1}
P_CLEARING_CUTOFF_NM	Clearing cut-off name	String {0..1}
P_CLEARING_CUTOFF_STS	Clearing cut-off status	String {0..1}
P_PROC_CUTOFF_TM	Processing cut-off time	Date time {0..1}
P_PROC_CUTOFF_NM	Processing cut-off name	String {0..1}
P_PROC_CUTOFF_STS	Processing cut-off status	String {0..1}

2.3.3.12 Operational Section*

Field Name	Description	Occurrences
D_BUTTON_ID	Holds the button ID that was last activated	{0..1}
D_SCREENSET_ID	Holds the Screenset ID	{0..1}
TemplateSection	See Template Section Line	{0..1}

2.3.3.12.1 Template Section Line

Field Name	Description	Occurrences
D_TEMPLATE_UNCHANGED_FIELDS	Template Unchanged Fields. Includes a comma-separated list of fields (Logical Field ID) that cannot be modified. When adding a field, if it is not the first field mapped then the value mapped must be preceded by a comma.	{0..1}

2.3.3.13 Balance Check Information

Field Name	Description	Occurrences
M_BI_INFO_LINE	Balance check information record. See Memo Post Line	{0..n}

2.3.3.13.1 Balance Check Line

Field Name	Description	Occurrences
F_BI_INFO_DEBIT_TYPE	The type of the amount on which balance check is requested; either MAIN or FEE	{0..1}
F_BI_INFO_ACCNO	Account number	{0..1}
F_BI_INFO_ACC_CURRENCY	Account currency	{0..1}
F_BI_INFO_ACC_OFFICE	Account office	{0..1}
F_ BI_INFO_ACC_TRANS_CD	The transaction code associated with the account the balance check is on. The source for this attribute is as follows: • For Principal account it is populated with **P_DBT_TX_CD** (it is populated using the **Debit transaction code** rules) • For fee account it is populated with the transaction code of the relevant **Fee Formula**	{0..1}

Field Name	Description	Occurrences
F_BI_INFO_BOOKING_ENT	The Booking Entity (accounting system) that the account is managed in. The source for this attribute is: • For Principal account: from the Account object containing the information for the debit account – either from its GPP DB Account entry or received from Account lookup • For fee account: if it is same as principal account, then same source. If it is a different account it is only populated from its GPP DB Account entry	{0..1}
F_BI_INFO_AMOUNT	The amount on which balance check is requested for this entry	{0..1}
F_BI_INFO_VALUE_DATE	Value date for which the balance was checked	{0..1}
F_BI_INFO_BALANCE	Balance returned from the Balance Inquiry interface (if returned)	{0..1}
F_BI_INFO_EARMARK_REF	Earmark reference returned from the Balance Inquiry interface (if returned)	{0..1}
F_BI_INFO_EARMARK_STS	Earmark status. Possible values: • X - Default (initial value) • R - Required • P - Pending response. It is required and a request for balance check with earmark was sent • E - Earmarked (earmark reference returned from HOST) • C - Earmark Canceled/Released • U - Earmark Used. Earmark reference was sent as part of Posting for this amount	{0..1}

2.3.3.14 Memo Post (aka Posting Information – Older Design)

Field Name	Description	Occurrences
M_POSTING_INFO_LINE	Posting Info record. See Memo Post Line	{0..n}

2.3.3.14.1 Memo Post Line

Field Name	Description	Occurrences
F_POSTING_INFO_MOVEMENT_TYPE	Either debit or credit	{0..1}

Field Name	Description	Occurrences
F_POSTING_INFO_OFFICE	Account owning office	{0..1}
F_POSTING_INFO_ACCNO	Account number	{0..1}
F_POSTING_INFO_ACCT_TP	Account type	{0..1}
F_POSTING_INFO_FEE_TP	Fee type (only relevant for fee posting entries)	{0..1}
F_POSTING_INFO_CURRENCY	Account currency	{0..1}
F_POSTING_INFO_AMOUNT	Posting amount	{0..1}
F_POSTING_INFO_VALUE_DATE	Posting value date	{0..1}

2.3.3.15 Message Posting (aka Posting Information – New Design)

Field Name	Description	Occurrences
M_POSTING_INFO_LINE	Posting Info record. See Posting Info Line (Msg_Posting entry)	{0..n}
MsgPostingReqExt	Extension information (customer specific) related to, and on the level of, the posting request. See Posting Info Line (Msg_Posting entry)	{0..n}

2.3.3.15.1 Posting Info Line (Msg_Posting entry)

Field Name	Description	Occurrences
F_POSTING_INFO_POSTING_REQ_ID	A unique ID of the posting request in which the posting entry is included	{0..1}
F_POSTING_INFO_POSTING_NTRY_ID	A unique ID of the posting entry	{0..1}
F_POSTING_INFO_IS_REVERSAL_IND	An indicator of whether the posting entry is a reversed posting of another original posting entry	{0..1}
F_POSTING_INFO_RVRSD_ORIG_NTRY_ID	In the original posting entry this tag quotes the reversed posting entry id. In the reversed posting entry this tag quotes the posting entry id of the original posting entry that is being reversed. **Note:** When the first step accounting is a lump sum (on the S): • Only in the reversed posting entries of the individual messages, the original posting is quoted. • This tag is not quoted in the original lump posting entry, as there is a relation of 1:n between the original posting entry (on the S) and the	{0..1}

Field Name	Description	Occurrences
	possible reversed (per Individual)	
F_POSTING_INFO_POSTING_TYPE	The entry posting type, can have the values as setup in **Fields_Values** for **Field_Type**=POSTING_TYPE	{0..1}
F_POSTING_INFO_OFFICE	The transaction Office	{0..1}
F_POSTING_INFO_CR_DR_FLAG	The action of this posting – CR/DR	{0..1}
F_POSTING_INFO_ACCNO	The account the posting is on	{0..1}
F_POSTING_INFO_ACCT_TP	The type of the account the posting is on	{0..1}
F_POSTING_INFO_CURRENCY	The currency account the posting is on	{0..1}
F_POSTING_INFO_ACC_OFFICE	The office of the account the posting is on	{0..1}
F_POSTING_INFO_CUST_ACC_IND	An indication that the posting account is a customer account (copied from the relevant attribute of the **ACCTYPES** entry relevant for the posting account)	{0..1}
F_POSTING_INFO_ACC_TRANS_CD	The transaction code associated with the account the posting is on. The source for this attribute is as follows: • For Principal debit entry – populated with **P_DBT_TX_CD** (that is populated using the **Debit transaction code** rules) • For Principal credit entry – populated with **P_CDT_TX_CD** (that is populated using the **Credit transaction code** rules) • For fee entries - populated with the transaction code of the relevant **Fee Formula**	{0..1}
F_POSTING_INFO_BOOKING_ENT	The booking entity/accounting system under which the account the posting is on is managed	{0..1}
F_POSTING_INFO_ACC_COST_CTR	The Cost Center to which the account belongs (attribute of the **Accounts** entry). Used by Anti-Money Laundering, mainly for Posting and mainly in US.	{0..1}
F_POSTING_INFO_AMOUNT	The amount posted per this entry	{0..1}
F_POSTING_INFO_BASE_AMOUNT	The base amount equivalent of the posting amount	{0..1}
F_POSTING_INFO_VALUE_DATE	The relevant Dbt/Cdt value date of the posting entry	{0..1}

Field Name	Description	Occurrences
F_POSTING_INFO_FEE_TP	The fee type of the selected fee posted in this entry (only relevant for fee posting entries) **Note**: This tag is not represented in the Msg_Posting table as the rest of the POSTING_INFO tags, but it remains in the structure for historic/backward compatibility reasons	{0..1}
F_POSTING_INFO_FEE_TP_CTG	The fee type category of the selected fee posted in this entry (only relevant for fee posting entries)	{0..1}
F_POSTING_INFO_STATUS	The status of the posting entry **Note:** this tag usually is not mapped when using this section as the posting request (status is Pending), but can be used in the Posting Response to report specific status per entry. It also can be mapped when using the Fndt Message as a full structure reporting all details on the message, including posting information, for example on completion.	{0..1}
F_POSTING_INFO_EARMARK_REF	Earmark reference that was returned from the Balance Inquiry interface (if returned), and should be sent back with the posting entry to allow the linkage between the earmarked funds and this posting entry	{0..1}
F_POSTING_INFO_FORCE_POST_IND	An indicator of whether the current posting entry was sent to the accounting system with an instruction to force post	{0..1}
F_MAN_POST_RSPNS_IND	An indicator of whether the current posting status is the result of a manually instructed posting response a user had requested – either Positive or Negative **Note:** same mapping behavior as for POSTING_STS	{0..1}
MsgPostingEntryExt	Extension information (customer specific) related to, and on the level of, the posting entry. See Entry Level Posting extension Info Line	{0..n}

2.3.3.15.1.1   Entry Level Posting extension Info Line

Field Name	Description	Occurrences
F_POSTING_NTRY_EXT_INFO_FLD_NM	The name of the additional customer specific attribute (on entry level)	{0..1}
F_POSTING_NTRY_EXT_INFO_FLD_VAL	The value of the additional customer specific attribute (on entry level)	{0..1}

2.3.3.15.2   Request Level Posting Extension Info Line

Field Name	Description	Occurrences
F_POSTING_REQ_EXT_INFO_FLD_NM	The name of the additional customer specific attribute (on request level)	{0..1}
F_POSTING_REQ_EXT_INFO_FLD_VAL	The value of the additional customer specific attribute (on request level)	{0..1}

2.3.3.16 User Defined Fields – Custom Fields

The Custom Fields (CMFs) can include the following elements (with any order between the following elements):

- System-wide user-defined fields section encapsulated in a System element

- Financial institution user-defined fields section encapsulated in an Office element

  Note: The Financial Institution's code value must be provided in the parent Office code attribute.

- Financial institution clients' user-defined fields section encapsulated in a Customer element

  Note: The transaction's proprietary ID value element must be provided in the parent Customer code attribute.

Both sections must contain a sequence of logical field ID tags that encapsulate inner text values.

Field name	Description	Occurrences
System	This element holds the system level CMF	{0..1}
Office	This element holds the office level CMF	{0..1}
Customer	This element holds the customer level CMF	{0..1}

2.3.3.17 Interfaces Section (N/A)

2.3.3.18 QA Info (N/A)

2.3.3.19 Web Services Result

Field Name	Occurrences
returnCode	Integer {0..1}
description	String {0..1}
errorsList	String {0..1}

Field Name	Occurrences
error	String {0..n}
code	Integer {0..1}
description	String {0..1}
dataArray	String {0..1}
error	String {0..n}

2.3.3.20 Processing Transient Info*

Field Name	Occurrences
D_1ST_IN_CDT_CHA_ACCNUM_FLD_ID	{0..1}
D_1ST_IN_CDT_CHA_IBAN_FLD_ID	{0..1}
D_1ST_IN_DBT_CHA_ACCNUM_FLD_ID	{0..1}
D_1ST_IN_DBT_CHA_BIC_FLD_ID	{0..1}
D_1ST_IN_DBT_CHA_IBAN_FLD_ID	{0..1}
D_ACCOUNT_DERIVATION_TYPE	{0..1}
D_AF_MATCHED_MID	{0..1}
D_CDTR_IBAN_CUST_CD	{0..1}
D_CONFIRMATION_FLOW	{0..1}
D_CURRENCY_CONVERSION_TYPE	{0..1}
D_DIRECT_RECEIVER_INDEX	{0..1}
D_FIND_FIRST_IN_CHAIN_TYPE	{0..1}
D_FEE_CALCULATION_TYPE	{0..1}
D_FIRST_IN_CDT_CHAIN_ACC_NUM	{0..1}
D_FIRST_IN_CDT_CHAIN_IBAN	{0..1}
D_FIRST_IN_DBT_CHAIN_ACC_NUM	{0..1}
D_FIRST_IN_DBT_CHAIN_BIC	{0..1}
D_FIRST_IN_DBT_CHAIN_IBAN	{0..1}
D_LOAD_CUSTOMER_TYPE	{0..1}
D_MOP_SELECTION_TYPE	{0..1}
D_MT191AUTOGEN	{0..1}
D_STOP_FLAGS_PROCESS_TYPE	{0..1}
D_AVAILABLE_MOPS	{0..1}
D_CDT_CURR1_UNITS	{0..1}
D_CDT_CURR2_UNITS	{0..1}
D_DBT_CURR1_UNITS	{0..1}
D_DBT_CURR2_UNITS	{0..1}
D_DEBIT_AUTHORIZATION	{0..1}
D_MOP_VALID	{0..1}
D_CDT_FEE_ACCT_AMT	{0..1}
D_CDT_FEE_ACCT_BASEEQVT	{0..1}

Field Name	Occurrences
D_CDT_FEE_PMT_DEDUCT_AMT	{0..1}
D_CDT_FEE_PMT_DEDUCT_BASEEQVT	{0..1}
D_CDT_AF_FEE_PMT_AMT	{0..1}
D_CDT_FEE_ACCT_AMT_LATER	{0..1}
D_IN_AF_CDT_ACCT_AMT	{0..1}
D_DBT_FEE_ACCT_AMT	{0..1}
D_DBT_FEE_ACCT_BASEEQVT	{0..1}
D_DBT_FEE_ACCT_CCY	{0..1}
D_DBT_FEE_PMT_DEDUCT_AMT	{0..1}
D_DBT_FEE_PMT_DEDUCT_BASEEQVT	{0..1}
D_DBT_MAIN_POST_AMT	{0..1}
D_TOT_FEE_PMT_DEDUCT_AMT	{0..1}
D_TOT_FEE_PMT_DEDUCT_BASEEQVT	{0..1}
D_DBT_FEE_PMT_AMT_REQUEST	{0..1}
D_CDT_FEE_ACCT_AMT_NOW	{0..1}
D_DBT_FEE_AMT_PMT_PRE_IN_AF	{0..1}
D_RULE_TYPE_ID	{0..1}
D_RULE_SUB_TYPE	{0..1}
D_EVENT_ID	{0..1}
D_DBT_AF_FEE_ACCT_AMT	{0..1}
D_BANK_ID	{0..1}
D_BRANCH_ID	{0..1}
D_IBAN_STS	{0..1}
D_VD_MONTH_CALENDAR	{0..1}
D_PD_MONTH_CALENDAR	{0..1}
D_STP_FIELDS_TO_VALID	{0..1}
D_STP_RULE	{0..1}
D_STANDARD_VD	{0..1}

2.3.3.21 Monitors*

Field Name	Description	Occurrences
UserMonitor*	See User Monitor Information	{0..1}
ServiceState*	See Service State Monitor Information	{0..1}
PlaceHolder		{0..1}

2.3.3.21.1   User Monitor Information*

Field Name	Occurrences
MU_REQ_FOR_CHARGES_FORCE_STS	String {0..1}
MU_STOP_FLAGS_OVERRIDE_STS	String {0..1}
MU_MISSED_CUTOFF	String {0..1}
MU_SPECIAL_INST_STS	String {0..1}
MU_PI_FORCE_STS	String {0..1}
MU_HANDLE_71G_GAP	String {0..1}
MU_COMPLIANCE_FORCE_STS	String {0..1}
MU_NSF_FORCE_STS	String {0..1}
MU_FORCE_STANDARD_VD	String {0..1}

2.3.3.21.2   Service State Monitor Information*

Field Name	Occurrences
MF_DBT_STOP_FLAGS_STS	String {0..1}
MF_CDT_STOP_FLAGS_STS	String {0..1}
MF_MOP_SELECTION_STS	String {0..1}
MF_SPECIAL_INST_STS	String {0..1}
MF_INITIAL_CREATE	String {0..1}
MF_OUT_REQ_FOR_CHRG_MATCH_STS	String {0..1}
MF_GENERATE_REQ_CHARGES	String {0..1}
MF_TIME_HOLD	String {0..1}
MF_GENERATED_ANSWER_MESSAGE	String {0..1}
MF_GENERATED_CANCEL_REQUEST	String {0..1}
MF_REQ_FOR_CHARGES_MATCH_STS	String {0..1}
MF_COMPLIANCE_VALIDATION_STS	String {0..1}
MF_DIRECT_COVER_GENERATED	String {0..1}
MF_REQ_FOR_CHARGES_VALID_STS	String {0..1}
MF_PISN_MATCH_STS	String {0..1}
MF_PISN_PROCESS_STS	String {0..1}
MF_CANCEL_MATCH_STS	String {0..1}
MF_CANCEL_REQUEST_VALID_STS	String {0..1}
MF_N_MESSAGES_MATCH_STS	String {0..1}
MF_FEE_PROC_STS	String {0..1}
MF_POSTING_STS	String {0..1}

2.3.3.22 Reference Data*

Field Name	Description	Occurrences
M_DBT_CUST_PROFILE*	See Debit Party Profile Info	{0..1}
M_CDT_CUST_PROFILE*	See Credit Party Profile Info	{0..1}
M_STTLM_CCY_PROFILE*	See Settlement Currency Info	{0..1}
M_DBT_MOP_PROFILE*	See Debit MOP Profile	{0..1}
M_CDT_MOP_PROFILE*	See Credit MOP Profile	{0..1}
M_DBT_ACCOUNT*	See Debit Account Info	{0..1}
M_CDT_ACCOUNT*	See Credit Account Info	{0..1}
M_INSTG_AGT_PROFILE*	See Instructing Agent Info	{0..1}
M_LOCAL_OFFICE_PROFILE*	See Office Profile	{0..1}
M_CONTACT_INFO	See Contact Profile	{0..1} option for multi occurrences of M_CONTACT_LINE)

2.3.3.22.1 Debit Party Profile Info*

Field Name	Occurrences
F_DBT_CUST_ABA	String {0..1}
F_DBT_CUST_ALIAS	String {0..1}
F_DBT_CUST_BASE_NO	String {0..1}
F_DBT_CUST_CLEARING_CODE	String {0..1}
F_DBT_CUST_COUNTRYCODE	String {0..1}
F_DBT_CUST_CUST_CATEGORY	String {0..1}
F_DBT_CUST_CUST_CODE	String {0..1}
F_DBT_CUST_CUST_NAME	String {0..1}
F_DBT_CUST_CUST_TYPE	String {0..1}
F_DBT_CUST_DEPARTMENT	String {0..1}
F_DBT_CUST_FEE_ACCOUNT_NO	String {0..1}
F_DBT_CUST_FEE_ACCOUNT_CCY	String {0..1}
F_DBT_CUST_FEE_ACCOUNT_OFFICE	String {0..1}
F_DBT_CUST_FROMREASON	String {0..1}
F_DBT_CUST_IBAN_BANK_ID	String {0..1}
F_DBT_CUST_OWNERSHIP	String {0..1}
F_DBT_CUST_PROFESSION	String {0..1}
F_DBT_CUST_REG_REPORT1	String {0..1}
F_DBT_CUST_REG_REPORT2	String {0..1}

Field Name	Occurrences
F_DBT_CUST_STOPFLAGFROM	Integer {0..1}
F_DBT_CUST_STOPFLAGTO	Integer {0..1}
F_DBT_CUST_SWIFT_ID	String {0..1}
F_DBT_CUST_TOREASON	String {0..1}
F_DBT_CUST_FROMREASON	String {0..1}
F_DBT_CUST_CITY	String {0..1}
F_DBT_CUST_STATE	String {0..1}
F_DBT_CUST_ZIP	String {0..1}
F_DBT_CUST_ADDRESS1	String {0..1}
F_DBT_CUST_ADDRESS2	String {0..1}
F_DBT_CUST_ADDRESS3	String {0..1}
F_DBT_CUST_ADDRESS4	String {0..1}

2.3.3.22.2 Credit Party Profile Info*

Field Name	Occurrences
F_CDT_CUST_ABA	String {0..1}
F_CDT_CUST_ALIAS	String {0..1}
F_CDT_CUST_BASE_NO	String {0..1}
F_CDT_CUST_CLEARING_CODE	String {0..1}
F_CDT_CUST_COUNTRYCODE	String {0..1}
F_CDT_CUST_CUST_CATEGORY	String {0..1}
F_CDT_CUST_CUST_CODE	String {0..1}
F_CDT_CUST_CUST_NAME	String {0..1}
F_CDT_CUST_CUST_TYPE	String {0..1}
F_CDT_CUST_DEPARTMENT	String {0..1}
F_CDT_CUST_FEE_ACCOUNT_NO	String {0..1}
F_CDT_CUST_FEE_ACCOUNT_CCY	String {0..1}
F_CDT_CUST_FEE_ACCOUNT_OFFICE	String {0..1}
F_CDT_CUST_FROMREASON	String {0..1}
F_CDT_CUST_IBAN_BANK_ID	String {0..1}
F_CDT_CUST_OWNERSHIP	String {0..1}
F_CDT_CUST_PROFESSION	String {0..1}
F_CDT_CUST_REG_REPORT1	String {0..1}
F_CDT_CUST_REG_REPORT2	String {0..1}
F_CDT_CUST_STOPFLAGFROM	Integer {0..1}
F_CDT_CUST_STOPFLAGTO	Integer {0..1}
F_CDT_CUST_SWIFT_ID	String {0..1}
F_CDT_CUST_TOREASON	String {0..1}
F_CDT_CUST_CITY	String {0..1}

Field Name	Occurrences
F_CDT_CUST_STATE	String {0..1}
F_CDT_CUST_ZIP	String {0..1}
F_CDT_CUST_ADDRESS1	String {0..1}
F_CDT_CUST_ADDRESS2	String {0..1}
F_CDT_CUST_ADDRESS3	String {0..1}
F_CDT_CUST_ADDRESS4	String {0..1}

2.3.3.22.3   Settlement Currency Info*

Field Name	Occurrences
F_INSTR_CCY_DRAFT	Boolean {0..1}
F_INSTR_CCY_EURO	String {0..1}

2.3.3.22.4   Debit MOP Profile*

Field Name	Occurrences
F_MOP_MAXAMOUNT	Amount {0..1}
F_MOP_CHK_DRAFT_CURRENCY	Boolean {0..1}
F_MOP_CURRENCY	Currency {0..1}
F_MOP_MOPDOWN	Boolean {0..1}
F_MOP_ALLOW_NAC_MSG	Boolean {0..1}
F_MOP_SENDOUTMSG	Boolean {0..1}
F_MOP_MINAMOUNT	Amount {0..1}
F_MOP_SEND_REC_IDCODE	String {0..1}
F_MOP_SETT_ACC_EXISTS	Boolean {0..1}
F_MOP_SPLIT_OVER_MAX	Boolean {0..1}
F_MOP_NM	String {0..1}
F_MOP_GROUP	String {0..1}
F_MOP_NCC_TYPE	String {0..1}

2.3.3.22.5   Credit MOP Profile*

Field Name	Occurrences
F_CDT_MOP_CCY	String {0..1}
F_CDT_MOP_CHK_DRAFT_CCY	Boolean {0..1}
F_CDT_MOP_MIN_AMT	Amount {0..1}
F_CDT_MOP_SENDOUTMSG	Boolean {0..1}
F_CDT_MOP_SEND_REC_IDCODE	String {0..1}
F_CDT_MOP_SETT_ACC_EXISTS	Boolean {0..1}
F_INSTG_CUST_ALIAS	Boolean {0..1}

Field Name	Occurrences
F_CDT_MOP_SNDR_BIC	BIC {0..1}
F_CDT_MOP_SPLIT_OVER_MAX	Boolean {0..1}
F_CDT_MOP_FIN_COPY	String {0..1}
F_CDT_MOP_DOWN	Boolean {0..1}
F_CDT_MOP_NCC_TP	String {0..1}
F_CDT_MOP_MAX_AMT	Amount {0..1}
F_CDT_MOP_ALLOW_NAC_MSG	Boolean {0..1}
F_CDT_MOP_GRP	String {0..1}
F_CDT_MOP_NM	String {0..1}

2.3.3.22.6   Debit Account Info*

Field Name	Occurrences
F_DBT_ACCT_ASSET	Boolean {0..1}
F_DBT_ACCT_BOOKNG_ENT	String {0..1}
F_DBT_ACCT_ACC_TYPE	String {0..1}
F_DBT_ACCT_STOPFLAGDR	Integer {0..1}
F_DBT_ACCT_REASONDR	String {0..1}
F_DBT_ACCT_STOPFLAGCR	Integer {0..1}
F_DBT_ACCT_REASONCR	String {0..1}

2.3.3.22.7   Credit Account Info*

Field Name	Occurrences
F_CDT_ACCT_ASSET	Boolean {0..1}
F_CDT_ACCT_BOOKNG_ENT	String {0..1}
F_CDT_ACCT_ACC_TYPE	String {0..1}
F_CDT_ACCT_STOPFLAGDR	Integer {0..1}
F_CDT_ACCT_REASONDR	String {0..1}
F_CDT_ACCT_STOPFLAGCR	Integer {0..1}
F_CDT_ACCT_REASONCR	String {0..1}

2.3.3.22.8   Instructing Agent Info*

Field Name	Occurrences
F_INSTG_CUST_ABA	String {0..1}
F_INSTG_CUST_SWIFT_ID	String {0..1}
F_INSTG_CUST_ALIAS	String {0..1}

2.3.3.22.9 Office Profile*

Field Name	Occurrences
F_OFFICE_CUST_SWIFT_ID	String {0..1}
F_OFFICE_BDT	Date time {0..1}

2.3.3.22.10 Contact Profile

Field Name	Description	Occurrences
M_CONTACT_LINE	Contact record. See Contact Info Line	{0..n}

2.3.3.22.10.1   Contact Info Line

Field Name	Description	Occurrences
F_CONTACT_OF	The entity that this entry serves as its contact for advising. Values: DR_PARTY, CR_PARTY, DR_ACCT, CR_ACCT, DR_FEE, CR_FEE	String {0..1}
F_CONTACT_NAME	Name of the contact	String {0..1}
F_UID_CONTACT	Unique ID for CONTACTS table entry (Office and Contact Name)	String {0..1}
F_CONTACT_DESCRIPTION	Description of the contact	String {0..1}
F_CONTACT_PHONE	Phone of the contact	String {0..1}
F_CONTACT_FAX	Fax of the contact	String {0..1}
F_CONTACT_EMAIL	E-mail address of the contact	String {0..1}
F_CONTACT_ADDRESS1	First line of the address of the contact	String {0..1}
F_CONTACT_ADDRESS2	Second line of the address of the contact	String {0..1}
F_CONTACT_ADDRESS3	Third line of the address of the contact	String {0..1}
F_CONTACT_ADDRESS4	Fourth line of the address of the contact	String {0..1}
F_CONTACT_ADDRESS5	Fifth line of the address of the contact	String {0..1}
F_CONTACT_ADDRESS6	Sixth line of the address of the contact	String {0..1}

2.3.3.23 Response Details

Field Name	Occurrences
returnCode	Integer {0..1}
description	String {0..1}
errorsList	String {0..1}
error	String {0..n}
code	Integer {0..1}
description	String {0..1}
dataArray	String {0..1}
error	String {0..n}

2.4   Examples

2.4.1   Creating Custom Message Fields (CMFs)

Custom Fields can be defined at the user level and system level. For information about how to create a custom field, see Creating Custom Fields Overview in the GPP Online Help.

The following example assumes that these two Custom Fields have been created:

- Field name = PMT_CAT, UDF Type = System

- Field name = REF_NUM, UDF Type = Client, Cust Code = D-36789242

Example of a request using the defined Custom Fields.

```
<FndtMsg xmlns="http://fundtech.com/SCL/CommonTypes">
  <Msg>
    <Pmnt>
      <Document xmlns="urn:iso:std:iso:20022:tech:xsd:pacs.008.001.02"/>
    </Pmnt>
    <Extn>
      <UserDefinedFields>
       <System>
          <PMT_CAT>Urgent</PMT_CAT>
       </System>
       <Customer code="D-36789242">
          <REF_NUM> AB-1223</REF_NUM>
       </Customer>
      </UserDefinedFields>
    </Extn>
  </Msg>
</FndtMsg>
```

2.4.2   Example of a Response

```
<FndtMsg xmlns="http://fundtech.com/SCL/CommonTypes">
  <Msg>
    <Pmnt>
      <Document xmlns="urn:iso:std:iso:20022:tech:xsd:pacs.008.001.02"/>
    </Pmnt>
    <Extn>
      <UserDefinedFields>
            <System>
         <PMT_CAT>Urgent</PMT_CAT>
       </System>
       <Customer>
          <REF_NUM>AB-1223</REF_NUM>
       </Customer>
      </UserDefinedFields>
    </Extn>
  </Msg>
</FndtMsg>
```

2.4.3   FndtMsgBatch

2.4.3.1   BatchHeader

```
< <BatchHeader>
    <GrpHdr xmlns="urn:iso:std:iso:20022:tech:xsd:pain.001.001.03">
<MsgId>CTv422-001</MsgId>
              <CreDtTm>2008-06-25T06:19:06</CreDtTm>
              <NbOfTxs>3</NbOfTxs>
              <CtrlSum>2400</CtrlSum>
              <InitgPty>
                    <Nm>THE US COMPANY</Nm>
                    <Id>
```

```
                                    <OrgId>
                                            <Othr>
                                            <Id>
                                                    <Id>US1SACOMPUS33XXX</Id>
                                            </Id>
                                            </Othr>
                                    </OrgId>
                            </Id>
                    </InitgPty>
        </GrpHdr>
</BatchHeader>
```

2.4.3.2   PmtHeader

```
<PmntHeader>
        <PmtInf xmlns:p="urn:iso:std:iso:20022:tech:xsd:pain.001.001.03">
    <BtchBookg>false</BtchBookg>
                <Dbtr>
                  <Nm>The US Company</Nm>
                        <PstlAdr>
                         <StrtNm>Tower Hill</StrtNm>
                         <BldgNb>4</BldgNb>
                         <PstCd>NY 10011</PstCd>
                          <TwnNm>New York</TwnNm>
                          <Ctry>US</Ctry>
                        </PstlAdr>
                </Dbtr>
                <DbtrAcct>
                  <Id>
                   <Othr>
                        <Id>22222222</Id>
                   </Othr>
                  </Id>
                  <Ccy>USD</Ccy>
                </DbtrAcct>
                <DbtrAgt>
                    <FinInstnId>
                       <BIC>BOFAUS31XXX</BIC>
                    </FinInstnId>
                </DbtrAgt>
        <PmtInfId>PmntHeader1</PmtInfId>
    </PmtInf>
</PmntHeader>
```

Note: CdtTrfTxInf is not included in the header.

2.4.3.3   TxInf

```
<TxInf>
  <FndtMsg>
    <Msg>
      <Pmnt>
        <Document xsi:schemaLocation="urn:iso:std:iso:20022:tech:xsd:pain.001.001.03
pain.001.001.03.xsd " xmlns="urn:iso:std:iso:20022:tech:xsd:pain.001.001.03"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
        <CstmrCdtTrfInitn>
          <GrpHdr />
          <PmtInf>
            <CdtTrfTxInf>
              <PmtId>
                <InstrId>AA_1</InstrId>
                <EndToEndId>CTv422-8/2008-06-25</EndToEndId>
              </PmtId>
        <PmtTpInf>
<CtgyPurp>
                <Cd>GDDS</Cd>
              </CtgyPurp>
              </PmtTpInf>
```

```
<Amt>
                <InstdAmt Ccy="USD">700</InstdAmt>
            </Amt>
            <ChrgBr>CRED</ChrgBr>
            <CdtrAgt>
              <FinInstnId>
                <BIC>CITIUS33XXX</BIC>
              </FinInstnId>
            </CdtrAgt>
            <CdtrAcct>
              <Id>
                <Othr>
                  <Id>3333421212</Id>
                </Othr>
              </Id>
            </CdtrAcct>
            <RmtInf>
              <Unstrd>
</Unstrd>
            </RmtInf>
          </CdtTrfTxInf>
        </PmtInf>
      </CstmrCdtTrfInitn>
    </Document>
   </Pmnt>
  </Msg>
 </FndtMsg>
 <FndtMsg>
  <Msg>
   <Pmnt>
    <CdtTrfTxInf>
      <PmtId>
        <InstrId>AB_1</InstrId>
        <EndToEndId>CTv422-8/2008-06-25</EndToEndId>
      </PmtId>
   <PmtTpInf>
<CtgyPurp>
                <Cd>GDDS</Cd>
        </CtgyPurp>
      </PmtTpInf>
        <Amt>
        <InstdAmt Ccy="USD">800</InstdAmt>
      </Amt>
      <ChrgBr>CRED</ChrgBr>
      <CdtrAgt>
        <FinInstnId>
          <BIC>CITIUS33XXX</BIC>
        </FinInstnId>
      </CdtrAgt>
      <CdtrAcct>
        <Id>
          <Othr>
            <Id>3333421212</Id>
          </Othr>
        </Id>
      </CdtrAcct>
      <RmtInf>
        <Unstrd>
        </Unstrd>
      </RmtInf>
    </CdtTrfTxInf>
   </Pmnt>
  </Msg>
 </FndtMsg>
</TxInf>
```

2.4.3.4   Full Message – All Elements

```
<FndtMsgBatch xmlns="http://fundtech.com/SCL/CommonTypes">
```

```
    <FndtHeader>
<credentials>
        <UserID>AUDIT</UserID>
        </credentials>
        <Workflow>Template</Workflow>
```

Note: Populate <Workflow> with the value Template (for batch imports) or File (for file imports).

```
    </FndtHeader>
    <BatchHeader>
      <GrpHdr xmlns="urn:iso:std:iso:20022:tech:xsd:pain.001.001.03">
        <MsgId>CTv422-001</MsgId>
        <CreDtTm>2008-06-25T06:19:06</CreDtTm>
        <NbOfTxs>3</NbOfTxs>
        <CtrlSum>2400</CtrlSum>
        <InitgPty>
          <Nm>THE US COMPANY</Nm>
          <Id>
            <OrgId>
              <Othr>
                <Id>
                  <Id>US1SACOMPUS33XXX</Id>
                </Id>
              </Othr>
            </OrgId>
          </Id>
        </InitgPty>
      </GrpHdr>
    </BatchHeader>
    <PmntTxInf>
      <PmntHeader>
        <PmtInf xmlns:p="urn:iso:std:iso:20022:tech:xsd:pain.001.001.03">
        <BtchBookg>false</BtchBookg>
        <Dbtr>
            <Nm>The US Company</Nm>
            <PstlAdr>
              <StrtNm>Tower Hill</StrtNm>
              <BldgNb>4</BldgNb>
              <PstCd>NY 10011</PstCd>
              <TwnNm>New York</TwnNm>
              <Ctry>US</Ctry>
            </PstlAdr>
        </Dbtr>
        <DbtrAcct>
          <Id>
            <Othr>
              <Id>22222222</Id>
            </Othr>
          </Id>
          <Ccy>USD</Ccy>
        </DbtrAcct>
        <DbtrAgt>
          <FinInstnId>
            <BIC>BOFAUS31XXX</BIC>
          </FinInstnId>
        </DbtrAgt>
        <PmtInfId>PmntHeader1</PmtInfId>
      </PmtInf>
    </PmntHeader>
    <TxInf>
      <FndtMsg>
        <Msg>
          <Pmnt>
            <Document xsi:schemaLocation="urn:iso:std:iso:20022:tech:xsd:pain.001.001.03
pain.001.001.03.xsd " xmlns="urn:iso:std:iso:20022:tech:xsd:pain.001.001.03"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
              <CstmrCdtTrfInitn>
                <GrpHdr />
                <PmtInf>
```

```
                        <CdtTrfTxInf>
                          <PmtId>
                            <InstrId>AA_1</InstrId>
                            <EndToEndId>CTv422-8/2008-06-25</EndToEndId>
                          </PmtId>
  <PmtTpInf>
<CtgyPurp>
                                    <Cd>GDDS</Cd>
                            </CtgyPurp>
                                </PmtTpInf>
                          <Amt>
                          <InstdAmt Ccy="USD">700</InstdAmt>
                          </Amt>
                          <ChrgBr>CRED</ChrgBr>
                          <CdtrAgt>
                            <FinInstnId>
                              <BIC>CITIUS33XXX</BIC>
                            </FinInstnId>
                          </CdtrAgt>
                          <CdtrAcct>
                            <Id>
                              <Othr>
                                <Id>3333421212</Id>
                              </Othr>
                            </Id>
                          </CdtrAcct>
                          <RmtInf>
                            <Unstrd>
                            </Unstrd>
                          </RmtInf>
                        </CdtTrfTxInf>
                      </PmtInf>
                    </CstmrCdtTrfInitn>
                  </Document>
                </Pmnt>
              </Msg>
            </FndtMsg>
            <FndtMsg>
              <Msg>
                <Pmnt>
                  <CdtTrfTxInf>
                    <PmtId>
                      <InstrId>AB_1</InstrId>
                      <EndToEndId>CTv422-8/2008-06-25</EndToEndId>
                    </PmtId>
  <PmtTpInf>
<CtgyPurp>
                                <Cd>GDDS</Cd>
                        </CtgyPurp>
                            </PmtTpInf>
                      <Amt>
                      <InstdAmt Ccy="USD">800</InstdAmt>
                      </Amt>
                      <ChrgBr>CRED</ChrgBr>
                      <CdtrAgt>
                        <FinInstnId>
                          <BIC>CITIUS33XXX</BIC>
                        </FinInstnId>
                      </CdtrAgt>
                      <CdtrAcct>
                        <Id>
                          <Othr>
                            <Id>3333421212</Id>
                          </Othr>
                        </Id>
                      </CdtrAcct>
                      <RmtInf>
                        <Unstrd>
                        </Unstrd>
                      </RmtInf>
```

```
                </CdtTrfTxInf>
              </Pmnt>
            </Msg>
        </FndtMsg>
        <FndtMsg>
          <Msg>
            <Pmnt>
              <Document xsi:schemaLocation="urn:iso:std:iso:20022:tech:xsd:pain.001.001.03
pain.001.001.03.xsd " xmlns="urn:iso:std:iso:20022:tech:xsd:pain.001.001.03"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
                <CstmrCdtTrfInitn>
                  <GrpHdr />
                  <PmtInf>
                    <CdtTrfTxInf>
                      <PmtId>
                        <InstrId>AC_1</InstrId>
                        <EndToEndId>CTv422-8/2008-06-25</EndToEndId>
                      </PmtId>
    <PmtTpInf>
<CtgyPurp>

                            <Cd>GDDS</Cd>
                      </CtgyPurp>
                        </PmtTpInf>
                        <Amt>
                      <InstdAmt Ccy="USD">900</InstdAmt>
                      </Amt>
                      <ChrgBr>CRED</ChrgBr>
                      <CdtrAgt>
                        <FinInstnId>
                          <BIC>CITIUS33XXX</BIC>
                        </FinInstnId>
                      </CdtrAgt>
                      <CdtrAcct>
                        <Id>
                          <Othr>
                            <Id>3333421212</Id>
                          </Othr>
                        </Id>
                      </CdtrAcct>
                      <RmtInf>
                        <Unstrd>
                        </Unstrd>
                      </RmtInf>
                    </CdtTrfTxInf>
                  </PmtInf>
                </CstmrCdtTrfInitn>
              </Document>
            </Pmnt>
          </Msg>
        </FndtMsg>
      </TxInf>
    </PmntTxInf>
</FndtMsgBatch>
```

2.4.3.5   FndtMsgBatch – Used for Submit Requests

FndtMsgBatch includes the following sections:

- FndtHeader – Base header that includes context information and credentials.

- FndtPmntTxInfo – Multiple transaction section containing a list of FndtMsg elements.

See the example in pain.001 to FndtBatchMsg of Submit Request.

2.4.4   FndtMsg

FndtMsg includes the following sections:

- Header – contains the message MID (in a non-create mode).

- Msg –Transaction and extension.

- Pmnt – Pain message "as is" (including both headers).

- Extn – GPP message extension.

- OrigMsg – Original message as received before any enrichment process began

2.4.5   Submit Message Example

```
<q0:MsgBatch>
       <q1:FndtHeader>
         <q1:credentials>
           <q1:UserID>audit3</q1:UserID>
         </q1:credentials>
         <q1:Workflow>File</q1:Workflow>
       </q1:FndtHeader>
       <q1:FndtPmntTxInf>
         <q1:FndtMsg>
           <q1:Msg>
             <q1:Pmnt>
               <Document xmlns="urn:iso:std:iso:20022:tech:xsd:pain.001.001.03"
xmlns:n1="http://www.w3.org/2001/XMLSchema-instance">
                 <CstmrCdtTrfInitn>
                   <GrpHdr>
                     <MsgId>CTv422-001</MsgId>
                     <CreDtTm>2008-06-25T06:19:06</CreDtTm>
                     <NbOfTxs>1</NbOfTxs>
                     <CtrlSum>700</CtrlSum>
                     <InitgPty>
                       <Nm>THE US COMPANY</Nm>
                       <Id>
                         <OrgId>
                           <Othr>
                             <Id>US1SACOMPUS33XXX</Id>
                           </Othr>
                         </OrgId>
                       </Id>
                     </InitgPty>
                   </GrpHdr>
                   <PmtInf>
                     <PmtMtd>TRF</PmtMtd>
    <BtchBookg>false</BtchBookg>
                     <ReqdExctnDt>2009-05-04</ReqdExctnDt>
                     <Dbtr>
                       <Nm>THE US COMPANY</Nm>
                       <Id>
                         <OrgId>
                           <Othr>
                             <Id>US1SACOMPUS33XXX</Id>
                           </Othr>
                         </OrgId>
                       </Id>
                     </Dbtr>
                     <DbtrAcct>
                       <Id>
                         <Othr>
                           <Id>22222222</Id>
                         </Othr>
                       </Id>
                       <Ccy>USD</Ccy>
                     </DbtrAcct>
                     <DbtrAgt>
                       <FinInstnId>
                         <BIC>BOFAUS31XXX</BIC>
                       </FinInstnId>
                     </DbtrAgt>
```

```
                  <CdtTrfTxInf>
                    <PmtId>
                      <InstrId>ADv41-04</InstrId>
                      <EndToEndId>CTv422-8/2008-06-25</EndToEndId>
                    </PmtId>
                    <Amt>
                      <InstdAmt Ccy="USD">700</InstdAmt>
                    </Amt>
                    <ChrgBr>CRED</ChrgBr>
                    <CdtrAgt>
                      <FinInstnId>
                        <BIC />
                      </FinInstnId>
                    </CdtrAgt>
                    <CdtrAcct>
                      <Id>
                        <Othr>
                          <Id>8552502</Id>
                        </Othr>
                      </Id>
                      <RmtInf>
                        <Unstrd>
                        </Utrd>
                      </RmtInf>
                    </CdtTrfTxInf>
                  </PmtInf>
                </CstmrCdtTrfInitn>
              </Document>
            </q1:Pmnt>
            <q1:Extn>
              <q1:ProcessingPersistentInfo>
                <q1:P_OFFICE>US1</q1:P_OFFICE>
                <q1:P_DEPARTMENT>PSV</q1:P_DEPARTMENT>
                <q1:DebitSide>
                  <q1:P_DBT_ACCT_NB>22222222</q1:P_DBT_ACCT_NB>
                  <q1:P_DBT_ACCT_CCY>USD</q1:P_DBT_ACCT_CCY>
                  <q1:P_DBT_ACCT_OFFICE>US1</q1:P_DBT_ACCT_OFFICE>
                </q1:DebitSide>
              </q1:ProcessingPersistentInfo>
              <q1:UserDefinedFields>
                <q1:System>
                  <q1:PMT_CTGORY>INTERNAL</q1:PMT_CTGORY>
                </q1:System>
              </q1:UserDefinedFields>
              <q1:OperationalSection>
                <q1:D_BUTTON_ID>Submit</q1:D_BUTTON_ID>
              </q1:OperationalSection>
            </q1:Extn>
          </q1:Msg>
        </q1:FndtMsg>
      </q1:FndtPmntTxInf>
    </q0:MsgBatch>
```

2.4.6   FndtBatchMsg for File Processing

The illustration shows how pain.001.001.03 sections are accommodated in the Fndt batch message structure while maintaining support for one debit with multiple credits.

```xml
- <FndtMsgBatch xmlns="http://fundtech.com/SCL/CommonTypes">
  - <BatchHeader>
    - <GrpHdr xmlns="urn:iso:std:iso:20022:tech:xsd:pain.001.001.03">
        <MsgId>qBatchMsg-001</MsgId>
        <CreDtTm>2008-06-25T06:19:06</CreDtTm>
        <BtchBookg>false</BtchBookg>
        <NbOfTxs>3</NbOfTxs>
        <CtrlSum>2400</CtrlSum>
        <Grpg>GRPD</Grpg>
      + <InitgPty>
      </GrpHdr>
    </BatchHeader>
  - <PmntTxInf>
    - <PmntHeader>
      - <PmtInf xmlns:p="urn:iso:std:iso:20022:tech:xsd:pain.001.001.03">
        + <Dbtr>
        + <DbtrAcct>
        + <DbtrAgt>
          <PmtInfId>PmntHeader1</PmtInfId>
        </PmtInf>
      </PmntHeader>
    - <TxInf>
      - <FndtMsg>
        - <Msg>
          - <Pmnt>
            - <Document xsi:schemaLocation="urn:iso:std:iso:20022:tech:xsd:pain.001.001.03 pain.001.001.03.xsd"
              - <CstmrCdtTrfInitn>
                  <GrpHdr />
                - <PmtInf>
                  + <CdtTrfTxInf>
                  </PmtInf>
                </CstmrCdtTrfInitn>
              </Document>
            </Pmnt>
          + <Extn>
          </Msg>
        </FndtMsg>
        + <FndtMsg>
        + <FndtMsg>
      </TxInf>
    </PmntTxInf>
  </FndtMsgBatch>
```

2.4.6.1   pain.001 to FndtBatchMsg of File Processing

The illustration shows how a standard pain.001 message (that can include multiple transactions) is accommodated in the FndtBatchMsg of file processing.

```
331                                          <CdOrPrtry>
332                                              <Cd>CINV</Cd>
333                                          </CdOrPrtry>
334                                      </Tp>
335                                  </RfrdDocInf>
336                              </Strd>
337                          </RmtInf>
338                      </CdtTrfTxInf>
339                      <CdtTrfTxInf>
340                          <PmtId>
341                              <InstrId>d_1z3570q001</InstrId>
342                              <EndToEndId>d_1z3570q001</EndToEndId>
343                          </PmtId>
344                          <Amt>
345                              <InstdAmt Ccy="AUD">7000</InstdAmt>
346                          </Amt>
347                          <ChrgBr>SHAR</ChrgBr>
348                          <CdtrAgt>
349                              <FinInstnId>
350                                  <BIC>BKCHAU2SXXX</BIC>
351                              </FinInstnId>
352                          </CdtrAgt>
353                          <Cdtr>
354                              <Nm>Institut_Tourrades</Nm>
355                          </Cdtr>
356                          <CdtrAcct>
357                              <Id>
358                                  <Othr>
359                                      <Id>9990000007</Id>
360                                  </Othr>
361                              </Id>
362                          </CdtrAcct>
363                          <RmtInf>
364                              <Strd>
365                                  <RfrdDocInf>
366                                      <Tp>
367                                          <CdOrPrtry>
368                                              <Cd>CINV</Cd>
369                                          </CdOrPrtry>
370                                      </Tp>
371                                  </RfrdDocInf>
372                              </Strd>
373                          </RmtInf>
374                      </CdtTrfTxInf>
375                      <CdtTrfTxInf>
376                          <PmtId>
377                              <InstrId>d_1z3570q001</InstrId>
378                              <EndToEndId>d_1z3570q001</EndToEndId>
379                          </PmtId>
380                          <Amt>
381                              <InstdAmt Ccy="AUD">7000</InstdAmt>
382                          </Amt>
383                          <ChrgBr>SHAR</ChrgBr>
384                          <CdtrAgt>
385                              <FinInstnId>
```
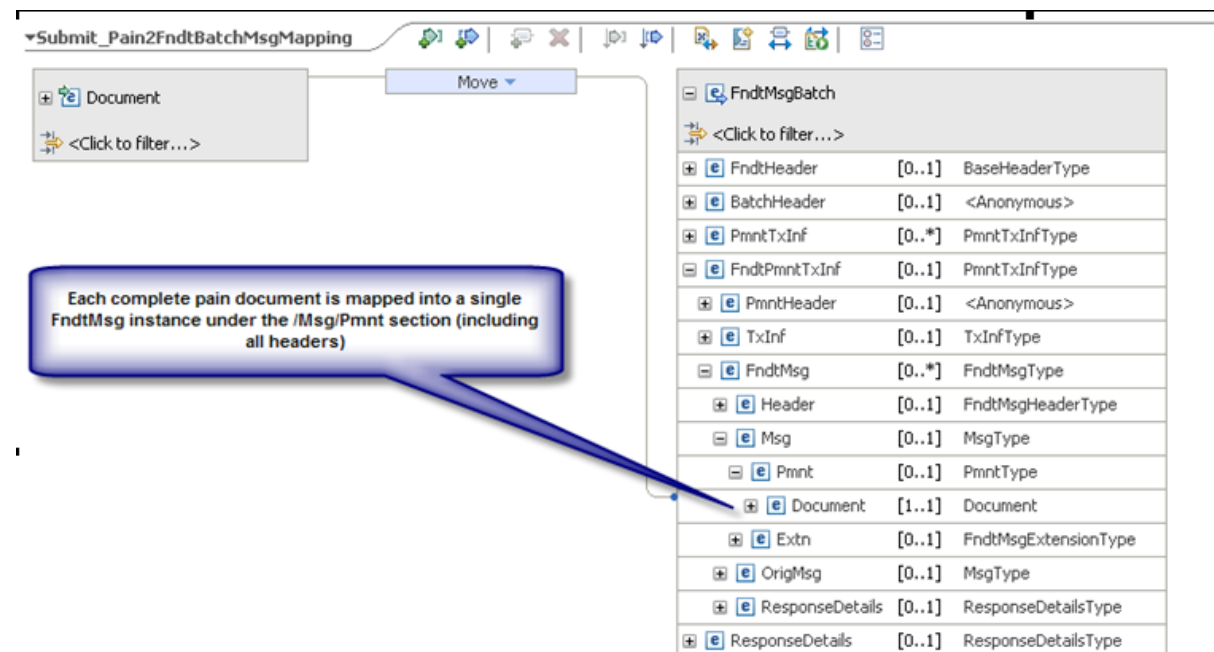
2.4.6.2   pain.001 to FndtBatchMsg of Submit Request

The illustration shows how a standard pain.001 message can be accommodated in the FndtBatchMsg of a submit request.

3   Usage

3.1   Feeding Systems

It is recommended to use Fndt message proprietary format for feeder system. This allows a robust feeding mechanism. The feeder can use both a standard format, such as pain or MT103, and also provide GPP with specific attributes in the GPP extension section that includes customized message fields, and additional GPP attributes that can have effect on the processing of the transaction, such as Fees information, Rates information.

An interface (type: FEEDER) has to be set up with the relevant specifications, for example, the definition of MQ that may be used.

Note: In the Interface profile for 'feeder' the transaction different sources may be defined with the source field. This allows more specific identification of the feeder type (for example: Internet banking or branches feeder).

3.2   Posting

Posting information is defined by GPP during the transaction processing flow.

The Posting interface can be invoked using the Fndt message or any other proprietary pre-defined document.

When using the Fndt Message structure the posting information (per each entry – for example, type, amount, dr/cr indication, currency, account), resides in the M_POSTING_INFO_LINE element in the Fndt message (see section Message Posting (aka Posting Information – New Design)). Along with the main attributes of each entry, there is also, within this element (in F_POSTING_INFO_FORCE_POST_IND), an indication that the posting entry needs to be forced (no balance check should be performed in the back office end), whether due to user action in the insufficient funds queue, or due to processing reasons (for example, reverse posting due to canceled transaction or Offline mode). To get more indication of why this entry should be forced, an indication for user action of force transaction outside of insufficient funds status is available in the UserMonitors element info (MU_NSF_FORCE_STS).

These monitors should be taken into account when setting up the interface on the back office end. In cases where the posting information also requires including additional related information (for example, advising) it is easy and configurable to setup the relevant elements from the full Fndt message to be included in the posting request. The definition of which elements from the full structure are included in the specific posting request structure is specified in XML_FORMAT_TYPE_RELATIONS system table.

Note: Bank/FI may request to use the minimal recommended and predefined POSTING elements in the Fndt message or request to include its own list of additional elements from the Fndt message for posting.

Posting response may be positive or negative. Where the posting response is negative, it is also possible to state the reason for failure. GPP, with its generic posting logic, uses the negative response code to appropriately change the GPP message status (msg sts) where the transaction should park (whether it is posting restrictions, insufficient funds, posting exceptions or with the workflow system rules to any pre-defined message status).

3.3   Balance inquiry

Balance Inquiry (BI) can be invoked using the Fndt message or any other proprietary pre-defined document.

When using the Fndt Message structure the balance request resides in the M_BI_INFO_LINE element in the Fndt message (see section Balance Check Information).

BI response may be positive or negative. When the BI response is positive it may include an earmark reference and an account balance. When the BI response is negative, it is also possible to state the reason for failure. GPP with the workflow system rules is capable to set GPP message status (msg sts) where the transaction should park (whether it is repair or insufficient funds or any pre-defined message status).

BI service indicator is held by field ID 'MF_BI_STS'.

Appendix A: Glossary of Terms

This table lists the terms used in this document.

Term	Description
Fndt Message	The FuNDs Transfer message structure is a GPP specific XML structure that is comprising of the full set of information as received, enriched, computed or manually updated per message. This structure is used as part of the standard interfaces for interacting with financial institution systems.
ISO	International Organization for Standards
Feeder	Feeder systems are the customer facing systems (front end systems) that enable transaction capture.

The prefix convention for naming transaction attribute fields is described in this table:

Prefix	Meaning	Explanation
T_	Tree	Place holder in the tree view that hold the relevant associated information. For example: T_PARTIES holds all of the transaction parties
X_	XML	ISO (<pmnt>) information that is stored in an XML structure in the XML_MSG
OX_	Original XML	Copy of the originally received XML transaction (<pmnt>) information that is stored in an XML structure in ORIG_XML_MSG
OC_	Original Copy of XML field	Prefix used if there is more than one way to receive specific data. Example: OX_CDTR_AGT_BIC_1OR or OX_CDTR_AGT_BIC_2AND. GPP copies the data into OC_CDTR_AGT_BIC to facilitate determining whether creditor agent BIC was provided or not. Relevant only for originally received attributes.
P_	Process	GPP extension field for transaction data that cannot be placed in the ISO standard format. Examples of commonly used attributes: P_MID, P_OFFICE.
F_	GPP derived transaction attribute	Derived attribute that are taken from the static data profile that is associated with transaction details. For example, after P_CDT_MOP is determined, the related credit MOP profile attributes are set in these fields. Examples: F_CDT_MOP_NM is the credit MOP name derived from the credit MOP value. F_MOP_NM is associated with the debit MOP.
D_	Derived	Derived attributes that are calculated 'on the fly' while the GPP service is calculating the information. Derived fields are not stored in the transaction after processing is completed, or stopped for manual handling or wait. Therefore, they usually cannot be used as a condition in business rules.
MU MF MI	User Monitor Flow (service) monitor Interface monitor	Monitors are divided into three categories: User monitors that track the user action over the user interface, such as, forcing a transaction out of the insufficient funds queue Workflow monitors – internal monitors in the code that track the transaction processing flow Interface monitors that monitor interface interactions

Prefix	Meaning	Explanation
		These P_ field attributes hold the monitor statuses strings for every transaction. • P_USER_STATE_MONITOR - for User Monitors – MU_ prefix • P_SERVICE_STATE_MONITOR - for Flow Monitors – MF_ prefix • P_INTERFACE_STATE_MONITOR - for Interface Monitors – MI_ prefix The location of each monitor in the field is defined by LOGICAL_FIELDS.LOCATION. The first location is 0 (zero). Example of a monitor string P_ field value: XXXXXXXXXXXXXXXXXXXT. The following SQL could be used to check the full list of monitors as per their monitor P_field and their location: select lf.obj_ref_data_id, lf.location, lf.* from logical_fields lf where lf.obj_ref_data_id like '%MONITOR' order by 1,2

Appendix B: Conventions

This table details naming conventions used within the document.

Term	Meaning
Tag name in Bold	Indicate Aggregates
ISO Date Time	Date Time formats defined as ISO Date Time will conform to ISO8601. Representation: **ISO Date Time with milliseconds:** YYYY-MM-DD [T] {0,1} HH:MM:SS.mmm [Z,-,+] {1,1} HH:MM {0,1} **ISO Date Time without milliseconds:** YYYY-MM-DD [T] {0,1} HH:MM:SS [Z,-,+] {1,1} HH:MM {0,1} Where: • YYYY is the year • MM is the month (01 - 12) • DD is the day (01 - 31) • T is a literal separator between the date and time portions (optional) • HH is the hour in 24 hour time • MM is the minutes • SS is the seconds • mmm is the milliseconds • Z is the time zone designator: • Z for when time is in UTC time, OR • +HH:MM; OR • or -HH:MM
ISO Date	Date formats defined as ISO Date Time will conform to ISO8601. Representation: YYYY-MM-DD Where: • YYYY is the year, • MM is the month (01 - 12) • DD is the day (01 - 31)
ISO Decimal Values	Decimal values defined as ISO Decimal Values will use the ISO format definition using fractionDigits and totalDigits Where: • totalDigits defines the total number of digits in the number (on both sides of the decimal point) • fractionDigits defines the number of digits to the right of the decimal point (the fraction)
SWIFT Date	Date formats defined as SWIFT Date will conform to SWIFT representation: YYMMDD Where: • YY is the year

Term	Meaning
	• MM is the month (01 - 12) • DD is the day (01 - 31)
SWIFT Decimal Values	Decimal values defined as SWIFT Decimal Values will use the SWIFT representation of digits and a comma acting as the decimal separator between the fraction and the full number
Presence (Cardinality)	• 0..1 means Optional • 1..1 means Required • 0..n means Optional and may have multiple occurrences (limited to specified n) • 1..n means required and may have multiple occurrences (limited to specified n)
String format	[character set] {min length, max length] • [A-Z] means only upper letter characters • [a-z] means only lower letter characters • [0-9] means only digits • [A-Za-z] means upper and lower letter characters • Text means all characters • {1,6} means a string at least one character long and no longer than 6 characters

Appendix C: Additional Fndt Message Related Information

This section includes various SQL statements that can be used for various aspects of the concept and usage of the Fndt Message. These queries can be used to receive the up-to-date results (as per on-going evolvements).

C.1 Structure of the Fndt SWIFT XML

A SWIFT message, embedded within an XML structure quoting the full SWIFT text message in the /SWIFT/Header/Original_Swift/Message tag, and separate message attributes as per the different SWIFT fields.

The tags that appear under the SWIFT Header and SWIFT Data sections (under the <Pmnt> tag, vary per message type.

The following SQL statement can be used to fetch the appropriate tags:

- For the SWIFT header fields, the following query should be used (the <mark>highlighted</mark> parameter can be changed by the user per message type).

```
Select a.field_logical_id as "Logical Field" ,lf.description as "Field Description" from (SELECT
lfx_field_logical_id AS field_logical_id, lf_xml_type AS xml_type,
      lfx_field_path AS XML_Path --, lfx_xml_type AS script2, VERSION,
--        namespace
   FROM (SELECT lfx.field_logical_id AS lfx_field_logical_id,
           lfs.field_xml_type AS lf_field_xml_type,
           lfx.xml_type AS lf_xml_type,
             (SELECT lx.field_path
                         AS lx_field_path
              FROM   logical_fields_xpath lx,
                  logical_fields lf
              WHERE
                 lf.path_parent_id IS NOT NULL
               AND lx.field_logical_id LIKE 'X_%'
               AND lf.path_parent_id = lx.field_logical_id
               AND lf.field_logical_id = lfs.field_logical_id
               AND lx.xml_type = lfx.xml_type
               AND CASE
                    WHEN lfx.VERSION IS NULL
                      AND lx.VERSION IS NULL
                     THEN 1
                    WHEN lx.VERSION = lfx.VERSION
                      THEN 1
                    ELSE 0
                  END = 1)
         || lfx.field_path AS lfx_field_path,
         'xmlns="' || doc.namespace || '"' AS lfx_xml_type,
         lfx.VERSION, doc.namespace
       FROM logical_fields_xpath lfx,
          logical_fields lfs,
          xml_document_types doc
      WHERE lfs.LOCATION IN ('XML_MSG', 'XML_ORIG_MSG')
       AND lfx.field_logical_id = lfs.field_logical_id
       AND lfs.field_xml_type = 'TEXT'
       AND (lfx.xml_type    like 'SWIFT%')
       AND lfx.xml_type = doc.document_id
       AND (   (lfx.VERSION = doc.VERSION)
          AND (lfx.VERSION='001'))
          )) A
          ,logical_fields LF,xml_format_type_relations REL
```

where A.field_logical_id=lf.field_logical_id
and rel.field_logical_id=lf.field_logical_id
and rel.version='001'
and a.XML_Path like '/SWIFT/Header/%'
and rel.format_type='SWIFT_103'

Example extract for an MT103 Header:

XML_PATH	DESCRIPTION	FIELD_LOGICAL_ID
/SWIFT/Header/Bank_Priority	SWIFT block 3 tag 113, banking priority code	X_BNK_PRTY_CD
/SWIFT/Header/User_Header/Service_Identifier	Clearing System ID (SWIFT Business code-FIN copy)	X_CLR_SYS_ID
/SWIFT/Header/Create_Date_Time	PACS Header create date time	X_CRE_DT_TM
/SWIFT/Header/Sender_BIC	Instructing agent (SWIFT Sender) BIC	X_INSTG_AGT_BIC_2AND
/SWIFT/Header/User_Header/Address_Info/Ctry	Instructing agent (SWIFT Sender) country code	X_INSTG_AGT_CTRY_2AND
/SWIFT/Header/Message_Priority	Priority attribute (SWIFT block 2 header. PACS instruction priority). Possible values: S,N = NORM, U = HIGH	X_INSTR_PRTY
/SWIFT/Header/Receiver_BIC	Instructed agent (SWIFT Receiver) BIC	X_INSTD_AGT_BIC_2AND
/SWIFT/Header/User_Header/Address_Info/Ctry	country code of the instructed agent (Receiver)	X_INSTD_AGT_CTRY_2AND
/SWIFT/Header/Msg_ID	Point to point reference, as assigned by the account servicing institution, and sent to the account owner or the party authorized to receive the message, to unambiguously identify the message	X_MSG_ID
/SWIFT/Header/User_Header/Message_User_Reference	MUR is SWIFT tag 108 in block 3. Message User Reference (MUR) used by applications for reconciliation with ACK.	X_MSG_USER_REF
/SWIFT/Header/Original_Swift/Message	Sent message	X_SENT_MSG
/SWIFT/Header/Create_Date_Time	SWIFT Header Sender create date time	X_SND_CRE_DT_TM
/SWIFT/Header/Settlement_Method	Settlemt Method. Codeword: CLRG (clearingSystem), COVE (CoverMethod), INDA (InstructedAgent) and INGA (InstructingAgent)	X_STTLM_MTD
/SWIFT/Header/Input_Output_Identifier	direction attribute (SWIFT block 2 header direction indication I/O)	X_SWIFT_DIRECTION_IND
/SWIFT/Header/Sequence_Number	Swift Block1 Sequence number	X_SWIFT_SEQUENCE
/SWIFT/Header/Session_Number	Swift Block1 Session number	X_SWIFT_SESSION

XML_PATH	DESCRIPTION	FIELD_LOGICAL_ID
/SWIFT/Header/User_Header/Validation_Flag	Validation flag is SWIFT tag 119 in block 3. Used to indicate an MT202 COV or MT103PLS	X_VALIDATION_FLAG
/SWIFT/Header/Instd_Agent_Name	Instructed agent (SWIFT Receiver) name	X_INSTD_AGT_NM_2 AND
/SWIFT/Header/Instg_Agent_Name	Instructing agent (SWIFT Sender) name	X_INSTG_AGT_NM_2AND

- For the SWIFT data fields the following query should be used (<mark>highlighted</mark> parameter can be changed by the user per message type).

```
Select a.field_logical_id as "Logical Field" ,lf.description as "Field Description" from (SELECT
lfx_field_logical_id AS field_logical_id, lf_xml_type AS xml_type,
      lfx_field_path AS XML_Path --, lfx_xml_type AS script2, VERSION,
--       namespace
   FROM (SELECT lfx.field_logical_id AS lfx_field_logical_id,
            lfs.field_xml_type AS lf_field_xml_type,
            lfx.xml_type AS lf_xml_type,
              (SELECT lx.field_path
                         AS lx_field_path
               FROM   logical_fields_xpath lx,
                    logical_fields lf
              WHERE
                 lf.path_parent_id IS NOT NULL
              AND lx.field_logical_id LIKE 'X_%'
              AND lf.path_parent_id = lx.field_logical_id
              AND lf.field_logical_id = lfs.field_logical_id
              AND lx.xml_type = lfx.xml_type
              AND CASE
                     WHEN lfx.VERSION IS NULL
                        AND lx.VERSION IS NULL
                       THEN 1
                     WHEN lx.VERSION = lfx.VERSION
                       THEN 1
                     ELSE 0
                   END = 1)
          || lfx.field_path AS lfx_field_path,
          'xmlns="' || doc.namespace || '"' AS lfx_xml_type,
          lfx.VERSION, doc.namespace
        FROM logical_fields_xpath lfx,
           logical_fields lfs,
           xml_document_types doc
        WHERE lfs.LOCATION IN ('XML_MSG', 'XML_ORIG_MSG')
         AND lfx.field_logical_id = lfs.field_logical_id
         AND lfs.field_xml_type = 'TEXT'
         AND (lfx.xml_type   like 'SWIFT%')
         AND lfx.xml_type = doc.document_id
         AND (   (lfx.VERSION = doc.VERSION)
           AND (lfx.VERSION='001'))
           )) A
           ,logical_fields LF,xml_format_type_relations REL
           where A.field_logical_id=lf.field_logical_id
           and rel.field_logical_id=lf.field_logical_id
           and rel.version='001'
           and a.XML_Path like '/SWIFT/Data/%'
           and rel.format_type='SWIFT_103'
```

order by a.XML_Path

Example extract for an MT103 Data:

XML_PATH	Description	FIELD_LOGICAL_ID
/SWIFT/Data/ClrChannel	Clearing channel indication (//RT in SWIFT or RTGS in PACS). May be used in one of the credit parties to indicate that the transaction should be sent via the RTGS	X_CLR_CHANL
/SWIFT/Data/F13C/CLSTIME	Continuous Links Settlement (CLS) settlement request time, expressed in Central European Time (CET). SWIFT tag 13C (CLSTIME)	X_STTLM_CLS_TM
/SWIFT/Data/F13C/RNCTIME	Time at which a TARGET transaction has been debited at the sending central bank. SWIFT tag 13c (SNDTIME)	X_STTLM_CDT_DT_TM
/SWIFT/Data/F13C/SNDTIME	Time where TARGET transaction has been credited at the receiving central bank. SWIFT tag13C (RNCTIME)	X_STTLM_DBT_DT_TM
/SWIFT/Data/F20/Sender_s_Reference	Instruction ID (SWIFT tag 20 Sender's Reference)	X_INSTR_ID
/SWIFT/Data/F21/Related_Reference	End To End ID (SWIFT tag 21-Related Reference)	X_END_TO_END_ID
/SWIFT/Data/F23B	Service Level proprietary (SWIFT Tag 23B for codeword SPRI,SPAY,SSTD). Agreement under which or rules under which the transaction should be processed	X_SVC_LVL_PRTRY
/SWIFT/Data/F23E/CategoryPurposeCode	Category purpose, as published in an external category purpose code list (SWIFT 23E codewrod CORT and INTC)	X_CTGY_PURP_CD
/SWIFT/Data/F26T	Underlying reason for the transaction transaction (SWIFT 26T-Transaction Type Code)	X_PURP_PRTRY
/SWIFT/Data/F32A/Amount	Settlement (SWIFT tag 32A)- Amount	X_STTLM_AMT
/SWIFT/Data/F32A/Currency	Settlement (SWIFT tag 32A)- Currency	X_STTLM_CCY
/SWIFT/Data/F32A/Date	Settlement (SWIFT tag 32A)- Date	X_STTLM_DT_1B
/SWIFT/Data/F33B/Amount	Instructed (SWIFT tag 33B)- Amount	X_INSTD_AMT
/SWIFT/Data/F33B/Currency	Instructed (SWIFT tag 33B)- Currency	X_INSTD_CCY
/SWIFT/Data/F36/Rate	Exchange rate. The factor used for conversion of an amount from one currency into another (SWIFT tag 36).	X_XCHG_RATE
/SWIFT/Data/F50a/F50F/Id/PrvtId/DtAndPlcOfBirth/BirthDt	Debtor (SWIFT tag 50-Ordering Customer) birthdate	X_DBTR_BIRTHDT
/SWIFT/Data/F50a/F50F/Id/PrvtId/DtAndPlcOfBirth/CityOfBirth	Debtor (SWIFT tag 50-Ordering Customer) City of Birth	X_DBTR_CITYOFBIRTH

XML_PATH	Description	FIELD_LOGICAL_ID
/SWIFT/Data/F50a/F50F/Id/PrvtId/DtAndPlcOfBirth/CtryOfBirth	Debtor (SWIFT tag 50-Ordering customer) Country of Birth	X_DBTR_CTRYOFBIRTH
/SWIFT/Data/F50a/F50F/Id/PrvtId/Othr/Id	Debtor (SWIFT tag 50-Ordering Customer) other identification. codeword:ARNU,CCPT,CUST,DRLC,EMPL NIDN,SOSE,TXID	X_DBTR_PRVTID_OTHR_ID
/SWIFT/Data/F50a/F50F/Id/PrvtId/Othr/Issr	Debtor (SWIFT tag 50-Ordering Customer) Entity that assigns the identification	X_DBTR_PRVTID_OTHR_ISSR
/SWIFT/Data/F50a/F50F/Id/PrvtId/Othr/SchmeNmCd	Debtor (SWIFT tag 50-Ordering Customer) other identification. This field contains the identification type from codeword profile	X_DBTR_PRVTID_OTHR_CD
/SWIFT/Data/F50a/PartyInfo/Account_IBAN	IBAN of the debtor account group	X_DBTR_ACCT_IBAN
/SWIFT/Data/F50a/PartyInfo/Addr_info/Ctry	Debtor (SWIFT tag 50-Ordering Customer) country part of the postal address	X_DBTR_PSTLADR_CTRY
/SWIFT/Data/F50a/PartyInfo/Addr_info/TwnNm	Debtor (SWIFT tag 50-Ordering Customer) town name part of the postal address	X_DBTR_PSTLADR_TWNNM
/SWIFT/Data/F50a/PartyInfo/Identifier_Code	Debtor (SWIFT tag 50-Ordering Customer) BIC	X_DBTR_BIC
/SWIFT/Data/F50a/PartyInfo/PartyName	Debtor (SWIFT tag 50-Ordering Customer) name	X_DBTR_NM
/SWIFT/Data/F50a/SWIFT/Data/F50a	debtor account currency	X_DBTR_ACCT_CCY
/SWIFT/Data/F52a/Account_IBAN	IBAN of the debtor agent account	X_DBTR_AGT_ACCT_IBAN
/SWIFT/Data/F52a/ClrSysCd	NCC of the debtor agent	X_DBTR_AGT_CLR_SYS_PRTRY
/SWIFT/Data/F53a/Account	Instructing reimbursement agent (SWIFT tag 53-Senders Correspondent) Account	X_INSTG_RMB_AGT_ACCT_ID_2AND
/SWIFT/Data/F53a/Account	Sttlm Acct Schem Name Code	X_STTLM_ACCT_SCHM_CD
/SWIFT/Data/F53a/Account_IBAN	Instructing reimbursement agent (SWIFT tag 53-Senders Correspondent) IBAN	X_INSTG_RMB_AGT_ACCT_IBAN
/SWIFT/Data/F53a/ClrSysCd	Instructing reimbursement agent (SWIFT tag 53-Senders Correspondent) NCC	X_INSTG_RMB_AGT_CLR_SYS_PRTRY
/SWIFT/Data/F53a/Country	Instructing reimbursement agent (SWIFT tag 53-Senders Correspondent) Country code	X_INSTG_RMB_AGT_CTRY_2AND
/SWIFT/Data/F53a/SchmeNmCd	Instructing reimbursement agent (SWIFT tag 53-Senders Correspondent). Name of the identification scheme, in a coded form	X_INSTG_RMB_AGT_ACCT_SCHM_CD
/SWIFT/Data/F54a/ClrSysCd	Proprietary NCC of the instructed reimbursement agent (Receivers Correspondent SWIFT tag 54)	X_INSTD_RMB_AGT_CLR_SYS_PRTRY
/SWIFT/Data/F54a/Country	Country code of the instructed reimbursement agent (Receivers Correspondent SWIFT tag 54)	X_INSTD_RMB_AGT_CTRY_2AND
/SWIFT/Data/F54b/Account	Account number of the instructed reimbursement agent (Receivers Correspondent SWIFT tag 54)	X_INSTD_RMB_AGT_ACCT_ID_2AND

XML_PATH	Description	FIELD_LOGICAL_ID
/SWIFT/Data/F54b/Account_IBAN	IBAN of the instructed reimbursement agent (Receivers Correspondent SWIFT tag 54)	X_INSTD_RMB_AGT_ACCT_IBAN
/SWIFT/Data/F54b/SchmeNmCd	Name of the instructed reimbursement agent (Receivers Correspondent SWIFT tag 54), in a coded form	X_INSTD_RMB_AGT_ACCT_SCHM_CD
/SWIFT/Data/F55a/Account_IBAN	Third reimbursement institution (SWIFT tag 55) account group IBAN	X_THRD_RMB_AGT_ACCT_IBAN
/SWIFT/Data/F56a/Account	Intermediary agent 1 (SWIFT tag 56-Intermediary Institution) account number	X_INTRMY_AGT1_ACCT_ID
/SWIFT/Data/F56a/ClrSysCd	Intermediary agent 1 (SWIFT tag 56-Intermediary Institution) NCC	X_INTRMY_AGT1_CLR_SYS_PRTRY
/SWIFT/Data/F56a/Country	Intermediary agent 1 (SWIFT tag 56-Intermediary Institution) country code	X_INTRMY_AGT1_CTRY_2AND
/SWIFT/Data/F56a/PartyName	Intermediary agent 1 (SWIFT tag 56-Intermediary Institution) account number	X_INTRMY_AGT1_ACCT_NM
/SWIFT/Data/F57a/Account_IBAN	Creditor agent (SWIFT tag 57-Account With Institution) IBAN	X_CDTR_AGT_ACCT_IBAN
/SWIFT/Data/F57a/Country	Creditor agent (SWIFT tag 57-Account With Institution) country code	X_CDTR_AGT_CTRY_2AND
/SWIFT/Data/F71A/Code	Charges bearer (SWIFT F71A Details of Charges)	X_CHRG_BR
/SWIFT/Data/F72/PrevInstructAgent/ClrSysCd	Agent immediately prior to the instructing agent	X_PRVS_INSTG_AGT_CLR_SYS_CD
/SWIFT/Data/F72/PrevInstructAgent/Party_Identifier	Agent immediately prior to the instructing agent	X_PRVS_INSTG_AGT_ID_2AND
/SWIFT/Data/InstrForAgents/InstrsForCdtrAgent/InstrForCdtrAgent/F23E_72_Code	Instruction for creditor agent. codeword (SWIFT 72 codeword ACC or 23E codeword)	X_INSTR_CDTR_AGT_CD
/SWIFT/Data/InstrForAgents/InstrsForCdtrAgent/InstrForCdtrAgent/F23E_72_Information	Instruction for Creditor Agent (SWIFT tag 72 codeword ACC) instructions are for the account with institution	X_INSTR_CDTR_AGT_INF
/SWIFT/Data/InstrForAgents/InstrsForNextAgent/InstrForNextAgent/F23E_72_Code	Standard instruction for next agent (SWIFT tag 72 for codeword INT, REC)	X_INSTR_NXT_AGT_CD
/SWIFT/Data/InstrForAgents/InstrsForNextAgent/InstrForNextAgent/F23E_72_Information	Standard instruction for next agent (SWIFT tag 72 codeword INT and SWIFT tag 23E for codeword PHON, TELE, PHOI and TELI)	X_INSTR_NXT_AGT_INF
/SWIFT/Data/SvcLvlCd	Service level code (SWIFT 23E codeword SDVA). Pre-agreed level of service between the parties, as published in an external code list	X_SVC_LVL_CD

Example of the <Pmnt> tag content in case of an MT103 SWIFT message, including both the Header and the Data sections:

```
<Pmnt>
    <swif:SWIFT MT="103" xmlns:swif="urn:fundtech/scl/SWIFT"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
        <swif:Header>
            <swif:Input_Output_Identifier>I</swif:Input_Output_Identifier>
            <swif:Sender_BIC>CLYDGB2SXXX</swif:Sender_BIC>
            <swif:Receiver_BIC>CITIUS33XXX</swif:Receiver_BIC>
            <swif:Message_Priority>NORM</swif:Message_Priority>
            <swif:User_Header>
                <swif:Message_User_Reference>13AD804381M30W04</swif:Message_User_Reference>
            </swif:User_Header>
            <swif:Original_Swift>

                <swif:Message>{1:F01CLYDGB2SAXXX0000000000}{2:I103CITIUS33XXXXN}{3:{108:13AD8
            04381M30W04}}{4:
                :20:C1n1223225
                :23B:CRED
                :32A:131013USD4427,00
                :33B:USD4427,
                :50K:/4505123456500
                REMITTER
                :57A:ADCBAEAAXXX
                :59:/AE850030000928312345678
                BENEFICIARY
                :70:WAGES
                :71A:SHA
                -}</swif:Message>
            </swif:Original_Swift>
            <swif:Create_Date_Time>2013-10-13T08:04:38</swif:Create_Date_Time>
            <swif:Msg_ID>C1n1223225</swif:Msg_ID>
            <swif:Sequence_Number>000000</swif:Sequence_Number>
            <swif:Session_Number>0000</swif:Session_Number>
        </swif:Header>
        <swif:Data xsi:type="swif:Data_103">
            <swif:F20>
                <swif:Sender_s_Reference>C1n1223225</swif:Sender_s_Reference>
            </swif:F20>
            <swif:F32A>
                <swif:Currency>USD</swif:Currency>
                <swif:Amount>4427.00</swif:Amount>
                <swif:Date>2013-10-13</swif:Date>
            </swif:F32A>
            <swif:F33B>
                <swif:Currency>USD</swif:Currency>
                <swif:Amount>4427</swif:Amount>
            </swif:F33B>
            <swif:F50a>
                <swif:SWIFT>
                    <swif:Data>
                        <swif:F50a>USD</swif:F50a>
                    </swif:Data>
                </swif:SWIFT>
                <swif:Account>4505123456500</swif:Account>
                <swif:PartyInfo>
                    <swif:PartyName>REMITTER</swif:PartyName>
                </swif:PartyInfo>
            </swif:F50a>
            <swif:F56a>
                <swif:Identifier_Code>CITIUS33XXX</swif:Identifier_Code>
            </swif:F56a>
            <swif:F57a>
                <swif:Identifier_Code>ADCBAEAAXXX</swif:Identifier_Code>
                <swif:Country>AE</swif:Country>
            </swif:F57a>
            <swif:Cdrt_F58a_F59a>
                <swif:Account>AE850030000928312345678</swif:Account>
                <swif:PartyName>BENEFICIARY</swif:PartyName>
```

```
              </swif:Cdrt_F58a_F59a>
              <swif:F70>
                 <swif:Unstructed>WAGES</swif:Unstructed>
              </swif:F70>
              <swif:F71A>
                 <swif:Code>SHAR</swif:Code>
              </swif:F71A>
           </swif:Data>
        </swif:SWIFT>
     </Pmnt>
```

C.2 Supported XML Based Components

```
select distinct xml_type from LOGICAL_FIELDS_XPATH
union
select distinct FORMAT_TYPE from XML_FORMAT_TYPE_RELATIONS
```

	XML_TYPE
1	210
2	ACK_NOTIFY
3	ACK_PAIN_002
4	ACMT_023
5	ACMT_024
6	CAMT_052
7	CAMT_053
8	CAMT_054
9	CHIPS_31
10	Camt_029
11	Camt_056
12	DOWNST
13	DOWNST_RESP
14	ENRICH
15	EXTN
16	FED_10
17	FED_15
18	FED_16
19	FED_ABI
20	FED_ABO
21	FED_DSI
22	FED_DSO
23	FED_EBI
24	FED_ECI
25	FED_ECO

	XML_TYPE
26	FED_FUNDS
27	FED_GBI
28	FED_RES
29	FED_RTI
30	FED_RTO
31	FED_SVC
32	FED_TGI
33	FED_TGO
34	FNDT_MSG
35	FULL
36	FX_EXEC_REPORT_INTERFACE
37	FX_ORDER_INTERFACE
38	FX_ORDER_STATUS_INTERFACE
39	FX_QUOTE_INTERFACE
40	FX_QUOTE_RES_INTERFACE
41	G3ACK_NOTIFY
42	G3_ACK_PAIN2
43	INTERFACE1
44	INTERFACE2
45	INTERFACE3
46	INTERFACE4
47	MAMBO_FTM401
48	MAMBO_FTM402
49	MAMBO_FTM411
50	MAMBO_FTM441
51	MAMBO_FTM451
52	MAMBO_FTM452
53	MAMBO_HUB401
54	MAMBO_HUB402
55	MAMBO_HUB411
56	MAMBO_HUB441
57	MAMBO_HUB451
58	MAMBO_HUB452
59	MASS_PAY_TEMPLATE
60	MOP_OUT
61	MPEDDIdfBlkDirDeb

	XML_TYPE
62	MSG_SBMT_OUT
63	N90
64	N91
65	N92
66	N95
67	N96
68	N98
69	N99
70	NOTIFY
71	ORIG_PERSISTENT_DATA
72	PERSISTENT_DATA
73	POSTING
74	POSTING_CAMT
75	POSTING_REQ
76	Pacs_002
77	Pacs_003
78	Pacs_004
79	Pacs_007
80	Pacs_008
81	Pacs_00801
82	Pacs_009
83	Pain_001
84	Pain_002
85	Pain_007
86	Pain_008
87	Pain_009
88	Pain_010
89	Pain_011
90	RTR
91	SCTCvfBlkCredTrf
92	SCTIcfBlkCredTrf
93	SCTScfBlkCredTrf
94	SWIFT
95	SWIFT_103
96	SWIFT_190
97	SWIFT_191

	XML_TYPE
98	SWIFT_192
99	SWIFT_195
100	SWIFT_196
101	SWIFT_198
102	SWIFT_199
103	SWIFT_200
104	SWIFT_202
105	SWIFT_202COV
106	SWIFT_210
107	SWIFT_290
108	SWIFT_291
109	SWIFT_292
110	SWIFT_295
111	SWIFT_296
112	SWIFT_298
113	SWIFT_298_011
114	SWIFT_298_012
115	SWIFT_298_013
116	SWIFT_298_014
117	SWIFT_299
118	SWIFT_400
119	SWIFT_401
120	SWIFT_402
121	SWIFT_900
122	SWIFT_910
123	SWIFT_940
124	SWIFT_941
125	SWIFT_942
126	SWIFT_950
127	SWIFT_970
128	SWIFT_971
129	SWIFT_972
130	VERIFY_ACC
131	VERIFY_ACC_RS
132	WS_REQ

C.3 Fndt Message Components

```
select * from LOGICAL_FIELDS_XPATH where XML_TYPE = 'FNDT_MSG'
```

FIELD_LOGICAL_ID	XML_TYPE	FIELD_PATH	TAG_NAME
X_FNDT_MSG_PMNT	FNDT_MSG	/FndtMsg/Msg/Pmnt/*	Pmnt
X_FNDT_MSG_EXT	FNDT_MSG	/FndtMsg/Msg/Extn	Extn
X_FNDT_ORIG_MSG_P MNT	FNDT_MSG	/FndtMsg/OrigMsg/Pmnt /*	Pmnt
X_FNDT_ORIG_MSG_EX T	FNDT_MSG	/FndtMsg/OrigMsg/Extn	Extn
X_ENRICH_MSG	FNDT_MSG	/Document	Document
X_ENRICH_ORIG_MSG	FNDT_MSG	/Document	Document
D_SKIP_PERSIST_ON_E RROR	FNDT_MSG	/D_SKIP_PERSIST_ON _ERROR	D_SKIP_PERSIST_ON_E RROR
P_MID	FNDT_MSG	/P_MID	P_MID
X_FNDT_MSG_HDR_SE CTION	FNDT_MSG	/FndtMsg/Header	Header
D_SKIP_PERSIST_ON_E RROR	FNDT_MSG	/D_SKIP_PERSIST_ON _ERROR	D_SKIP_PERSIST_ON_E RROR

C.4 Usage of Fndt Message

```
select * from xml_format_type_relations where xml_Type = 'FNDT_MSG'
```