



Global PAYplus

# **Fndt Message Usage for Compliance Interface**

Technical Guide

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## Version Control

Version	Date	Summary of Changes
1.0		New for GPP V4.6.2
2.0		Added additional explanation of the formatting and conventions used in the detailed structure tables. In addition, renamed Appendix B. to Conventions (Including Format and Presence).
3.0	December 2016	Updated with an additional note explaining the usage of the Credentials element in the Header structure, and its addition for these scenarios + removal of a redundant note regarding the Pmnt section
3.0	January 2017	Updated with the following: <ul style="list-style-type: none"><li>• Removal of the tag D_SKIP_PERSIST_ON_ERROR from Response structure</li><li>• Additional note on the tag in D_SKIP_PERSIST_ON_ERROR in Request structure to indicate its irrelevancy for interfaces</li></ul> Update of population instruction for the P_MID tag within the Response to indicate that it must be populated when matching Response based on it
3.1	May 2017	Added Seized Funds return code to the Compliance Second Response section.

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# 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 Finastra Project Manager.

## 1.1 Overview

This guide describes Global PAYplus (GPP) standard usage of the Fndt (FuNDs Transfer) message for the Compliance interface between GPP and the Financial Institution's Compliance system. This interface is an XML interface based on the GPP Fndt (FuNDs Transfer) message format.

Detailed in this document is the interface structure and related processing of the Compliance interface Request and Response:

- Compliance request (from GPP to Compliance system)
- Compliance response (from Compliance system to GPP)

The guide covers only the structure and mapping aspects. The processing, manual handling and configuration required for the Compliance Request, are detailed in the Compliance interface section in the GPP Business Guide System Integration - Single Payment document.

## 1.2 About This Guide

Information is provided for GPP clients implementing a Compliance interface, using the GPP Fndt (FuNDs Transfer) Message Format as the base for request when providing transaction information, and response for providing compliance hit state information.

## 1.3 References

For information about the GPP Fndt (FuNDs Transfer) Message structure, see GPP Technical Guide Fndt Message Format document.

For more information about the logic and functionality around this interface, see GPP Business Guide System Integration – Single Payments document.

# 2 Interface Structures

For the formatting and conventions in the interface detailed structure tables, the following should be taken into consideration:

- The shading in the detailed tables in this chapter marks tags, which represent subtree parents, for example, tags in level 1, 2, where leaf tags in level 3 exist under the level 1 and 2. Each level has a different shade, with the first (1) being the darkest shade and gradually getting lighter through the levels.
- For conventions, including the explanation of the values in the Presence and Format within the detailed structure tables, see [Appendix B: Conventions \(Including Format and Presence\)](#).

The first call to the Compliance interface is used for incoming and incoming-onward messages and sends the original message as received in the request to the external Compliance system.

The second call to the Compliance interface is used for outgoing and incoming-onward messages.

In case of a SWIFT payment, the interface may be configured to first invoke the Mapping Out rules and then to trigger the SWIFT Formatter service to format the outgoing message in SWIFT format. The formatted message, as it would be sent out, is then sent in the request to the external Compliance system.

## 2.1 Compliance Request

The following sections from the full Fndt (Funds Transfer) Message structure are the Product minimal scope to be included when the structure is used as a Compliance Request (additional sections can be configured to be included, if required).

- 
- Note: 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.'
- 

Level 1	Level 2	Level 3	Level 4	Level 5	Description
FndtMsg					
	Header				General identifying attributes
	Msg				Transaction message
		Pmnt			<Pmnt> quotes the enriched transaction. When used for Compliance interface, it is an ISO based pain, or a SWIFT message embedded within the GPP proprietary XML structure. For more information, see GPP Technical Guide Fndt Message.
	OrigMsg				
		Pmnt			<Pmnt> quotes the original transaction. When used for Compliance interface, it is an ISO based pain, or a SWIFT message embedded within the GPP proprietary XML structure. For more information, see GPP Technical Guide Fndt Message.

## 2.1.1 Compliance Request

The same request may be used for both Compliance exit points. The difference is in the message formatting, where the second interface call may trigger the appropriate Mapping Out and, when required a specific formatter (for instance SWIFT for SWIFT MOP).

Note: 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.'

For the conventions of the Presence and Format columns in this table, see [Appendix B: Conventions \(Including Format and Presence\)](#).

Tag	L	0	1	2	3	4	5	6	7	8	9	10	Presence	Element	Description	Format	Mapped From/Into GPP Table and Field
FndtMsg	1		+										[1..1]	Fndt (Funds Transfer) Message			
Header	2			+									[1..1]	Header			
contextName	3				+								[1..1]	Context Name	Generic field to add information regarding the specific usage.	Text {1,n}	Populate with SanctionsPre
contextLocalName	3				+								[0..1]	Context Local Name	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	Text {1,n}	If required – populate with specific local context string
credentials	3				+								[0..1]	Credentials	Credentials when required.		Note: The usage of this section, if populated, is allowing to filter results returned in the Fndt Message structure, based on the credentials (permissions) of the quoted GPP user. For example, filtering out details of transactions belonging to an Office, the quoted user does not have permissions for.  This section is mainly used when Fndt Message structure is used within SOA

Tag	L	0	1	2	3	4	5	6	7	8	9	10	Presence	Element	Description	Format	Mapped From/Into GPP Table and Field
																	<p>services, but can also be applied, when filtering is required, when using it in interface structures.</p> <p>If left empty – no filtering occurs</p> <p>In the context of Compliance initiated from the GPP flow, which has less meaning and business rationale.</p>
UserID	4					+							[0..1]	User ID	User ID	Text {1,8}	Populate with <b>User Id</b>
Role	4					+							[0..1]	Role	Role	Text {1,50}	Populate with <b>User Role</b>
D_SKIP_PERSIST_ON_ERROR	3				+								[0..1]	Skip Persist On Error Indicator	An indication whether to store the transaction details when an error or errors are found <b>Note:</b> Not relevant for interfaces. This is used when the structure is used in Web Services	[1,0] {1, 1}	Populate with 0 <sup>1</sup>
Workflow	3				+								[0..1]	Workflow	Defined for mass processing. The valid values are Template, File, or Swift.	Text {1,50}	Populate with - TBD
P_MID	3				+								[1..1]	GPP Message Identifier	The Internal GPP message Identifier	Text {1,16}	Map from P_MID
DeliveryTimestamp	3				+								[1..1]	Deliver Timestamp	The Timestamp when the request was created	ISO Date	Populate with Office Date Time
EventID	3				+								[1..1]	Event ID	Request unique identification	Text {1,16}	
Msg	2			+									[1..1]	Message			

<sup>1</sup> Not skip the saving of the message in case of error during Compliance request handling



Tag	L	0	1	2	3	4	5	6	7	8	9	10	Presence	Element	Description	Format	Mapped From/Into GPP Table and Field
Pmnt	3				+								[1..1]	Payment	ISO or SWIFT message text that is stored in an XML structure in the XML_MSG (Enriched payment, as it will be sent out)		
OrigMsg	2			+									[1..1]	Original Message			
Pmnt	3				+								[1..1]	Payment	ISO or SWIFT message text that is stored in an XML structure in the XML_ORIG_MSG (Original payment, as received)		

## 2.2 Compliance Response

The following sections from the full Fndt Message structure are the Product minimal scope to be included when the structure is used as a Compliance Response (additional sections can be configured to be included, if required).

Level 1	Level 2	Level 3	Level 4	Level 5	Description
FndtMsg					
	Header				General identifying attributes
	ResponseDetails				
			returnCode		Return code of the Compliance response
			description		Return code description

## 2.2.1 Compliance First Response

Note: 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.'

The First Response is returned in a case when the Compliance system found a possible hit and an investigation is conducted to check if indeed this is a hit. In this case a Second response will follow after the investigation is complete with the final resolution. For the conventions of the Presence and Format columns in this table, see [Appendix B: Conventions \(Including Format and Presence\)](#).

Tag	L	0	1	2	3	4	5	6	7	8	9	10	Presence	Element	Description	Format	Mapped From/Into GPP Table and Field
FndtMsg	1		+										[1..1]	Fndt (Funds Transfer) Message			
Header	2			+									[1..1]	Header			
contextName	3				+								[1..1]	Context Name	Generic field to add information regarding the specific usage.	Text {1,16}	Should be populated with Response1
contextLocalName	3				+								[0..1]	Context Local Name	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	Text {1,n}	If required – populate with specific local context string
credentials	3				+								[0..1]	Credentials	Credentials when required.		Note: The usage of this section, if populated, is allowing to filter results returned in the Fndt Message structure, based on the credentials (permissions) of the quoted GPP user. For example, filtering out details of transactions belonging to an Office, the quoted user does not have permissions for.  This section is mainly used when Fndt Message structure is used within SOA services, but can also

Tag	L	0	1	2	3	4	5	6	7	8	9	10	Presence	Element	Description	Format	Mapped From/Into GPP Table and Field
																	be applied, if filtering is required, when using it in interface structures. If left empty – no filtering occurs In the context of Compliance initiated from the GPP flow, and specifically within its response, which has less meaning and business rationale.
UserID	4				+								[0..1]	User ID	User ID	Text {1,8}	If included in the Request and filtering is required, copy the same vale as in the Request UserId
Role	4				+								[0..1]	Role	Role	If included in the Request, copy the same vale as in the Request UserId	If included in the Request and filtering is required, copy the same vale as in the Request UserId
Workflow	3				+								[0..1]	Workflow	Defined for mass processing. The valid values are Template, File, or Swift.	Text {1,50}	Populate with - TBD
P_MID	3				+								[1..1]	GPP Message Identifier	The Internal GPP message Identifier	Text {1,16}	Must be mapped from <P_MID> tag from request when used for matching in GPP (always in file processing).
DeliveryTimestamp	3				+								[1..1]	Deliver Timestamp	The Timestamp when the request was created	ISO Date	Populate either <deliveryTimestamp> from request or with current Timestamp
EventID	3				+								[0..1]	Event ID	Unique 16-chars event ID generated for each interface request	Text {1,16}	Can be copied from request. Currently not used in GPP for matching with request – so – not mandatory
ResponseDetails	2			+									[1..1]	Response Details			

Tag	L	0	1	2	3	4	5	6	7	8	9	10	Presence	Element	Description	Format	Mapped From/Into GPP Table and Field
returnCode	3				+								[1..1]	Return Code	The return code to indicate the nature of the Sanctions second response: <ul style="list-style-type: none"> <li>0 - Hit</li> <li>1 - No Hit</li> <li>2 - Seized Funds</li> <li>990 - Processing / technical error</li> </ul>	[0-9] {1, 5}	<p>If No Hit, transaction continues to be processed.</p> <p>If a Hit or Error, GPP routes the transaction to an exception queue, based on the received error code:</p> <ul style="list-style-type: none"> <li>Hit - route to OFAC_POSSIBLE_HIT</li> <li>No Hit - continue processing</li> <li>Failure - message is routed to REPAIR</li> <li>Invalid - message is routed to REPAIR</li> </ul>
Description	3				+								[0..1]	Description	The description of the return code. Relevant only for a failure (not 1) <returnCode>.	Text {1,250}	Mapped to message error log

## 2.2.2 Compliance Second Response

Note: 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.'

The Second (or last) Response is returned either as a final response in a case when the Compliance system found a possible hit, returned a First Response, and an investigation was conducted, or when the Compliance system provides only its final response. For the conventions of the Presence and Format columns in this table, see [Appendix B: Conventions \(Including Format and Presence\)](#).

Tag	L	0	1	2	3	4	5	6	7	8	9	10	Presence	Element	Description	Format	Mapped From/ Into GPP Table and Field
FndtMsg	1		+										[1..1]	Fndt (Funds Transfer) Message			
Header	2			+									[1..1]	Header			
contextName	3				+								[1..1]	Context Name	Generic field to add information regarding the specific usage.	Text {1,16}	Should be populated with Response2
contextLocalName	3				+								[0..1]	Context Local Name	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	Text {1,n}	If required – populate with specific local context string
P_MID	3				+								[1..1]	GPP Message Identifier	The Internal GPP message Identifier	Text {1,16}	Must be mapped from <P_MID> tag from request when used for matching in GPP (always in file processing).
credentials	3				+								[0..1]	Credentials	Credentials when required.		Note: The usage of this section, if populated, is allowing to filter results returned in the Fndt Message structure, based on the credentials (permissions) of the quoted GPP User – for example filtering out details of transactions belonging to

Tag	L	0	1	2	3	4	5	6	7	8	9	10	Presence	Element	Description	Format	Mapped From/ Into GPP Table and Field
																	<p>an Office the quoted user doesn't have permissions for.</p> <p>This section is mainly used when Fndt Message structure is used within SOA services, but can also be applied, if filtering is required, when using it in interface structures.</p> <p>If left empty – no filtering occurs</p> <p>In the context of Compliance initiated from the GPP flow, and specifically within its response, which has less meaning and business rationale.</p>
UserID	4					+							[0..1]	User ID	User ID	Text {1,8}	If included in the Request and filtering is required, copy the same vale as in the Request UserId
Role	4					+							[0..1]	Role	Role	If included in the Request, copy same vale as in the Request UserId	If included in the Request and filtering is required, copy the same vale as in the Request UserId
Workflow	3				+								[0..1]	Workflow	Defined for mass processing. The valid values are Template, File, or Swift.	Text {1,50}	Populate with - TBD
DeliveryTimestamp	3				+								[1..1]	Deliver Timestamp	The Timestamp when the request was created	ISO Date	Populate either <deliveryTimestamp> from request or with current Timestamp
EventID	3				+								[0..1]	Event ID	Unique 16-chars event ID generated for each interface request	Text {1,16}	Can be copied from request. Currently not used in GPP for matching with request – so – not mandatory
ResponseDetails	2			+									[1..1]	Response Details			

Tag	L	0	1	2	3	4	5	6	7	8	9	10	Presence	Element	Description	Format	Mapped From/ Into GPP Table and Field
returnCode	3				+								[1..1]	Return Code	The return code to indicate the nature of the Sanctions second response: <ul style="list-style-type: none"> <li>0 - Hit</li> <li>1 - No Hit</li> <li>2 - Seized Funds</li> <li>990 - Processing / technical error</li> </ul>	[0-9] {1, 5}	
description	3				+								[0..1]	Description	The description of the return code. Relevant only for a failure (not 1) <returnCode>.	Text {1,250}	Should be received with one of the following and mapped to the message Error log: <ul style="list-style-type: none"> <li>Approved - route to Compliance Exception</li> <li>Disapproved - continue processing</li> <li>Failure - message is routed to REPAIR</li> <li>Invalid - message is routed to REPAIR</li> <li>Seized Funds - message is routed to SEIZED, after the funds are seized into a special suspense account</li> </ul>
errorsList	3				+								[0..n]	Error List	List of errors for this response.		
Error	4					+							[1..1]	Error			
code	5						+						[1..1]	Code	The return code to indicate one of multiple failure codes of Account Lookup.	[0-9] {1, n}	
description	5						+						[0..1]	Description	The description of the failure code.	Text {1,250}	



Tag	L	0	1	2	3	4	5	6	7	8	9	10	Presence	Element	Description	Format	Mapped From/ Into GPP Table and Field
dataArray	3				+								[0..n]	Data Array	List of additional information entries, if required.		
data	4					+							[0..1]	Data	Additional information entry.	Text {1,250}	

### 3 Usage

For more information on logic related to STP processing, usage of the information provided in the Compliance interface, related manual handling and related configuration see Compliance Interface section in the GPP Business Guide System Integration - Single Payment document.

## 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

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. Commonly used attributes: P_MID, P_OFFICE, etc.
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.

Prefix	Meaning	Explanation
MU	User Monitor	<p>Monitors are divided into three categories:</p> <ul style="list-style-type: none"> <li>• User monitors that track the user action over the UI such as forcing a transaction out of the insufficient funds queue</li> <li>• Workflow monitors – internal monitors in the code that track the payment processing flow</li> <li>• Interface monitors that monitor interface interactions</li> </ul> <p>These P_ field attributes hold the monitor statuses strings for every transaction.</p> <p>P_USER_STATE_MONITOR - for User Monitors – MU_ prefix for specific user action monitors within the P_USER_STATE_MONITOR string</p> <p>P_SERVICE_STATE_MONITOR - for Flow Monitors – MF_ prefix for specific flow monitors within the P_SERVICE_STATE_MONITOR string</p> <p>P_INTERFACE_STATE_MONITOR - for Interface Monitors – MI_ prefix for specific interface interaction monitors within the P_INTERFACE_STATE_MONITOR string</p> <p>The location of each monitor in the string field is defined by LOGICAL_FIELDS.LOCATION. The first location is 0 (zero).</p> <p>Example of a monitor string P_ field value: XXXXXXXXXXXXXXXXXXXXXT.</p> <p>The following SQL can be used to check the full list of monitors as per their monitor string P_ field and their location:</p> <pre>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</pre>
MF	Flow (service) monitor	
MI	Interface monitor	

## Appendix B: Conventions (Including Format and Presence)

This table details naming conventions (including explanation of the values in the format and presence) used in the interface structures in this document.

Term	Meaning
Tag name in Bold	Indicate Aggregates
ISO Date Time	<p>Date Time formats defined as ISO Date Time will conform to ISO8601. Representation:</p> <p><b>ISO Date Time with milliseconds:</b> YYYY-MM-DD [T] {0,1} HH:MM:SS.mmm [Z,-,+] {1,1} HH:MM {0,1}</p> <p><b>ISO Date Time without milliseconds:</b> YYYY-MM-DD [T] {0,1} HH:MM:SS [Z,-,+] {1,1} HH:MM {0,1}</p> <p>Where:</p> <ul style="list-style-type: none"> <li>• YYYY is the year</li> <li>• MM is the month (01 - 12)</li> <li>• DD is the day (01 - 31)</li> <li>• T is a literal separator between the date and time portions (optional)</li> <li>• HH is the hour in 24 hour time</li> <li>• MM is the minutes</li> <li>• SS is the seconds</li> </ul>

Term	Meaning
	<ul style="list-style-type: none"> <li>• mmm is the milliseconds</li> <li>• Z is the time zone designator: Z for when time is in UTC time, OR +HH:MM; OR or -HH:MM</li> </ul>
ISO Date	<p>Date formats defined as ISO Date Time will conform to ISO8601. Representation: YYYY-MM-DD</p> <p>Where:</p> <ul style="list-style-type: none"> <li>• YYYY is the year,</li> <li>• MM is the month (01 - 12)</li> <li>• DD is the day (01 - 31)</li> </ul>
ISO Decimal Values	<p>Decimal values defined as ISO Decimal Values will use the ISO format definition using fractionDigits and totalDigits</p> <p>Where:</p> <ul style="list-style-type: none"> <li>• totalDigits defines the total number of digits in the number (on both sides of the decimal point)</li> <li>• fractionDigits defines the number of digits to the right of the decimal point (the fraction)</li> </ul>
SWIFT Date	<p>Date formats defined as SWIFT Date will conform to SWIFT representation: YYMMDD</p> <p>Where:</p> <ul style="list-style-type: none"> <li>• YY is the year</li> <li>• MM is the month (01 - 12)</li> <li>• DD is the day (01 - 31)</li> </ul>
SWIFT Decimal Values	<p>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</p>
Presence (Cardinality)	<ul style="list-style-type: none"> <li>• 0..1 means Optional</li> <li>• 1..1 means Required</li> <li>• 0..n means Optional and may have multiple occurrences (limited to specified n)</li> <li>• 1..n means required and may have multiple occurrences (limited to specified n)</li> </ul>
String format	<p>[character set] {min length, max length}</p> <ul style="list-style-type: none"> <li>• [A-Z] means only upper letter characters</li> <li>• [a-z] means only lower letter characters</li> <li>• [0-9] means only digits</li> <li>• [A-Za-z] means upper and lower letter characters</li> <li>• Text means all characters</li> <li>• {1,6} means a string at least one character long and no longer than 6 characters</li> </ul>

