



Global PAYplus Version 4.6.7

# **Actions on Payments**

Service-Oriented Architecture

## Copyright

© 2009-2017 D+H Global Transaction Banking Solutions. All rights reserved. D+H is a trademark of D+H Limited Partnership.

PROPRIETARY AND CONFIDENTIAL - This document contains information, which contains Confidential and Know How property of D+H. Disclosure to or use by persons who are not expressly authorized in writing by D+H is strictly prohibited.

D+H reserves the right to alter the specifications and descriptions in this publication without prior notice. No part of this publication shall be deemed to be part of any contract or warranty unless specifically incorporated by reference into such contract or warranty.

All brand or product names are the trademarks or registered trademarks of their respective holders.

The information contained herein is merely descriptive in nature, and does not constitute a binding offer for the license of the product described herein.

Catalog ID: GPP4.6-00-S03-03-201708

# **Version Control**

Version	Date	Summary of Changes		
1.0		Document created		
2.0	Aug 2015	Document restructured on new template		
3.0	Nov 2015	Document rebranded		
4.0	Feb 2017	Updated with Validate Payment examples and additional functionality to receive variable scope of additional information in the MessageSubmitTable Response		

# **Table of Contents**

1	INT	RODUCTION	5
	1.1	Overview	5
	1.2	Target Audience	5
2	ME	SSAGE LOAD SERVICE DESCRIPTION	6
	2.1	Overview	
	2.2	Service Function	
	2.3	Input	
	2.3.1	Output Request	
	2.3.2	Processing	
	2.4	Output	
	2.5	Errors	9
	2.6	Examples	9
	2.6.1	Example 1: Ad-hoc Structure - Load Specific Payment Fields	9
	2.6.2	Example 2: Presets with Output Mode FULL + Convert to SWIFT 103	11
	2.6.3	Example 3: Non-existing MID	18
	2.6.4	Example 4: Presets with Output Mode ORIG_PERSISTENT_DATA	19
3	ME	SSAGE SUBMIT SERVICE DESCRIPTION	22
	3.1	Overview	22
	3.2	Service Functions	22
	3.3	Input	23
	3.3.1	Service Input Table Legend	24
	3.4	Processing	24
	3.5	Output	25
	3.6	Errors	26
	3.7	Examples	27
	3.7.1	Example 1: Manual Creation of a Payment	
	3.7.2	Example 2: Final Approve of an Existing Payment	
	3.7.3	Example 3: Cancel a Payment	
	3.7.4	Example 4: When an Action is not Allowed for the Queue	
	3.7.5	Example 5: Validate a Payment	47
4	ERI	RORS	61
	4.1	Generic Errors	61
	4.2	Static Data Related Error Codes	62
	4.3	Message Processing Related Error Codes	62
A	PPENDI	X A	63
	List of S	ystem Users	63
		ystem Entitlements	
		nt Preservation	
	Messa	age Load Service	63
	Messa	age Submit Service	63
Δ	PPFNDI	K B: GLOSSARY	64

Actions on Payments Introduction

#### 1 Introduction

Note: This SOA Guide 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.

#### 1.1 Overview

GPP is a robust payment engine whose workflow emulates the business flow of the bank or other financial institution. Configurable reference data profiles control the sequence of workflow steps and the actions performed in each step.

GPP processes and manages payments. As part of the message processing flow, the payment is always associated with a message status (msg sts). When a payment reaches the end of processing, the status is Complete. Where a payment is being held for manual intervention, it would be set to Repair or any other available/relevant status.

To be able to handle payments outside of GPP, the following standalone services are used:

- QueueListService: Provides a list of payments which meet a given selection criteria and are
  filtered by user restrictions, for example, it will include a list of all payments that meet the
  combined criteria of the input, such as payments with same message status that the user has
  permissions to view. For more information, see GPP SOA Guide Queue List Service.
- MessageLoadService: Loads a specific payment, i.e. the third party application gets all payment details
- MessageSubmitService: Takes a manual action on a specific payment, such as Submit or Cancel

This document describes the last two services and focuses on the ability to simulate the UI ability to load and take action on payments. For more information about the QueueListService, see <a href="mailto:GPP SOA">GPP SOA</a> Queue List Service document.

## 1.2 Target Audience

This book describes GPP web services that are based on a Service-Oriented Architecture (SOA) concept which enables 3rd party applications to interact with GPP.

# 2 Message Load Service Description

## 2.1 Overview

This service enables a user to retrieve full or partial data for a single payment transaction, based on the unique payment ID (MID).

The service also enables a user to retrieve the output in a different message format. For example, the original payment message type is pain.001, and the user can request to receive the output as message type pacs.008.

## 2.2 Service Function

This service supports the single MessageLoadService method only.

## 2.3 Input

The table below describes the required input parameters.

The L column lists the level for each parameter, which is the element level in the file. The + indicators in Tag Name column are accordance to the level number.

Parameter	Tag Name	L	Format	Comment
Header	Header	0		Request header
D+H Header	+FndtHeader	1		Service Header
Credentials	++Credentials	2	{11}	Credentials
User ID	+++UserID	3	String {11}	A valid GPP user (see <u>List of System Users</u> ). User name is case sensitive. Use the exact user name.
				The user must have the following credentials: User exists, and active (status = AC) and not logged in (LOGGED_IN <> 2)
User Entitlement	+++Role	3	String {11}	A valid GPP entitlement profile (see <u>List</u> of <u>System Entitlements</u> ).
code				Credentials check: The entitlement exists and assigned to the login user. Also where applicable the relevant access permission is granted.
Body	Body	0	{11}	Service Body
Request details	+PerformMessage LoadRequest	1	{11}	Request details
Audit user	++UserID	2	String {01}	Audit user only. This input is not being validated. Where applicable, this would be used as the audit user
Unique Inputs				
MID	++P_MID	2	String (length 16) {11}	Message ID

Parameter	Tag Name	L	Format	Comment
Output request				Payments are stored in D+H message structure in the database. Where not specified, the output would be D+H message (as-is). The following options (one of 2) are allowed. And one of them must be present.in the input.
Ad-hock structured	++fndtMsgSubset	2	{01} or	An ad-hoc defined structure that is defined by this element. Allows retrieving specific information about a payment.
Presets	++ParseOutputMode	2	{01}	A preset of allowed outputs. FULL, ORIG_PERSISTENT_DATA, PERSISTENT_DATA. (See section Presets for Further Details)
	origPmntConversionType			Defines the original XML message structure.  Possible values: AS IS (the output would be exactly what is stored in GPP database), or xml type from Xml Type.
	pmntConversionType			Defines the outgoing XML message structure.  If empty, the output will be the same as set in the database (i.e. AS-IS). If not empty, can get a value from Xml Type. Requesting a specific output format (the service converts the input format).

## 2.3.1 Output Request

The service output may provide one of the following structures:

#### 2.3.1.1 Ad-hock Structure

This structure enables retrieving partial data available for a single payment, based on the payment unique ID (MID). The input shall include the specific logical fields requested by the user.

(See Example 1: Ad-hoc Structure - Load Specific Payment Fields.)

## 2.3.1.2 **Presets**

This structure enables retrieving data available for a single payment, based on the payment unique ID (MID). The returned output fields will be determined by the input's output mode.

This table shows the allowed Output Modes for Presets:

Output Mode	Support Type	Output Provided
FULL	Fully supported	ALL MINF Relational columns
		All Monitor Fields
		All User Defined Fields
		Updated Xml pmnt Section
		Original Message

Output Mode	Support Type	Output Provided
		Msg Extension
ORIG_PERSISTENT_DATA	Fully supported	Original Message
		Msg Extension (if provided)
PERSISTENT_DATA	Fully supported	ALL MINF Relational columns
		All Monitor Fields
		All User Defined Fields
		Updated Xml pmnt Section

This table is an extract from system tables: XML\_DOCUMENT\_TYPES for the different DOCUMENT\_ID. It shows the Applicable XML Types that can be used as a preset for each.

Xml Type	Support Type	Content
ACMT_023	As-is	
ACMT_024	As-is	
CAMT_052	As-is	
CAMT_054	As-is	
EXTN	As-is	
FNDT_MSG	As-is	
MOP_OUT	As-is	
N90	As-is	
N91	As-is	
N92	As-is	
N95	As-is	
N96	As-is	
N98	As-is	
N99	As-is	
Pacs_002	As-is	
Pacs_004	As-is	
Pacs_008	As-is	Also PACS_00801 is version 001 support is required.
Pacs_009	As-is	
Pain_001	As-is	
Pain_002	As-is	
SWIFT_103	As-is	
SWIFT_190	As-is	
SWIFT_191	As-is	
SWIFT_192	As-is	
SWIFT_195	As-is	
SWIFT_196	As-is	
SWIFT_199	As-is	
SWIFT_202	As-is	

Xml Type	Support Type	Content
SWIFT_202COV	As-is	
SWIFT_210	As-is	
SWIFT_290	As-is	
SWIFT_291	As-is	
SWIFT_292	As-is	
SWIFT_295	As-is	
SWIFT_296	As-is	
SWIFT_299	As-is	
SWIFT_400	As-is	
SWIFT_401	As-is	
SWIFT_402	As-is	
SWIFT_900	As-is	
SWIFT_910	As-is	

## 2.3.2 Processing

- 1. A query is constructed and a single payment is fetched.
- 2. The payment may be converted as requested in the output request.
- 3. When no message is found, the relevant error is returned.

Note: This service can be used for both payments and templates.

## 2.4 Output

The output depends on the input parameters. That is, either a response that is taking an extract of the message (see <a href="Example 1: Ad-hoc Structure - Load Specific Payment Fields">Example 1: Ad-hoc Structure - Load Specific Payment Fields</a>) or a full message with the ability to convert the original/outgoing XML to any message type.

## 2.5 Errors

This table shows the relevant Error Messages:

Code	Description
77782	Message was not found for MID [MID not found in MINF]

See also Errors.

## 2.6 Examples

# 2.6.1 Example 1: Ad-hoc Structure - Load Specific Payment Fields

Invoke the service with an existing MID (10801N3428AO0448) request for specific attributes (logical fields) from MINF (Message information table in the DB).

#### 2.6.1.1 Request

```
<?xml version="1.0" encoding="UTF-8"?>
<soapenv:Envelope xmlns:soapenv="http://www.w3.org/2003/05/soap-envelope"</pre>
xmlns:q0="http://fundtech.com/SCL/MessageLoadService"
xmlns:q1="http://fundtech.com/SCL/CommonTypes" xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
    <soapenv:Header>
  <q1:credentials>
     <q1:UserID>SERVICES</q1:UserID>
     <q1:Role>ADMIN</q1:Role>
  </q1:credentials>
  </soapenv:Header>
    <soapenv:Body>
    <q0:PerformMessageLoadRequest>
    <q1:credentials>
       <q1:UserID>audit3</q1:UserID>
    </q1:credentials>
  <q1:P MID>10801N3428A00448</q1:P MID>
  <q0:fndtMsgSubset>
    <q1:document id="X_FNDT_MSG_EXT">
           <q1:field id="X_EXTN_PRS_PERIST_INF">
                   <q1:field id="P_MSG_STS"/>
<q1:field id="P_BASE_AMT"/>
                   <q1:field id="P BASE CCY"/>
                   <q1:field id="P_DEPARTMENT"/>
                   <q1:field id="P_MSG_CLASS"/>
<q1:field id="P_MSG_TYPE"/>
<q1:field id="P_OFFICE"/>
                   <q1:field id="P PROC DT"/>
                   <q1:field id="P_TIME_STAMP"/>
           </q1:field>
           <q1:field id="X_EXTN_CREDIT_SIDE">
                           <q1:field id="P CDT ACCT CCY"/>
                           <q1:field id="P_CDT_ACCT_NB"/>
                           <q1:field id="P_CDT_AMT"/>
                           <q1:field id="P CDT CUST CD"/>
                           <q1:field id="P_CDT_MOP"/>
           </q1:field>
           <q1:field id="X_EXTN_DEBIT_SIDE">
                           <q1:field id="P_DBT_ACCT_NB"/>
<q1:field id="P_DBT_AMT"/>
                           <q1:field id="P_DBT_CUST_CD"/>
                           <q1:field id="P_DBT_MOP"/>
                           <q1:field id="P_DBT_RATE_USAGE_NM"/>
           </q1:field>
     </q1:document>
  </q0:fndtMsgSubset>
</q0:PerformMessageLoadRequest>
  </soapenv:Body>
</soapenv:Envelope>
2.6.1.2 Response
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope"</pre>
xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance">
   <soap:Body xmlns:ns1="http://fundtech.com/SCL/CommonTypes">
      <FndtMsg xmlns="http://fundtech.com/SCL/CommonTypes">
         <Msg>
             <Pmnt/>
             <Extn>
                 ProcessingPersistentInfo>
                   <P_MSG_STS>WAIT_CONFIRMATION</P_MSG_STS>
                   <P BASE AMT>636.36</P BASE AMT>
                   <P_BASE_CCY>USD</P_BASE_CCY>
                   <P_DEPARTMENT>PSV</P_DEPARTMENT>
                   <P MSG CLASS>PAY</P MSG CLASS>
```

```
<P_MSG_TYPE>Pain_001</P_MSG_TYPE>
                   <P OFFICE>US1</P OFFICE>
                   <P_PROC_DT>2010-04-20<P_TIME_STAMP>2010-08-02 00:03:16.956<CreditSide>
                      <P CDT ACCT CCY>AUD</P CDT ACCT CCY>
                      <P_CDT_ACCT_NB>50006789</P_CDT_ACCT_NB>
                      <P_CDT_AMT>700</P_CDT_AMT>
<P_CDT_CUST_CD>USD1SACITIUS33XXX</P_CDT_CUST_CD>
                      <P CDT MOP>CRSCCY</P_CDT_MOP>
                   </CreditSide>
                   <DebitSide>
                      <P_DBT_ACCT_NB>8552502</P_DBT_ACCT_NB>
                      <P_DBT_AMT>700</P_DBT_AMT>
                      <P DBT CUST CD>US1SACOMPUS33XXX</P DBT CUST CD>
                      <P_DBT_MOP>BOOK</P_DBT_MOP>
                      <P DBT RATE USAGE NM>US1^STANDARD/P DBT RATE USAGE NM>
                   </DebitSide>
                </ProcessingPersistentInfo>
                <QaInfo>
                   <D_ELAPSED_TIME_MS>[MessageLoad]:5.684</D_ELAPSED_TIME_MS>
                   <QATest2/>
                </QaInfo>
             </Extn>
          </Msg>
         <ResponseDetails>
             <returnCode>0</returnCode>
             <description/>
         </ResponseDetails>
      </FndtMsg>
   </soap:Body>
</soap:Envelope>
```

#### 2.6.2 Example 2: Presets with Output Mode FULL + Convert to SWIFT 103

Invoke the service with an existing MID (1042984940CK0208) request for FULL (one of the use presets) and convert the original payment format (Message type pain.001) into message type SWIFT 103 xml format.

#### 2.6.2.1 Request

```
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope"</pre>
xmlns:mes="http://fundtech.com/SCL/MessageLoadService"
xmlns:com="http://fundtech.com/SCL/CommonTypes">
   <soap:Header>
<com:FndtHeader>
 <com:credentials>
     <com:UserID>MASTERUSER</com:UserID>
     <com:Role>ADMIN</com:Role>
  </com:credentials>
 </com:FndtHeader>
   </soap:Header>
   <soap:Body>
   <mes:PerformMessageLoadRequest>
   <com:P MID>1042984940CK0208
   <com:credentials>
   <com:UserID>audit3</com:UserID>
   </com:credentials>
   <mes:outputMode
origPmntConversionType="Pain_001"pmntConversionType="SWIFT_103">FULL</mes:outputMode>
  </mes:PerformMessageLoadRequest>
   </soap:Body>
</soap:Envelope>
```

#### 2.6.2.2 Response

```
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope"</pre>
xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance">
   <soap:Body xmlns:ns1="http://fundtech.com/SCL/CommonTypes">
      <ns1:FndtMsg xmlns="http://fundtech.com/SCL/CommonTypes">
         <Header>
            <P MID>1042984940CK0208</P MID>
         </Header>
         <Msg>
            <Pmnt>
               <swif:SWIFT MT="103" xmlns:swif="urn:fundtech/scl/SWIFT">
                  (swif:Header>
                     <swif:Create_Date_Time xmlns="urn:fundtech/scl/SWIFT">2008-06
25T06:19:06</swif:Create_Date_Time>
                     <swif:Msg_ID xml
                  </swif:Header>
                  <swif:Data xmlns="urn:fundtech/scl/SWIF</pre>
                     <F32A>
                       <Date>2010-05-02</Date>
                       <Currency>USD</Currency>
                     </F32A>
                     <F20>
                     <F33B>
                       <Currency>USD</Currency
                       <Amount>755.00</Amount>
                     </F33B>
                     <F21>
                       <Related Reference>CTv422-8/2008-06-25</Related Reference>
                     </F21>
                     </F71A>
                     <F52a>
                     </F52a>
                     <F50a>
                       <F50F>
                          </Id>
                       </F50F>
                    </F50a>
                     <F57a>
                       <Identifier_Code>CITIUS33XXX</Identifier_Code>
                     </F57a>
                     <Cdrt_F58a_F59a>
                       <Account>3333421212</Acc
                     </Cdrt_F58a_F59a>
                  </swif:Data>
                 swif:SWIFT>
            </Pmnt>
               <AuditTrail>
                     <F_AUDIT_ERROR_CODE>40171</F_AUDIT_ERROR_CODE>
                     <F AUDIT TIME STAMP>2010-04-29 18:59:54.367/F AUDIT TIME STAMP>
                     <F_AUDIT_END_DATE>2010-04-29T00:00:00</F_AUDIT_END_DATE>
                    <F_AUDIT_IS_NEW>false</F_AUDIT_IS_NEW>
                  </M_AUDIT_TRAIL>
<M_AUDIT_TRAIL>
                     <F_AUDIT_ERROR_CODE>40171</F_AUDIT_ERROR_CODE
```

```
<F_AUDIT_TIME_STAMP>2010-04-29 18:59:54.366</f_AUDIT_TIME_STAMP>
                         <F AUDIT END DATE>2010-04-29T00:00:00</F AUDIT END DATE>
                         <F_AUDIT_UPDATE_DATE>2010-04-29T00:00:00</f_AUDIT_UPDATE_DATE>
                            _AUDIT_ZONE_CODE>EST</F_AUDIT_ZONE_CODE>
_AUDIT_IS_NEW>false</F_AUDIT_IS_NEW>
                     </M AUDIT TRAIL>
                     <M_AUDIT_TRAIL>
                         <F_AUDIT_ERROR_CODE>40171</f_AUDIT_ERROR_CODE>
<F_AUDIT_TIME_STAMP>2010-04-29 18:59:54.365</f_AUDIT_TIME_STAMP>
<F_AUDIT_END_DATE>2010-04-29T00:00:00</f_AUDIT_END_DATE>
                         <F_AUDIT_UPDATE_DATE>2010-04-29T00:00:00</F_AUDIT_UPDATE_DATE>
                     <F_AUDIT_ZONE_CODE>EST</f_AUDIT_ZONE_CODE>
<f_AUDIT_IS_NEW>false</f_AUDIT_IS_NEW>
</M_AUDIT_TRAIL>
                     <M AUDIT TRAIL>
                         <F_AUDIT_ERROR_CODE>40171</F_AUDIT_ERROR_CODE>
                         <F_AUDIT_TIME_STAMP>2010-04-29 18:59:54.364</f_AUDIT_TIME_STAMP>
<F_AUDIT_END_DATE>2010-04-29T00:00:00</f_AUDIT_END_DATE>
                         <F AUDIT UPDATE DATE>2010-04-29T00:00:00/F AUDIT UPDATE DATE>
                         <F_AUDIT_ZONE_CODE>EST</F_AUDIT_ZONE_CODE>
                         <F_AUDIT_IS_NEW>false</F_AUDIT_IS_NEW>
                     </M_AUDIT_TRAIL>
                     <M AUDIT TRAIL>
                         <F AUDIT ERROR CODE>40171/F AUDIT ERROR CODE>
                         <F_AUDIT_TIME_STAMP>2010-04-29 18:59:54.363</F_AUDIT_TIME_STAMP>
                         <F_AUDIT_END_DATE>2010-04-29T00:00:00<F_AUDIT_END_DATE><F_AUDIT_UPDATE_DATE>2010-04-29T00:00:00<F_AUDIT_UPDATE_DATE>
                         <F AUDIT ZONE CODE>EST</f AUDIT ZONE CODE>
                         <F_AUDIT_IS_NEW>false</F_AUDIT_IS_NEW>
                     </M_AUDIT_TRAIL>
<M_AUDIT_TRAIL>
                         <F_AUDIT_ERROR_CODE>40171</fractalenterror_CODE>
                         <F_AUDIT_TIME_STAMP>2010-04-29 18:59:54.362</F_AUDIT_TIME_STAMP>
                         <F_AUDIT_END_DATE>2010-04-29T00:00:00</F_AUDIT_END_DATE>
                         <F_AUDIT_UPDATE_DATE>2010-04-29T00:00:00</fractor/
</pre>
                         <F_AUDIT_ZONE_CODE>EST</f_AUDIT_ZONE_CODE>
                         <F AUDIT IS NEW>false</F AUDIT IS NEW>
                     </M_AUDIT_TRAIL>
                     <M_AUDIT_TRAIL>
                         <F AUDIT_ERROR_CODE>40035</f_AUDIT_ERROR_CODE>
                         <F AUDIT TIME STAMP>2010-04-29 18:59:54.361// AUDIT TIME STAMP>
                         <F_AUDIT_END_DATE>2010-04-29T00:00:00</F_AUDIT_END_DATE>
                         <F_AUDIT_UPDATE_DATE>2010-04-29T00:00:00</f_AUDIT_UPDATE_DATE>
<F_AUDIT_ZONE_CODE>EST</F_AUDIT_ZONE_CODE>
<F_AUDIT_ERROR_PARAMS>@@2010-03-
03@@STRING@@@@,@@PROCESSING@@STRING@@@@,@@SLA-PROCS@@STRING@@</F AUDIT ERROR PARAMS>
                         <F_AUDIT_IS_NEW>false</F_AUDIT_IS_NEW>
                     </M_AUDIT_TRAIL>
<M_AUDIT_TRAIL>
                         <F AUDIT_ERROR_CODE>1001/F_AUDIT_ERROR_CODE>
                         <F_AUDIT_TIME_STAMP>2010-04-29 18:59:54.360</F_AUDIT_TIME_STAMP>
                         <F_AUDIT_END_DATE>2010-04-29T00:00:00<F_AUDIT_UPDATE_DATE>2010-04-29T00:00<F_AUDIT_UPDATE_DATE>2010-04-29T00:00
                         <F AUDIT_ZONE_CODE>EST</f_AUDIT_ZONE_CODE>
F_AUDIT_ERROR_PARAMS>@@PEND_APPROV@@STRING@@@,@@SCHEDULE@@STRING@@</F_AUDIT_ERROR_PARAMS>
                     <F_AUDIT_IS_NEW>false
                     <M AUDIT TRAIL>
                         <F_AUDIT_ERROR_CODE>40090</F_AUDIT_ERROR_CODE>
                         <F_AUDIT_USER_NAME>ADMIN2</f_AUDIT_USER_NAME>
<F_AUDIT_TIME_STAMP>2010-04-29 08:49:40.472</fr>
                                    TIME_STAMP>2010-04-29 08:49:40.472</F_AUDIT_TIME_STAMP>
                         <F AUDIT END DATE>2010-04-29T00:00:00</f AUDIT END DATE>
                         <F_AUDIT_UPDATE_DATE>2010-04-29T00:00:00</f_AUDIT_UPDATE_DATE>
                         <F_AUDIT_ZONE_CODE>EST</f_AUDIT_ZONE_CODE>
<F_AUDIT_ERROR_PARAMS>@@Submit@@STRING@@</f_AUDIT_ERROR_PARAMS>
                         <F_AUDIT_IS_NEW>false/F_AUDIT_IS_NEW>
                     </M AUDIT TRAIL>
                     <M_AUDIT_TRAIL>
                         <F AUDIT ERROR CODE>40171/F AUDIT ERROR CODE>
```

```
<F_AUDIT_USER_NAME>ADMIN2</f_AUDIT_USER_NAME>
                      <F AUDIT TIME STAMP>2010-04-29 08:49:40.471//F AUDIT TIME STAMP>
                      <F_AUDIT_END_DATE>2010-04-29T00:00:00</F_AUDIT_END_DATE>
                      <F_AUDIT_UPDATE_DATE>2010-04-29T00:00:00cF_AUDIT_ZONE_CODE>ESTcODE>EST
                      <F AUDIT IS NEW>false/F AUDIT IS NEW>
                   </M_AUDIT_TRAIL>
                   <M_AUDIT_TRAIL>
<f_AUDIT_ERROR_CODE>40171<f_AUDIT_USER_NAME>ADMIN2
                      <F_AUDIT_TIME_STAMP>2010-04-29 08:49:40.470</F_AUDIT_TIME_STAMP>
                      <F_AUDIT_END_DATE>2010-04-29T00:00:00</F_AUDIT_END_DATE>
                         AUDIT_UPDATE_DATE>2010-04-29T00:00:00</F_AUDIT_UPDATE_DATE
                      <F AUDIT_ZONE_CODE>EST</f_AUDIT_ZONE_CODE>
                      <F AUDIT IS NEW>false</F AUDIT IS NEW>
                   </M_AUDIT_TRAIL>
                   <M_AUDIT_TRAIL>
<F_AUDIT_ERROR_CODE>40171</F_AUDIT_ERROR_CODE>
                      <F AUDIT USER NAME>ADMIN2/F AUDIT USER NAME>
                      <F_AUDIT_TIME_STAMP>2010-04-29 08:49:40.469</F_AUDIT_TIME_STAMP>
                      <F_AUDIT_END_DATE>2010-04-29T00:00:00</f_AUDIT_END_DATE>
<F_AUDIT_UPDATE_DATE>2010-04-29T00:00:00</f_AUDIT_UPDATE_DATE>
                      <F_AUDIT_ZONE_CODE>EST</f_AUDIT_ZONE_CODE>
                      <F AUDIT IS NEW>false/F AUDIT IS NEW>
                   </M_AUDIT_TRAIL>
<M_AUDIT_TRAIL>
                      <F_AUDIT_ERROR_CODE>1001</F_AUDIT_ERROR_CODE>
<F_AUDIT_USER_NAME>ADMIN2</F_AUDIT_USER_NAME>
                      <F_AUDIT_TIME_STAMP>2010-04-29 08:49:40.468</F_AUDIT_TIME_STAMP>
                      <F_AUDIT_END_DATE>2010-04-29T00:00:00</F_AUDIT_END_DATE>
                         AUDIT_UPDATE_DATE>2010-04-29T00:00:00</F_AUDIT_UPDATE_DATE>
                      <F_AUDIT_ZONE_CODE>EST</F_AUDIT_ZONE_CODE>
F_AUDIT_ERROR_PARAMS>@@(RECEIVED)@@STRING@@@@,@@PEND_APPROV@@STRING@@</F_AUDIT_ERROR_PARAMS>
                   <F_AUDIT_IS_NEW>false
                </AuditTrail>
                <MsgNotes>
                   <M_MSG_NOTES_GRID>
                      <F MSG_NOTES_USER_ID>USER1</f_MSG_NOTES_USER_ID>
                      <F MSG NOTES TEXT>LINE 1 TEXT/F MSG NOTES TEXT>
                      <F_MSG_NOTES_TIMESTAMP>2010-04-29 08:49:42.025/F_MSG_NOTES_TIMESTAMP>
                      <F_MSG_NOTES_CREATE_DATE>2010-04-29 08:49:42
(EST)</F_MSG_NOTES_CREATE_DATE>
                      <F_MSG_NOTES_EXTERNAL_NOTE_IND>true
F_MSG_NOTES_ATTACHED_FILE_LINK>//NoteFile1.txt</F_MSG_NOTES_ATTACHED_FILE_LINK>
                       <F_MSG_NOTES_REC_STATUS>AC</f_MSG_NOTES_REC_STATUS>
                   </M MSG NOTES GRID>
                </MsgNotes>
                <ProcessingPersistentInfo>
                   <CreditSide>
  <P_CDT_ACCT_CCY>USD</P_CDT_ACCT_CCY>
                      <P CDT_ACCT_NB>33334567812/P_CDT_ACCT_NB>
                      <P_CDT_ACCT_OFFICE>US1</P_CDT_ACCT_OFFICE>
                      <P_CDT_AMT>755</P_CDT_AMT>
<P_CDT_CROSS_CONV>false
<P_CDT_CUST_CD>USD1SACITIUS33XXX</P_CDT_CUST_CD>

                      <P CDT MOP>BOOK</P CDT MOP>
                      <P_CDT_RATE_USAGE_NM>US1^STANDARD</P_CDT_RATE_USAGE_NM>
                      <P_CDT_TX_CD>CRB0FA</P_CDT_TX_CD>
<P_CDT_VD>2010-05-02</P_CDT_VD>
                   </CreditSide>
                   <DebitSide>
                      <P_DBT_ACCT_CCY>USD</P_DBT_ACCT_CCY>
                      <P_DBT_ACCT_NB>22222222</P_DBT_ACCT_NB>
<P_DBT_ACCT_OFFICE>US1</P_DBT_ACCT_OFFICE>
                      <P DBT AMT>755</P DBT AMT>
                      <P_DBT_CROSS_CONV>false</P_DBT_CROSS_CONV>
                      <P DBT CUST CD>US1SACOMPUS33XXX</P DBT CUST CD>
```

```
<P_DBT_MOP>BOOK</P_DBT_MOP>
                                            <P DBT RATE USAGE NM>US1^STANDARD/P DBT RATE USAGE NM>
                                            <P_DBT_TX_CD>DRBOFA</P_DBT_TX_CD>
                                            <P_DBT_VD>2010-05-02</P_DBT_VD>
                                     </DebitSide>
                                     <P BASE AMT>755</P BASE AMT>
                                     <P_BASE_CCY>USD</P_BASE_CCY>
                                     <P_BASE_RATE_USAGE_NM>US1^BASE</P_BASE_RATE_USAGE_NM>
<P_BA_CD>US1</P_BA_CD>
                                     <P_CHARGES_PAID>false</P_CHARGES_PAID>
                                     <P DEPARTMENT>PSV</P DEPARTMENT>
                                     <P_DISPLAY_MSG_TYPE>PAIN001
<P_FC_INFO_IND>0
<P_IS_HISTORY>0

ABOUT TO THE 
                                     <P MSG CLASS>PAY</P MSG CLASS>
                                     <P_MSG_STS>COMPLETE</P_MSG_STS>
                                     <P_MSG_TYPE>Pain_001</P_MSG_TYPE>
<P_NON_ACC>false</P_NON_ACC>
                                     <P OFFICE>US1</P OFFICE>
                                     <P_ORG_INITG_PTY_CUST_CD>US1SACOMPUS33XXX</P_ORG_INITG_PTY_CUST_CD>
                                     <P_ORIG_MSG_TYPE>Pain_001</P_ORIG_MSG_TYPE>
<P_PAYMENT_TP>FEDWIRE</P_PAYMENT_TP>
<P_PRIORITY>900</P_PRIORITY>
                                     <P PROC DT>2010-05-02</P PROC DT>
                                     <P_PRODUCT_CD>HVP</P_PRODUCT_CD>
<P_RVS_SELL>false</P_RVS_SELL>
<P_TIME_STAMP>2010-05-02 14:54:01.528</P_TIME_STAMP>
                                     <P USER MSG TYPE>false</P USER MSG TYPE>
                               </ProcessingPersistentInfo>
                               <CutoffInfo>
                                     <P_CLEARING_CUTOFF_NM>SLA-CLEAR</P_CLEARING_CUTOFF_NM>
<P_CLEARING_CUTOFF_STS>B</P_CLEARING_CUTOFF_STS>
                                     <P_CLEARING_CUTOFF_TM>2010-05-02T15:30:00
CLEARING_CUTOFF_TM>
                                     <P_PROC_CUTOFF_NM>SLA-PROCS</P_PROC_CUTOFF_NM>
<P_PROC_CUTOFF_STS>B</P_PROC_CUTOFF_STS>
<P_PROC_CUTOFF_TM>2010-05-02T18:00:00</P_PROC_CUTOFF_TM>
                                     <P TREASURY CUTOFF NM>SLA-TRSURY</P TREASURY CUTOFF NM>
                                     <P_TREASURY_CUTOFF_STS>B</P_TREASURY_CUTOFF_STS>
<P_TREASURY_CUTOFF_TM>2010-05-02T18:00:00</P_TREASURY_CUTOFF_TM>
                               </CutoffInfo>
                               <UserDefinedFields xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
cmlns:q1="http://fundtech.com/SCL/CommonTypes"
</q1:System>
                               </UserDefinedFields>
                               <ProcessingTransientInfo>
                                     <D_DIRECT_RECEIVER_INDEX>X</D_DIRECT_RECEIVER_INDEX>
                               </ProcessingTransientInfo>
                               <Monitors>
                                     <UserMonitors>
                                            <MU_COMPLIANCE_FORCE_STS>X</MU_COMPLIANCE_FORCE_STS>
                                            <MU_FORCE_STANDARD_VD>X</MU_FORCE_STANDARD_VD>
                                            <MU_HANDLE_71G_GAP>X</MU_HANDLE_71G_GAP>
                                           <MU_MISSED_CUTOFF>X</MU_MISSED_CUTOFF>
<MU_NSF_FORCE_STS>X</MU_NSF_FORCE_STS>
<MU_PI_FORCE_STS>X</MU_PI_FORCE_STS>
                                            <MU REQ FOR CHARGES FORCE_STS>X</MU_REQ_FOR_CHARGES_FORCE_STS</pre>
                                            <MU_SPECIAL_INST_STS>X</MU_SPECIAL_INST_STS>
                                            <MU_STOP_FLAGS_OVERRIDE_STS>X</MU_STOP_FLAGS_OVERRIDE_STS>
                                     </UserMonitors>
                                     <ServiceMonitors>
                                            <MF_CANCEL_MATCH_STS>X</MF_CANCEL_MATCH_STS>
                                            <MF_CANCEL_REQUEST_VALID_STS>X</MF_CANCEL_REQUEST_VALID_STS>
<MF_CDT_STOP_FLAGS_STS>N</MF_CDT_STOP_FLAGS_STS>
                                            <MF_COMPLIANCE_VALIDATION_STS>B</mf_COMPLIANCE_VALIDATION_STS>
                                            <MF_DBT_STOP_FLAGS_STS>N</MF_DBT_STOP_FLAGS_STS>
                                            <MF_DIRECT_COVER_GENERATED>X</MF_DIRECT_COVER_GENERATED>
                                            <MF_FEE_PROC_STS>P</MF_FEE_PROC_STS>
```

```
<MF_GENERATED_ANSWER_MESSAGE>X</MF_GENERATED_ANSWER_MESSAGE:</pre>
       <MF GENERATED CANCEL REQUEST>X</MF GENERATED CANCEL REQUEST>
       <MF_GENERATE_REQ_CHARGES>X</MF_GENERATE_REQ_CHARGES>
            INITIAL_CREATE>X</MF_INITIAL_CREATE>
_MOP_SELECTION_STS>S</MF_MOP_SELECTION_STS>
       <MF N MESSAGES MATCH STS>X</MF N MESSAGES MATCH STS>
       <MF_OUT_REQ_FOR_CHRG_MATCH_STS>X</MF_OUT_REQ_FOR_CHRG_MATCH_STS>
       <MF_PISN_MATCH_STS>X</MF_PISN_MATCH_STS>
<MF_PISN_PROCESS_STS>X</MF_PISN_PROCESS_STS>
       <MF POSTING STS>P</MF POSTING STS>
       <MF_REQ_FOR_CHARGES_MATCH_STS>X</MF_REQ_FOR_CHARGES_MATCH_STS</pre>
       <MF_REQ_FOR_CHARGES_VALID_STS>X</mf_REQ_FOR_CHARGES_VALID_STS:
<MF_SPECIAL_INST_STS>X</mf_SPECIAL_INST_STS>
<MF_TIME_HOLD>H</mf_TIME_HOLD>
   </ServiceMonitors>
</Monitors>
<ReferenceData>
   <M_DBT_CUST_PROFILE>
       <F DBT CUST_BASE_NO>102030</f_DBT_CUST_BASE_NO>
       <F_DBT_CUST_COUNTRYCODE>US</f_DBT_CUST_COUNTRYCODE>
       <F_DBT_CUST_CUST_CODE>US1SACOMPUS33XXX</F_DBT_CUST_CUST_CODE>
<F_DBT_CUST_CUST_NAME>THE US COMPANY</F_DBT_CUST_CUST_NAME>
<F_DBT_CUST_CUST_TYPE>CU</F_DBT_CUST_CUST_TYPE>
       <F DBT CUST DEPARTMENT>PSV</F DBT CUST DEPARTMENT>
    </M_DBT_CUST_PROFILE>
   <M_CDT_CUST_PROFILE>
  <F_CDT_CUST_ABA>7878712</f_CDT_CUST_ABA>
       <F CDT CUST ADDRESS1>111, WALL STREET</f CDT CUST ADDRESS1>
       <F_CDT_CUST_ADDRESS2>TEST2 ADDRESSS
       <F_CDT_CUST_ALIAS>8585</f_CDT_CUST_ALIAS>
<F_CDT_CUST_CITY>NEW YORK</F_CDT_CUST_CITY>
<F_CDT_CUST_COUNTRYCODE>IE</f_CDT_CUST_COUNTRYCODE>
       <F_CDT_CUST_CUST_NAME>CITIBANK N.A.
   <F_CDT_CUST_SWIFT_ID>CITIUS33XXX</F_CDT_CUST_SWIFT_ID>
<F_CDT_CUST_ZIP>10043</F_CDT_CUST_ZIP>
</M_CDT_CUST_PROFILE>
   <M STTLM CCY PROFILE>
       <F_INSTR_CCY_DRAFT>false</f_INSTR_CCY_DRAFT>
   <F_INSTR_CCY_EURO>IN</F_INSTR_CCY_EURO>
</M_STTLM_CCY_PROFILE>
   <M DBT MOP PROFILE>
       <F_MOP_ALLOW_NAC_MSG>false</F_MOP_ALLOW_NAC_MSG>
       <F_MOP_CHK_DRAFT_CURRENCY>false</f_MOP_CHK_DRAFT_CURRENCY>
<F_MOP_CURRENCY></f_MOP_CURRENCY>
<F_MOP_MOPDOWN>false</f_MOP_MOPDOWN>
       <F MOP NCC TYPE></F MOP NCC TYPE>
       <F_MOP_NM>BOOK</F_MOP_NM>
<F_MOP_SENDOUTMSG>false</f_MOP_SENDOUTMSG>
<F_MOP_SEND_REC_IDCODE>SA</f_MOP_SEND_REC_IDCODE>
       <F MOP SETTLEMENT ACC>1/F MOP SETTLEMENT ACC>
       <F_MOP_SETT_ACC_EXISTS>false</F_MOP_SETT_ACC_EXISTS>
   <M_CDT_MOP_PROFILE>
       <F_CDT_MOP_ALLOW_NAC_MSG>false</F_CDT_MOP_ALLOW_NAC_MSG
       <F_CDT_MOP_CCY></F_CDT_MOP_CCY>
       <F_CDT_MOP_CHK_DRAFT_CCY>false/F_CDT_MOP_CHK_DRAFT_CCY>
<F_CDT_MOP_DOWN>false/F_CDT_MOP_DOWN>
       <F CDT MOP NCC TP></F CDT MOP NCC TP>
       <F_CDT_MOP_NM>BOOK</F_CDT_MOP_NM>
       <F_CDT_MOP_SENDOUTMSG>false</f_CDT_MOP_SENDOUTMSG>
<F_CDT_MOP_SEND_REC_IDCODE>SA</f_CDT_MOP_SEND_REC_IDCODE>
       <F_CDT_MOP_SETTLEMENT_ACC>1</f_CDT_MOP_SETTLEMENT_ACC>
       <F_CDT_MOP_SETT_ACC_EXISTS>false/F_CDT_MOP_SETT_ACC_EXISTS>
       <F_CDT_MOP_SPLIT_OVER_MAX>false/F_CDT_MOP_SPLIT_OVER_MAX>
   </M_CDT_MOP_PROFILE>
</ReferenceData>
<XMLPersistentInfo>
    <D_FIRST_IN_CDT_CHAIN_BIC>CITIUS33XXX</D_FIRST_IN_CDT_CHAIN_BIC>
</XMLPersistentInfo>
```

```
<QaInfo>
         <D ELAPSED TIME MS>[MessageLoad]:558.9982/D ELAPSED TIME MS>
         <QATest2/>
      </QaInfo>
  </Extn>
</Msg>
<OrigMsg>
  <Pmnt>
      <Document xmlns="urn:iso:std:iso:20022:tech:xsd:pain.001.001.03">
        <CstmrCdtTrfInitn>
            <GrpHdr>
               <MsgId>CTv422-001</MsgId>
               <CreDtTm>2008-06-25T06:19:06</CreDtTm>
               <InitgPty>
                  <Nm>THE US COMPANY</Nm>
                  <Id>
                     <OrgId>
                        <Othr>
                           <Id>US1SACOMPUS33XXX</Id>
                        </0thr>
                     </OrgId>
                  </Id>
               </InitgPty>
            </GrpHdr>
            <PmtInf>
               <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>
               <ChrgBr>SHAR</ChrgBr>
               <CdtTrfTxInf>
                  <PmtId>
                     <InstrId>CTv41-52</InstrId>
                     <EndToEndId>CTv422-8/2008-06-25</EndToEndId>
                  </PmtId>
                  <Amt>
                     <InstdAmt Ccy="USD">755</InstdAmt>
                  </Amt>
                  <ChrgBr>CRED</ChrgBr>
                  <CdtrAgt>
                     <FinInstnId>
                        <BIC>CITIUS33XXX</BIC>
                     </FinInstnId>
                  </CdtrAgt>
                  <CdtrAcct>
                     <Id>
                           <Id>3333421212</Id>
                        </0thr>
                     </Id>
```

```
</CdtrAcct
                            </CdtTrfTxInf>
                         </PmtInf>
                     </CstmrCdtTrfInitn>
                  </Document>
              </Pmnt>
              <Extn xmlns:q1="http://fundtech.com/SCL/CommonTypes";</pre>
                  <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:OperationalSection>
<q1:D_BUTTON_ID>Submit</q1:D_BUTTON_ID>
                  </q1:OperationalSection>
                  <q1:UserDefinedFields>
                     <q1:System>
<q1:PMT_CTGORY>1234</q1:PMT_CTGORY>
                     </q1:System>
                     <q1:Office/>
                     <q1:Customer/>
                  </q1:UserDefinedFields>
                  <q1:MsgNotes>
                     <q1:M_MSG_NOTES GRID>
                         <q1:F_MSG_NOTES_EXTERNAL_NOTE_IND>1</q1:F_MSG_NOTES_EXTERNAL_NOTE_IND>
q1:F_MSG_NOTES_ATTACHED_FILE_LINK>//NoteFile1.txt</q1:F_MSG_NOTES_ATTACHED_FILE_LINK>
                         <q1:F_MSG_NOTES_TEXT>LINE 1 TEXT</q1:F_MSG_NOTES_TEXT>
                         <q1:F_MSG_NOTES_USER_ID>USER1</q1:F_MSG_NOTES_USER_ID>
                         <q1:F_MSG_NOTES_CREATE_DATE>2010-01-
26T18:42:42.914+02:00</q1:F_MSG_NOTES_CREATE_DATE>
<q1:F_MSG_NOTES_REC_STATUS>AC</q1:F_MSG_NOTES_REC_STATUS>
                      </q1:M MSG NOTES GRID>
                  </q1:MsgNotes>
              </Extn>
           </OrigMsg>
           <ResponseDetails>
              <returnCode>0</returnCode>
              <description/>
          </ResponseDetails>
       </ns1:FndtMsg>
   </soap:Body>
</soap:Envelope>
```

## 2.6.3 Example 3: Non-existing MID

Invoke service with a non-existing MID (10729B4917DE3425) - service returns a fail response.

#### 2.6.3.1 Request

#### 2.6.3.2 Response

```
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope"</pre>
xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance">
   <soap:Body xmlns:ns1="http://fundtech.com/SCL/CommonTypes">
      <ns1:FndtMsg xmlns="http://fundtech.com/SCL/CommonTypes">
            <Fxtn>
               <OaInfo/>
            </Extn>
         </Msg>
         <ResponseDetails>
            <returnCode>28560</returnCode>
            <description>Message was not found for MID |1</description>
            <errorsList>
                  <code>28560</code>
                  <description>Message was not found for MID 10729B4917DE3425
               </error>
            </errorslist>
         </ResponseDetails>
      </ns1:FndtMsg>
   </soap:Body>
</soap:Envelope>
```

#### 2.6.4 Example 4: Presets with Output Mode ORIG\_PERSISTENT\_DATA

Invoke the service with an existing MID (1042984940CK0208) request for ORIG\_PERSISTENT\_DATA (one of the use presets). No format conversion is required.

#### 2.6.4.1 Request

```
<?xml version="1.0" encoding="UTF-8"?>
<soapenv:Envelope xmlns:soapenv="http://www.w3.org/2003/05/soap-envelope"</pre>
xmlns:q0="http://fundtech.com/SCL/MessageLoadService"
xmlns:q1="http://fundtech.com/SCL/CommonTypes" xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <soapenv:Header>
  <q1:credentials>
        <q1:UserID>YUVBOFA</q1:UserID>
        <q1:Role>ADMIN</q1:Role>
    </q1:credentials>
  </soapenv:Header>
  <soapenv:Body>
    <q0:PerformMessageLoadRequest>
      <q1:credentials>
       <q1:UserID>audit3</q1:UserID>
      </q1:credentials>
               <q1:P_MID>1042984940CK0208</q1:P MID>
               <q0:outputMode origPmntConversionType="Pain_001"
pmntConversionType="">ORIG_PERSISTENT_DATA</q0:outputMode>
       </q0:PerformMessageLoadRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

#### 2.6.4.2 Response

```
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope"</pre>
xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance">
   <soap:Body xmlns:ns1="http://fundtech.com/SCL/CommonTypes">
      <FndtMsg xmlns="http://fundtech.com/SCL/CommonTypes">
         <Header>
            <P MID>1042984940CK0208</P MID>
         </Header>
         <Msg>
            <Pmnt/>
            <Extn>
               <ProcessingPersistentInfo>
                  <P_TIME_STAMP>2010-05-02 14:54:01.528</P_TIME_STAMP>
               </ProcessingPersistentInfo>
               <OaInfo>
                  <D ELAPSED TIME MS>[MessageLoad]:13.054/D ELAPSED TIME MS>
                  <QATest2/>
               </0aInfo>
            </Extn>
         </Msg>
         <OrigMsg>
            <Pmnt>
               <Document xmlns="urn:iso:std:iso:20022:tech:xsd:pain.001.001.03">
                  <CstmrCdtTrfInitn>
                     <GrpHdr>
                         <MsgId>CTv422-001</MsgId>
                         <CreDtTm>2008-06-25T06:19:06</CreDtTm>
                         <InitgPty>
                            <Nm>THE US COMPANY</Nm>
                            <Id>
                               <OrgId>
                                  <Othr>
                                     <Id>US1SACOMPUS33XXX</Id>
                                  </Othr>
                               </OrgId>
                            </Id>
                        </InitgPty>
                     </GrpHdr>
                     <PmtInf>
                         <PmtMtd>TRF</PmtMtd>
                         <ReqdExctnDt>2009-05-04</ReqdExctnDt>
                         <Dbtr>
                            <Nm>THE US COMPANY</Nm>
                            <Id>
                                 <Othr>
                                    <Id>US1SACOMPUS33XXX</Id>
                                  </Othr>
                               </OrgId>
                            </Id>
                         </Dbtr>
                         <DbtrAcct>
                            <Id>
                                  <Id>2222222</Id>
                               </othr>
                            </Id>
                            <Ccy>USD</Ccy>
                         </DbtrAcct>
                         <DbtrAgt>
                            <FinInstnId>
                              <BIC>BOFAUS31XXX</BIC>
                            </FinInstnId>
                         </DbtrAgt>
                         <ChrgBr>SHAR</ChrgBr>
                         <CdtTrfTxInf>
                            <PmtId>
```

```
<InstrId>CTv41-52</InstrId>
                                <EndToEndId>CTv422-8/2008-06-25</EndToEndId>
                             </PmtId>
                             <Amt>
                                <InstdAmt Ccy="USD">755</InstdAmt>
                             </Amt>
                             <ChrgBr>CRED</ChrgBr>
                             <CdtrAgt>
<FinInstnId>
                                   <BIC>CITIUS33XXX</BIC>
                                 </FinInstnId>
                             </CdtrAgt>
                             <CdtrAcct>
                                <Id>
                                       <Id>3333421212</Id>
                                    </Othr>
                                </Id>
                             </CdtrAcct
                          </CdtTrfTxInf>
                       </PmtInf>
                   </CstmrCdtTrfInitn>
                </Document>
             </Pmnt>
             <Extn xmlns:q1="http://fundtech.com/SCL/CommonTypes">
                <q1:ProcessingPersistentInfo>
<q1:P_OFFICE>US1</q1:P_OFFICE>
                   <q1:P DEPARTMENT>PSV</q1:P DEPARTMENT>
                   <q1:DebitSide>
                      <q1:P_DBT_ACCT_NB>222222222</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:OperationalSection>
<q1:D_BUTTON_ID>Submit</q1:D_BUTTON_ID>
                </q1:OperationalSection>
                <q1:UserDefinedFields>
                   <q1:System>
<q1:PMT_CTGORY>1234</q1:PMT_CTGORY>
                   </q1:System>
                   <q1:Office/>
                   <q1:Customer/>
                </q1:UserDefinedFields>
                <q1:MsgNotes>
                   <q1:M_MSG_NOTES_GRID>
                       <q1:F_MSG_NOTES_EXTERNAL_NOTE_IND>1</q1:F_MSG_NOTES_EXTERNAL_NOTE_IND>
<q1:F_MSG_NOTES_ATTACHED_FILE_LINK>//NoteFile1.txt</q1:F_MSG_NOTES_ATTACHED_FILE_LINK>
                       <q1:F MSG NOTES TEXT>LINE 1 TEXT</q1:F MSG NOTES TEXT>
                       <q1:F_MSG_NOTES_USER_ID>USER1</q1:F_MSG_NOTES_USER_ID>
</q1:M_MSG_NOTES_GRID>
                </q1:MsgNotes>
             </Extn>
          </OrigMsg>
          <ResponseDetails>
             <returnCode>0</returnCode>
             <description/>
         </ResponseDetails>
      </FndtMsg>
   </soap:Body>
</soap:Envelope>
```

# 3 Message Submit Service Description

#### 3.1 Overview

This service creates a new message in GPP or amends an existing one. The service includes some action button validations (i.e., the action button is allowed for the message status) and some payment attributes validations (for example, mandatory attributes are set correctly), as well as user authorization to perform the action.

For more information, see <u>Use Case: Payment is submitted and only minimal success failure details</u> are required in the response.

The service can accept a batch (i.e. multiple payments) or a single payment action.

The MessageSubmitService also supports an optional request, to return in the response the full or partial information from GPP regarding the submitted message. This information includes computed, derived, or enriched information and when relevant, the updated message to be sent out (in technical terms – full or partial PDO for this message).

For more information, see <u>Use Case: Payment is submitted and additional details are required in the response.</u>

This option can also be used for validating a message before submitting it. When using the Validate button instead of the Submit button, the service returns all the requested information back to the channel, and no trace is left in GPP for this message. Then, after verifying with customer that the processing details are as expected, and after receiving approval, the channel can submit the message (now with the Submit button) for processing until completion.

For more information, see <u>Use Case: Payment is submitted for validation and only minimal success</u> <u>failure details are required in the response.</u>

For more information, see <u>Use Case: Payment is submitted for validation and additional details are</u> required in the response.

#### 3.2 Service Functions

This service only supports a single method: MessageSubmitService.

This table lists the possible action buttons available for use in the service:

Button ID	Description		
Submit	Performs validations and processes the payment either for a new message created via the service, or after update of an existing message. Returns all errors or a successful response, and optionally additional computed, derived and enriched information,		
Reject	Prompts a rejection (PACS 002) for a payment		
CancelTemplate	Cancels/deletes a templates		
Approve	Releases the payment/template into the processing flow from the Pending Approval status queue		
CreatePaymentFromTemplate	Receives the template ID Receives the template ID and changed fields, and generates individual/multiple payments (in this case, the payment information is derived from the template and from the quick fill fields).		

Button ID	Description		
	Step 1 – Get the list of templates that belong to the selected template set (by user). For this step use the GetQueueListService with the operator In Template Set.		
	Step 2 – Generate individual/multiple payments by sending the template ID and the fields that the user entered (such as value date and amount).		
Send to Repair	Sends the payment to Repair status		
Save	Saves payment without performing validation (set payment status to Timed Hold)		
AcceptDupex	Confirms the payment is not a duplicate for payments that are waiting in possible duplicate queue		
Cancel Request	Initiates the cancellation process. That is, changing message status to Pending cancellation request from which a user can either RefuseCancel or Cancel the payment.		
RefuseCancel	Refuse to cancel a payment (for a cancellation request). Payment returns to its previous status.		
Cancel	Sends payment to Cancel status queue.		
Validate	Returns all errors, and optionally additional computed, derived and enriched information, without saving the payment.		
FinalApprove	Perform final approval step for pending approval messages.		

Note: An additional capability is to store user notes for every action that will be associated with the message. These notes are defined as internal or external notes. Each note may contain a link to a reference file. Some notes can be accessed and edited.

## 3.3 Input

- A subset of D+H standard message
- These Input Parameters must be part of the input request:

Mandatory extension fields for MessageSubmitService input.

Parameter	Tag Name	L	Format	Comment
Extension Extn		0	{11}	D+H Extension
Persistent +ProcessingPersiste Information ntInfo		1	{11}	
Office	++P_OFFICE	2	String {01}	A 3 letter code from BANKS table in the DB
Department	++P_DEPARTMENT	2	String {01}	The relevant Office Department code
Operational instructions	+OperationalSection	1	{11}	
Action name	++D_BUTTON_ID	2	String {11}	The action name is a valid button ID taken from MESSAGEBUTTONS table (See action buttons)

## 3.3.1 Service Input Table Legend

The table explains the symbols used in the Service Input tables.

Symbol	Description	
L	Element level in the file	
++++	Shows the element indentation	

# 3.4 Processing

Input validations that include:

- 1. Action button exists (MESSAGEBUTTONS.BUTTONID) AND.
- 2. Message button is allowed for the message status (P\_MSG\_STS).
  - a. Assess Message fields sets selection system rule to identify the relevant button screen set (see list of Screen Set).

These are the Screen Sets for the Different Message Statuses:

Condition	Screen set
[P_MSG_STS] = APPROVE_CANCEL	WSI_STTN_APPR_CNCL
[P_MSG_STS] = COMPLETE AND [P_IS_HISTORY] = 2	WSI_STTN_CMPLT_TMP
[P_MSG_STS] = DUPEX	WSI_STTN_DUPX
[P_MSG_STS] = NAK	WSI_STTN_NAK
[P_MSG_STS] = PEND_APPROV	WSI_STTN_PND_APPR
[P_MSG_STS] = (RECEIVED)	WSI_STTN_RCVD
[P_MSG_STS] = REPAIR	WSI_STTN_RPR
[P_IS_HISTORY] = 2 AND [P_MSG_STS] = REPAIR	WSI_STTN_RPR_TMPLT
[P_MSG_STS] = SCHEDULE	WSI_STTN_SCHED
[P_MSG_STS] = VERIFY	WSI_STTN_VRFY

With screen set defined, assess the available action buttons for the screen and make sure the provided button ID is allowed for this screen set:

Screen Set	Message Status	Button ID
WSI_STTN_CMPLT_TMP	Complete templates	Submit
WSI_STTN_CMPLT_TMP	Complete templates	CreatePaymentFromTemplate
WSI_STTN_APPR_CNCL	Approve cancel	Approve
WSI_STTN_APPR_CNCL	Approve cancel	RefuseCancel
WSI_STTN_APPR_CNCL	Approve cancel	Reject
WSI_STTN_PND_APPR	Pending approval	Approve
WSI_STTN_PND_APPR	Pending approval	Cancel
WSI_STTN_PND_APPR	Pending approval	CancelTemplate

Screen Set	Message Status	Button ID
WSI_STTN_PND_APPR	Pending approval	FinalApprove
WSI_STTN_PND_APPR	Pending approval	Reject
WSI_STTN_PND_APPR	Pending approval	Submit
WSI_STTN_RPR_TMPLT	Repair template	CancelTemplate
WSI_STTN_DUPX	Possible duplicate	AcceptDupex
WSI_STTN_CMPLT_TMP	Complete templates	CancelTemplate
WSI_STTN_CMPLT_TMP	Complete templates	Reject
WSI_STTN_CMPLT_TMP	Complete templates	Send to Repair
WSI_STTN_DUPX	Possible duplicate	Cancel
WSI_STTN_DUPX	Possible duplicate	Reject
WSI_STTN_DUPX	Possible duplicate	Submit
WSI_STTN_DUPX	Possible duplicate	Validate
WSI_STTN_RCVD	Received	Save
WSI_STTN_RCVD	Received	Submit
WSI_STTN_RCVD	Received	Validate
WSI_STTN_RPR	Repair	Cancel
WSI_STTN_RPR	Repair	Save
WSI_STTN_RPR	Repair	Validate
WSI_STTN_RPR	Repair	Submit
WSI_STTN_SCHED	Schedule	Cancel
WSI_STTN_NAK	NAK	Send to Repair
WSI_STTN_NAK	NAK	Cancel

# 3.5 Output

- Successful creation of a new message in GPP repository (MINF table)
- A D+H message format is returned, along with a message ID that was associated with the message

This table is an extract from D+H message showing the important additional derived information that is returned together with the response.

Parameter	Tag Name	Format	Comment
Message ID	P_MID	String {11}	Message unique ID in GPP
Message status	P_MSG_STS	String {11}	The queue where the payment is. This would be MSG_STATUS from STATUSES system table
Time stamp	P_TIME_STAMP	Date time {11}	Server time representing the last time the message was modified
Payment/Template indicator	P_IS_HISTORY	[0,2]{11}	Valid Values: 0 - Active Partition 1 - Historical Partition 2 - Templates Partition

# 3.6 Errors

Code	Description	Notes
40037	Party cannot be found. Invalid account number: [invalid account number].	
40039	Unable to identify 1st in credit chain	
40040	Unable to identify 1st in debit chain	
40041	Failed to derive account number	
40078	Sender ([Original Sender BIC]) has no debit authorization on account number ([Debit account number]) (BIC = [Debit party BIC])	Debit authorization check has been failed
40083	Party cannot be found. Invalid ABA: [Invalid ABA].	
40079	Initiating party [Name of the party] has no debit authorization on account number [Debit account number]	Debit authorization check has been failed
40102	Payment status does not allow cancellation	Error message which will be issued when cancellation request cannot be processed because the original payment status does not allow cancellation
40161	Payment future value date ( 1) is greater than the MOP max extension ( 2)	
60019	Dbtr is empty	
60020	Dbtr BIC is invalid	
60021	Dbtr Agent ID is invalid	
60022	Dbtr Agent BIC is invalid	
60023	Instg Rmbrsmnt Agent is empty	
60024	Instg Rmbrsmnt Agent BIC is invalid	
60025	Instd Rmbrsmnt Agent is empty	
60026	Instd Rmbrsmnt Agent BIC is invalid	
60027	Thrd Rmbrsmnt Agent is empty	
60028	Thrd Rmbrsmnt Agent BIC is invalid	
60029	Intrmy Agent1 should be empty	
60030	Intrmy Agent1 is empty	
60031	Intrmy Agent1 BIC is invalid	
60032	Cdtr Agent is empty	
60033	Cdtr Agent BIC is invalid	
60034	Cdtr is empty	
60084	The action ButtonID used in the submit action is not allowed for a message with status Current message status	
60035	Cdtr BIC is invalid	
40199	Cancel action is not permitted on a Template pending Future changes	

Code	Description	Notes
40200	No action is permitted on a Template pending Future changes	

See also Generic Errors.

### 3.7 Examples

## 3.7.1 Example 1: Manual Creation of a Payment

3.7.1.1 Use Case: Payment is submitted and only minimal success failure details are required in the response

#### 3.7.1.1.1 Request

Provide payment details and action button (D\_BUTTON\_ID) as submit.

```
<?xml version="1.0" encoding="UTF-8"?>
<soapenv:Envelope
xmlns:q0="http://fundtech.com/SCL/MessageSubmitService"
xmlns:q1="http://fundtech.com/SCL/CommonTypes"
xmlns:soapenv="http://www.w3.org/2003/05/soap-envelope"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
         xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
 <soapenv:Header>
  <q1:FndtHeader>
   <q1:credentials>
    <q1:UserID>SERVICES</q1:UserID>
   <q1:Role>ADMIN</q1:Role>
   </q1:credentials>
  </q1:FndtHeader>
 </soapenv:Header>
 <soapenv:Body>
  <q0:MessageSubmitRequest>
   <q0:MsgBatch>
    <q1:FndtHeader>
     <q1:credentials>
     <q1:UserID>audit3</q1:UserID>
     </q1:credentials>
    </g1: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>CTv422-002</MsgId>
           <CreDtTm>2008-06-25T06:19:06</CreDtTm>
           <BtchBookg>false/BtchBookg>
           <NbOfTxs>1</NbOfTxs>
           <CtrlSum>700</CtrlSum>
           <Grpg>GRPD</Grpg>
           <InitgPty>
            <Nm>THE US COMPANY</Nm>
            <Id>
             <OrgId>
               <Id>US1SACOMPUS33XXX</Id>
```

```
</0thr>
   </OrgId>
  </Id>
</InitgPty>
</GrpHdr>
<PmtInf>
<PmtMtd>TRF</PmtMtd>
<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>8552502</Id>
   </0thr>
  </Id>
 <Ccy>EUR</Ccy>
 </DbtrAcct>
 <DbtrAgt>
 <FinInstnId>
  <BIC>BOFAUS31XXX</BIC>
 </FinInstnId>
 </DbtrAgt>
 <CdtTrfTxInf>
  <PmtId>
   <InstrId>AD_27</InstrId>
   <EndToEndId>Csa40E-27</EndToEndId>
  </PmtTd>
  <Amt>
  <InstdAmt Ccy="USD">731</InstdAmt>
  </Amt>
  <ChrgBr>CRED</ChrgBr>
  <CdtrAgt>
   <FinInstnId>
   <BIC>CITIUS33XXX</BIC>
   </FinInstnId>
  </CdtrAgt>
  <CdtrAcct>
   <Id>
    <Othr>
    <Id>3333421212</Id>
   </0thr>
   </Id>
  </CdtrAcct>
  <CtgyPurp>
   <Cd>GDDS</Cd>
  </CtgyPurp>
  <RmtInf>
   <Strd>
    <RfrdDocInf>
     <Tp>
      <CdOrPrtry>
      <Cd>CINV</Cd>
      </CdOrPrtry>
     </Tp>
     <RfrdDocNb>ABC-13679</RfrdDocNb>
    </RfrdDocInf>
    <RfrdDocRltdDt>2009-05-04</RfrdDocRltdDt>
   </Strd>
  </RmtInf>
 </CdtTrfTxInf>
</PmtInf>
```

```
</CstmrCdtTrfTnitn>
        </Document>
       </a1:Pmnt>
       <q1:Extn>
        <q1:ProcessingPersistentInfo>
         <q1:P_OFFICE>US1</q1:P_OFFICE>
         <q1:P_DEPARTMENT>PSV</q1:P_DEPARTMENT>
        </q1:ProcessingPersistentInfo>
        <q1:OperationalSection>
         <q1:D BUTTON ID>Submit</q1:D BUTTON ID>
        </q1:OperationalSection>
       </q1:Extn>
      </q1:Msg>
    </q1:FndtMsg>
    </q1:FndtPmntTxInf>
  </q0:MsgBatch>
 </q0:MessageSubmitRequest>
</soapenv:Body>
</soapenv:Envelope
```

#### 3.7.1.1.2 Response

Use Case: Payment was successfully created. The MID is returned along with the time stamp of creation and a payment/template indicator and the message status.

```
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope"</pre>
xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-
   <soap:Body xmlns:ns1="http://fundtech.com/SCL/CommonTypes">
      <FndtMsgBatch xmlns="http://fundtech.com/SCL/CommonTypes">
         <FndtPmntTxInf>
             <FndtMsg>
                <Header>
                   <P MID>10C02A4104J00231</P MID>
                </Header>
                <Msg>
                   <Pmnt/>
                   <Extn>
                      <ProcessingPersistentInfo>
                          <P IS HISTORY>0</P IS HISTORY>
                         <P_MSG_STS>PEND_APPROV<P_TIME_STAMP>2010-12-02 10:41:06.
                                                    10:41:06.134</P_TIME_STAMP:
                      </ProcessingPersistentInfo>
                   </Fxtn>
                </Msg>
            </FndtMsg>
          </FndtPmntTxInf>
      </FndtMsgBatch>
   </soap:Body>
</soap:Envelope>
```

Use Case: Message already exists (payment is created but moving to possible duplicate queue)

```
<M MSGERR LINE>
                           <F_MSGERR_CODE>6042</F_MSGERR_CODE>
                           <F_MSGERR_TIME_STAMP>2010-12-02 10:37:53.726/F_MSGERR_TIME_STAMP>
                           <F MSGERR CREATE DATE>2010-11-30T20:17:53/F MSGERR CREATE DATE>
                           <F_MSGERR_TIME_ZONE>EST</f_MSGERR_TIME_ZONE>
                           <F_MSGERR_FAULT></F_MSGERR_FAULT>
                           <F_MSGERR_PARAMS/>
                           <F MSGERR DISPLAY>0</F MSGERR DISPLAY>
                           <F_MSGERR_FIELD_LOGICAL_ID/>
                        </M_MSGERR_LINE>
                     </MsgErrors>
                     <ProcessingPersistentInfo>
                        <P_IS_HISTORY>0</P_IS_HISTORY>
                        <P TEMPLATE CD>05</P TEMPLATE CD>
                        <P_TIME_STAMP>2010-12-02 10:37:53.775</P_TIME_STAMP>
                     </ProcessingPersistentInfo>
                  </Extn>
               </Msg>
            </FndtMsg>
         </FndtPmntTxInf>
      </FndtMsgBatch>
  </soap:Body>
</soap:Envelope>
```

#### 3.7.1.2 Use Case: Payment is submitted and additional details are required in the response

Provide payment details, action button (D\_BUTTON\_ID) as submit, and an additional instruction regarding the scope returned in the Response.

Add the following to the request to receive a response with the optional information:

#### where:

- outputMode pmntConversionType is the message type, such as pain.001.
- **origPmntConversionType** is the format of the message type, such as AS-IS (meaning same message type as received), or a quoted message type as pain.001 or pacs.008
- A Format Type (as configured in the XML\_FORMAT\_TYPE\_RELATIONS table that represents the scope out of the full Fndt Message that should be exposed in the Response, such as FULL – for full scope.

The <q1:outputMode> tag must immediately follow the <q0:MessageSubmitRequest> tag. For an example of a request, see Request. For an example of a response, see Response.

#### 3.7.1.2.1 Request

The following example includes an optional <q1:outputMode> tag, which must directly follow the <q0:MessageSubmitRequest> tag, for a response that includes a specific message type in the Fndt Message structure.

```
</q1:credentials>
     </q1:FndtHeader>
   </soapenv:Header>
   <soapenv:Body>
      <q0:MessageSubmitRequest>
         <q0:MsgBatch>
            <q1:FndtHeader>
               <q1:credentials>
                  <q1:UserID>HOR2</q1:UserID>
               </q1:credentials>
            </q1:FndtHeader>
            <q1:FndtPmntTxInf>
               <q1:FndtMsg>
               <q1:Header>
                  <!--q1:P_MID forCreation="false"></q1:P_MID-->
                  <P_INIT_SRC_ID>FTR</P_INIT_SRC_ID>
                  <D_SKIP_PERSIST_ON_ERROR>true
               </q1:Header>
                  <q1:Msg>
                     <q1:Pmnt>
<Document xmlns="urn:iso:std:iso:20022:tech:xsd:pain.001.001.06">
        <CstmrCdtTrfInitn>
          <GrpHdr>
            <MsgId>TESTTCH001</MsgId>
            <CreDtTm>2016-11-01T06:45:57</CreDtTm>
            <NbOfTxs>1</NbOfTxs>
            <InitgPty>
              <Nm>Tom Hanks</Nm>
              <Id>
                <OrgId>
                  <Othr>
                   <Id>US1CUTOMHA</Id>
                </OrgId>
              </Id>
            </InitgPty>
          </GrpHdr>
          <PmtInf>
            <PmtInfId>TESTSNE_V32
            <PmtMtd>TRF</PmtMtd>
            <PmtTpInf>
              <InstrPrty>HIGH</InstrPrty>
              <SvcLvl>
                <Prtry>SDVA</Prtry>
              </SvcLvl>
              <CtgyPurp>
                <Cd>SDVA</Cd>
              </CtgyPurp>
            </PmtTpInf>
            <ReqdExctnDt>2016-11-21</ReqdExctnDt>
            <Dbtr>
              <Nm>Tom Hanks</Nm>
              <Id>
                <OrgId>
                  <Othr>
                    <Id>US1CUTOMHA</Id>
                  </Othr>
                </OrgId>
              </Id>
            </Dbtr>
            <DbtrAcct>
              <Id>
                  <Id>7770000022</Id>
                </Othr>
              </Id>
            </DbtrAcct>
            <DbtrAgt>
```

```
<FinInstnId>
        <ClrSysMmbId>
            <MmbId>020010001</MmbId>
         </ClrSysMmbId>
     </FinInstnId>
</DbtrAgt>
<CdtTrfTxInf>
 <PmtId>
      <InstrId>ER${=System.nanoTime().toString().substring(0, 12)}</InstrId>
      <EndToEndId>E${=System.nanoTime().toString().substring(0, 12)}</EndToEndId>
  <PmtTpInf>
    <InstrPrty>HIGH</InstrPrty>
    <SvcLvl>
      <Prtry>SDVA</Prtry>
    </SvcLvl>
    <LclInstrm>
      <Prtry>CONSUMER</Prtry>
    </LclInstrm>
  </PmtTpInf>
 <Amt>
    <InstdAmt Ccy="USD">100.00</InstdAmt>
 <ChrgBr>SHAR</ChrgBr>
 <UltmtDbtr>
    <Nm>Tom Hanks</Nm>
    <PstlAdr>
      <AdrLine>Adr</AdrLine>
    </PstlAdr>
    <Id>
      <PrvtId>
        <Othr>
          <Id>Id</Id>
          <SchmeNm>
            <Cd>ARNU</Cd>
          </SchmeNm>
        </Othr>
      </PrvtId>
    </Id>
 </UltmtDbtr>
 <CdtrAgt>
    <FinInstnId>
            <ClrSysMmbId>
               <MmbId>131000000</MmbId>
            </ClrSysMmbId>
         </FinInstnId>
  </CdtrAgt>
<Cdtr>
 <Nm>Dan Fox</Nm>
 <PstlAdr>
    <StrtNm>Mircea Voda</StrtNm>
    <BldgNb>40</BldgNb>
    <PstCd>030669</PstCd>
    <TwnNm>Bucuresti</TwnNm>
    <Ctry>RO</Ctry>
  </PstlAdr>
    <PrvtTd>
      <DtAndPlcOfBirth>
        <BirthDt>1976-02-14</BirthDt>
        <CityOfBirth>GL</CityOfBirth>
        <CtryOfBirth>RO</CtryOfBirth>
    </DtAndPlcOfBirth>
    </PrvtId>
  </Td>
</Cdtr>
 <CdtrAcct>
    <Id>
      <Othr>
        <Id>5544411121</Id>
```

<SchmeNm>

```
<Cd>BBAN</Cd>
                     </SchmeNm>
                     <Issr>123456</Issr>
                   </0thr>
                 </Id>
              </CdtrAcct>
              <RltdRmtInf>
                 <RmtId>111</RmtId>
              </RltdRmtInf>
            </CdtTrfTxInf>
          </PmtInf>
        </CstmrCdtTrfInitn>
      </Document>
     </q1:Pmnt>
     <q1:Extn>
        <q1:ProcessingPersistentInfo>
            <q1:P_OFFICE>US1</q1:P_OFFICE>
            <q1:P_DEPARTMENT>USD</q1:P_DEPARTMENT>
            <q1:P_PAYMENT_TP>FTR</q1:P_PAYMENT_TP>
            <!--q1:P_TIME_STAMP></q1:P_TIME_STAMP-->
         <UserDefinedFields>
             <System>
                   <q1:UDF_CHANGE_NOTES></q1:UDF_CHANGE_NOTES>
                   <q1:UDF_CANCEL_NOTES></q1:UDF_CANCEL_NOTES>
                   <q1:UDF_CLIENT_EXPIRATION_DATE></q1:UDF_CLIENT_EXPIRATION_DATE></q1:UDF_INITIATED_FROM></q1:UDF_INITIATED_FROM>
                   <q1:CID_DBT></q1:CID_DBT>
                   <q1:CID_CRT></q1:CID_CRT>
                   <q1:UDF_INTRMY_AGT1_ADV></q1:UDF_INTRMY_AGT1_ADV>
                   <q1:UDF_INTRMY_AGT2_ADV></q1:UDF_INTRMY_AGT2_ADV>
                   <q1:CONSUMER>0</q1:CONSUMER>
                   <q1:UDF_CLIENT_AUTHENT></q1:UDF_CLIENT_AUTHENT>
                   <!-- ONLY ON SUBMIT-->
                   <!--UDF CUST HAS REVIEWED></UDF CUST HAS REVIEWED>
                   <UDF_CUST_AWARE_FEE></UDF_CUST_AWARE_FEE>
                   <UDF CUST SIG AUTH></UDF CUST SIG AUTH>
                   <UDF OBTAIN AUTH></UDF OBTAIN AUTH>
                     <UDF_SIG_VERIFIED></UDF_SIG_VERIFIED>
                     <UDF_CUST_APPEARED></UDF_CUST_APPEARED-->
             </System>
         </UserDefinedFields>
        </q1:ProcessingPersistentInfo>
        <Monitors>
             <ServiceMonitors>
                   <MF_CDB_DB_STS></MF_CDB_DB_STS>
                   <MF_CDB_CR_STS></MF_CDB_CR_STS>
              </ServiceMonitors>
        </Monitors>
        <q1:OperationalSection>
              <q1:D_BUTTON_ID>Submit</q1:D_BUTTON_ID>
        </q1:OperationalSection>
        <q1:MsgNotes>
              <q1:F_MSG_NOTES_TEXT>Note</q1:F_MSG_NOTES_TEXT>
        </q1:MsgNotes>
       </q1:Extn>
      </q1:Msg>
     </q1:FndtMsg>
    </q1:FndtPmntTxInf>
   </q0:MsgBatch>
  </q0:MessageSubmitRequest>
 </soapenv:Body>
</soapenv:Envelope>
```

#### 3.7.1.2.2 Response

The following example shows a response to a request for a specific message enriched with a FULL Fndt Message structure.

```
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
   <env:Header xmlns:env="http://www.w3.org/2003/05/soap-envelope"/>
   <soap:Body>
      <FndtMsgBatch xmlns="http://fundtech.com/SCL/CommonTypes">
         <FndtPmntTxInf>
            <FndtMsg>
               <Header>
                  <P_MID>HA1BH58426SN2D1W</P_MID>
               </Header>
               <Msg>
                   <Pmnt>
                      <Document xmlns="urn:iso:std:iso:20022:tech:xsd:pain.001.001.03">
                         <CstmrCdtTrfInitn>
                            <GrpHdr>
                               <MsgId>TESTTCH001</MsgId>
                               <CreDtTm>2016-11-01T06:45:57.000</CreDtTm>
                               <NbOfTxs>1</NbOfTxs>
                               <InitgPty>
                                  <Nm>Tom Hanks</Nm>
                                  <Id>
                                     <OrgId>
                                        <Othr>
                                           <Id>US1CUTOMHA</Id>
                                        </Othr>
                                     </OrgId>
                                  </Id>
                               </InitgPty>
                            </GrpHdr>
                            <PmtInf>
                               <PmtInfId>TESTSNE V32/PmtInfId>
                               <PmtMtd>TRF</PmtMtd>
                               <PmtTpInf>
                                  <SvcLvl>
                                     <Prtry>SDVA</Prtry>
                                  </SvcLvl>
                               </PmtTpInf>
                               <RegdExctnDt>2016-11-21</RegdExctnDt>
                               <Dbtr>
                                  <Nm>Tom Hanks</Nm>
                                  <Id>
                                     <OrgId>
                                        <Othr>
                                           <Id>US1CUTOMHA</Id>
                                        </0thr>
                                     </OrgId>
                                  </Id>
                               </Dbtr>
                               <DbtrAcct>
                                  <Id>
                                     <Othr>
                                        <Id>7770000022</Id>
                                     </Othr>
                                  </Id>
                               </DbtrAcct>
                               <DbtrAgt>
                                  <FinInstnId>
                                     <ClrSysMmbId>
                                        <MmbId>020010001</MmbId>
                                     </ClrSysMmbId>
                                  </FinInstnId>
                               </DbtrAgt>
                               <ChrgBr>SHAR</ChrgBr>
                               <CdtTrfTxInf>
                                  <PmtId>
                                     <InstrId>ER208817514642</InstrId>
                                     <EndToEndId>E208817515367</EndToEndId>
                                  </PmtId>
                                  <PmtTpInf>
                                     <SvcLv1>
                                        <Prtry>SDVA</Prtry>
```

```
</SvcLvl>
                  <LclInstrm>
                      <Prtry>CONSUMER</Prtry>
                  </LclInstrm>
                  <CtgyPurp>
                     <Cd>SDVA</Cd>
                  </CtgyPurp>
               </PmtTpInf>
               <Amt>
                  <InstdAmt Ccy="USD">100.00</InstdAmt>
               </Amt>
               <ChrgBr>SHAR</ChrgBr>
               <UltmtDbtr>
                  <Nm>Tom Hanks</Nm>
                  <PstlAdr>
                     <AdrLine>Adr</AdrLine>
                  </PstlAdr>
                  <Id>
                      <PrvtId>
                         <SchmeNm>
                            <Cd>ARNU</Cd>
                         </SchmeNm>
                         <Othr>
                            <Id>Idd</Id>
                         </0thr>
                      </PrvtId>
                  </Id>
               </UltmtDbtr>
               <CdtrAgt>
                  <FinInstnId>
                      <ClrSysMmbId>
                         <MmbId>131000000</MmbId>
                      </ClrSysMmbId>
                  </FinInstnId>
               </CdtrAgt>
               <Cdtr>
                  <Nm>Dan Fox</Nm>
                  <PstlAdr>
                      <StrtNm>Mircea Voda</StrtNm>
                     <BldgNb>40</BldgNb>
                     <PstCd>030669</PstCd>
                     <TwnNm>Bucuresti</TwnNm>
                     <Ctry>RO</Ctry>
                  </PstlAdr>
                  <Id>
                      <PrvtId>
                         <DtAndPlcOfBirth>
                            <BirthDt>1976-02-14</BirthDt>
                            <CityOfBirth>GL</CityOfBirth>
                            <CtryOfBirth>RO</CtryOfBirth>
                         </DtAndPlcOfBirth>
                     </PrvtId>
                  </Id>
               </Cdtr>
               <CdtrAcct>
                  <Id>
                         <Id>5544411121</Id>
                      </Othr>
                  </Id>
               </CdtrAcct>
            </CdtTrfTxInf>
         </PmtInf>
      </CstmrCdtTrfInitn>
   </Document>
</Pmnt>
<Extn>
   <AuditTrail>
      <M_AUDIT_TRAIL>
         <F_AUDIT_ERROR_CODE>40090/F_AUDIT_ERROR_CODE>
```

```
<F AUDIT USER NAME>HOR2/F AUDIT USER NAME>
                                               <F_AUDIT_TIME_STAMP>2017-01-11 17:58:42.717/F_AUDIT_TIME_STAMP>
                                               <F_AUDIT_END_DATE>2017-01-11T02:58:42</F_AUDIT_END_DATE>
                                               <F AUDIT UPDATE DATE>2017-01-11T02:58:42</f AUDIT UPDATE DATE>
                                               <F AUDIT ZONE CODE>EST</F AUDIT ZONE CODE>
                                               <F_AUDIT_ERROR_PARAMS>@@Submit@@STRING@@</F_AUDIT_ERROR_PARAMS>
                                               <F_AUDIT_IS_NEW>false</F_AUDIT_IS_NEW>
                                          </M_AUDIT_TRAIL>
                                          <M_AUDIT_TRAIL>
                                               <F AUDIT ERROR CODE>40033/F AUDIT ERROR CODE>
                                               <F_AUDIT_USER_NAME>HOR2</F_AUDIT_USER_NAME>
                                               <F_AUDIT_TIME_STAMP>2017-01-11 17:58:42.708</F_AUDIT_TIME_STAMP>
                                               <F_AUDIT_END_DATE>2017-01-11T02:58:42</f_AUDIT_END_DATE>
                                               <F_AUDIT_UPDATE_DATE>2017-01-11T02:58:42</f_AUDIT_UPDATE_DATE>
                                               <F AUDIT ZONE CODE>EST</F AUDIT ZONE CODE>
                                               < F\_AUDIT\_ERROR\_PARAMS > @@VERIFY @@STRING @@@@, @@Workflow\ Determination - for the content of the content o
Manual@@STRING@@@@,@@VERIFY@@STRING@@@,@@***@@STRING@@</F_AUDIT_ERROR_PARAMS>
                                               <F_AUDIT_IS_NEW>false</F_AUDIT_IS_NEW>
                                          </M AUDIT TRAIL>
                                    </AuditTrail>
                                    <ProcessingPersistentInfo>
                                          <DebitSide>
                                               <P_DBT_MOP>BOOK</P_DBT_MOP>
                                          </DebitSide>
                                          <P_BASE_AMT>100.0</P_BASE_AMT>
                                          <P_BASE_CCY>USD</P_BASE_CCY>
                                         <P_BASE_MSG_STS>(RECEIVED)</P_BASE_MSG_STS>
                                         <P_DEPARTMENT>USD</P_DEPARTMENT>
                                          <P_DESTINATION_OFFICE>US1</P_DESTINATION_OFFICE>
                                         <P_DISPLAY_MSG_TYPE>PAIN001</P_DISPLAY_MSG_TYPE>
                                          <P_FINALIZATION_DT>2099-12-31</P_FINALIZATION_DT>
                                         <P_INSTR_ID>ER208817514642</P_INSTR_ID>
                                          <P_MSG_CLASS>PAY</P_MSG_CLASS>
                                          <P_MSG_STS>VERIFY</P_MSG_STS>
                                         <P_MSG_TYPE>Pain_001</P_MSG_TYPE>
                                          <P_OFFICE>US1</P_OFFICE>
                                         <P ORIG MSG TYPE>Pain 001</P ORIG MSG TYPE>
                                          <P ORIG STTLM AMT>100.00/P ORIG STTLM AMT>
                                         <P_ORIG_STTLM_CCY>USD</P_ORIG_STTLM_CCY>
                                          <P_ORIG_STTLM_DT>2016-11-21</P_ORIG_STTLM_DT>
                                         <P_PAYMENT_TP>FTR</P_PAYMENT_TP>
                                          <P_PROC_DT>2016-11-21</P_PROC_DT>
                                          <P_STTLM_DT_1B>2016-11-21</P_STTLM_DT_1B>
                                          <P_TIME_STAMP>2017-01-11 17:58:42.719</P_TIME_STAMP>
                                          <P_TRX_DIRECTION>O</P_TRX_DIRECTION>
                                         <P_TX_ID>TESTSNE_V32</P_TX_ID>
                                    </ProcessingPersistentInfo>
                                    <OperationalSection>
                                          <D_BUTTON_ID>Submit</D_BUTTON_ID>
                                    </OperationalSection>
                                    <ProcessingTransientInfo>
                                          <D_CURRENCY_CONVERSION_TYPE>Base
                                          <D_DIRECT_RECEIVER_INDEX>X</D_DIRECT_RECEIVER_INDEX>
                                    </ProcessingTransientInfo>
                                    <Monitors>
                                          <UserMonitors>
                                               <MU COMPLIANCE FORCE STS>X</MU COMPLIANCE FORCE STS>
                                               <MU_FORCE_STANDARD_VD>X</MU_FORCE_STANDARD_VD>
                                               <MU HANDLE 71G GAP>X</MU HANDLE 71G GAP>
                                               <MU_MISSED_CUTOFF>X</MU_MISSED_CUTOFF>
                                               <MU_NSF_FORCE_STS>X</MU_NSF_FORCE_STS>
                                               <MU_PARTY_LIMIT_FORCE_STS>X</MU_PARTY_LIMIT_FORCE_STS>
                                               <MU PI FORCE STS>X</MU PI FORCE STS>
                                               <MU_REQ_FOR_CHARGES_FORCE_STS>X</MU_REQ_FOR_CHARGES_FORCE_STS>
                                               <MU_SET_CDT_MOP>X</MU_SET_CDT_MOP>
                                               <MU_SPECIAL_INST_STS>X</MU_SPECIAL_INST_STS>
                                               <MU_STOP_FLAGS_OVERRIDE_STS>X</MU_STOP_FLAGS_OVERRIDE_STS>
                                          </UserMonitors>
                                          <ServiceMonitors>
                                               <MF_AF_MATCH_STS>X</MF_AF_MATCH_STS>
```

```
<MF_AF_PROCESS_STS>X</MF_AF_PROCESS STS>
            <MF_CANCEL_MATCH_STS>X</MF_CANCEL_MATCH_STS>
            <MF_CANCEL_REQUEST_VALID_STS>X</MF_CANCEL_REQUEST_VALID_STS>
            <MF CDT STOP FLAGS STS>X</MF CDT STOP FLAGS STS>
            <MF COMPLIANCE VALIDATION STS>X</MF COMPLIANCE VALIDATION STS>
            <MF_CRD FEES POSTING STS>X</MF_CRD FEES POSTING STS>
            <MF_CREDIT_POSTING_STS>X</MF_CREDIT_POSTING_STS>
            <MF_CREDIT_R_POSTING_STS>X</MF_CREDIT_R_POSTING_STS>
            <MF_DBT_FEES_POSTING_STS>X</MF_DBT_FEES_POSTING_STS>
            <MF_DBT_STOP_FLAGS_STS>X</MF_DBT_STOP_FLAGS_STS>
            <MF_DEBIT_POSTING_STS>X</MF_DEBIT_POSTING_STS>
            <MF_DEBIT_R_POSTING_STS>X</MF_DEBIT_R_POSTING_STS>
            <MF_DIRECT_COVER_GENERATED>X</MF_DIRECT_COVER_GENERATED>
            <MF_FEE_PROC_STS>X</MF_FEE_PROC_STS>
            <MF GENERATED ANSWER MESSAGE>X</mf GENERATED ANSWER MESSAGE>
            <MF_GENERATED CANCEL REQUEST>X</MF_GENERATED CANCEL REQUEST>
            <MF GENERATE REQ CHARGES>X</MF GENERATE REQ CHARGES>
            <MF_INITIAL_CREATE>I</MF_INITIAL_CREATE>
            <MF_LC_MATCH_STS>X</MF_LC_MATCH_STS>
            <MF_LC_PROCESS_STS>X</MF_LC_PROCESS_STS>
            <MF_MOP_SELECTION_STS>X</mf_MOP_SELECTION_STS>
            <MF_NUM_OF_191>X</MF_NUM_OF_191>
            <MF_NUM_OF_210>X</MF_NUM_OF_210>
            <MF N MESSAGES MATCH STS>X</MF N MESSAGES MATCH STS>
            <MF_OPIOSN_MATCH_STS>X</MF_OPIOSN_MATCH_STS>
            <MF OUT REQ FOR CHRG MATCH STS>X</MF OUT REQ FOR CHRG MATCH STS>
            <MF_PDM>X</MF_PDM>
            <MF PISN MATCH STS>X</MF PISN MATCH STS>
            <MF_PISN_PROCESS_STS>X</MF_PISN_PROCESS_STS>
            <MF_PNL_POSTING_STS>X</MF_PNL_POSTING_STS>
            <MF_POSTING_STS>X</MF_POSTING_STS>
            <MF REPRESMT_NOTIF>X</MF_REPRESMT_NOTIF>
            <MF_REQ_FOR_CHARGES_MATCH_STS>X</MF_REQ_FOR_CHARGES_MATCH_STS>
            <MF_REQ_FOR_CHARGES_VALID_STS>X</MF_REQ_FOR_CHARGES_VALID_STS>
            <MF_RTN_OCCURRENCE>X</MF_RTN_OCCURRENCE>
            <MF_SC_MATCH_STS>X</MF_SC_MATCH_STS>
            <MF SC PROCESS STS>X</MF SC PROCESS STS>
            <MF SPECIAL INST STS>X</MF SPECIAL INST STS>
            <MF TIME HOLD>X</MF TIME HOLD>
         </ServiceMonitors>
      </Monitors>
      <ReferenceData>
         <M_STTLM_CCY_PROFILE>
            <F_INSTR_CCY_DRAFT>false</F_INSTR_CCY_DRAFT>
            <F_INSTR_CCY_EURO>IN</F_INSTR_CCY_EURO>
         </M STTLM CCY PROFILE>
         <M DBT MOP PROFILE>
            <F MOP ALLOW NAC MSG>true
ALLOW NAC MSG>true
ALLOW NAC MSG>
            <F_MOP_CHK_DRAFT_CURRENCY>false</F_MOP_CHK_DRAFT_CURRENCY>
            <F MOP CURRENCY>USD</F MOP CURRENCY>
            <F_MOP_MAXAMOUNT>999999999</F_MOP_MAXAMOUNT>
            <F_MOP_MINAMOUNT>1</F_MOP_MINAMOUNT>
<F_MOP_MOPDOWN/>
            <F_MOP_NM>BOOK</F_MOP_NM>
            <F_MOP_SENDOUTMSG>true</F_MOP_SENDOUTMSG>
            <F_MOP_SEND_REC_IDCODE>USABA</F_MOP_SEND_REC_IDCODE>
            <F_MOP_SETTLEMENT_ACC>1</fraction="1">
<F_MOP_SETTLEMENT_ACC>
<F_MOP_SETT_ACC_EXISTS>
false
/F_MOP_SETT_ACC_EXISTS>
            <F MOP SPLIT OVER MAX>false/F MOP SPLIT OVER MAX>
         </M DBT MOP PROFILE>
      </ReferenceData>
      <XMLPersistentInfo>
         <X_CDTR_ACCT_ID>5544411121</X_CDTR_ACCT_ID>
      </XMLPersistentInfo>
   </Extn>
</Msg>
<OrigMsg>
   <Pmnt xmlns:q1="http://fundtech.com/SCL/CommonTypes">
      <Document xmlns="urn:iso:std:iso:20022:tech:xsd:pain.001.001.06">
         <CstmrCdtTrfInitn>
```

```
<GrpHdr>
  <MsgId>TESTTCH001</MsgId>
  <CreDtTm>2016-11-01T06:45:57</CreDtTm>
  <Nb0fTxs>1</Nb0fTxs>
  <InitgPty>
      <Nm>Tom Hanks</Nm>
      <Id>
         <OrgId>
            <Othr>
               <Id>US1CUTOMHA</Id>
            </0thr>
         </OrgId>
      </Id>
  </InitgPty>
</GrpHdr>
<PmtInf>
  <PmtInfId>TESTSNE_V32
  <PmtMtd>TRF</PmtMtd>
  <PmtTpInf>
      <InstrPrty>HIGH</InstrPrty>
      <SvcLvl>
         <Prtry>SDVA</Prtry>
      </SvcLvl>
      <CtgyPurp>
         <Cd>SDVA</Cd>
      </CtgyPurp>
   </PmtTpInf>
  <ReqdExctnDt>2016-11-21</ReqdExctnDt>
   <Dbtr>
      <Nm>Tom Hanks</Nm>
      <Id>
         <OrgId>
            <Othr>
               <Id>US1CUTOMHA</Id>
            </Othr>
         </OrgId>
      </Id>
   </Dbtr>
   <DbtrAcct>
      <Id>
         <Othr>
            <Id>7770000022</Id>
         </Othr>
     </Id>
   </DbtrAcct>
   <DbtrAgt>
      <FinInstnId>
         <ClrSysMmbId>
            <MmbId>020010001</MmbId>
         </ClrSysMmbId>
      </FinInstnId>
   </DbtrAgt>
   <CdtTrfTxInf>
      <PmtTd>
         <InstrId>ER208817514642</InstrId>
         <EndToEndId>E208817515367</EndToEndId>
      </PmtId>
      <PmtTpInf>
         <InstrPrty>HIGH</InstrPrty>
         <SvcLvl>
            <Prtry>SDVA</Prtry>
         </SvcLvl>
         <LclInstrm>
            <Prtry>CONSUMER</Prtry>
         </LclInstrm>
      </PmtTpInf>
      <Amt>
         <InstdAmt Ccy="USD">100.00</InstdAmt>
      </Amt>
      <ChrgBr>SHAR</ChrgBr>
```

```
<UltmtDbtr>
                  <Nm>Tom Hanks</Nm>
                  <PstlAdr>
                      <AdrLine>Adr</AdrLine>
                  </PstlAdr>
                  <Id>
                      <PrvtId>
                         <Othr>
                            <Id>Id</Id>
                            <SchmeNm>
                               <Cd>ARNU</Cd>
                            </SchmeNm>
                         </0thr>
                      </PrvtId>
                  </Id>
               </UltmtDbtr>
               <CdtrAgt>
                  <FinInstnId>
                     <ClrSysMmbId>
                         <MmbId>131000000</MmbId>
                      </ClrSysMmbId>
                   </FinInstnId>
               </CdtrAgt>
               <Cdtr>
                  <Nm>Dan Fox</Nm>
                  <PstlAdr>
                     <StrtNm>Mircea Voda</StrtNm>
                     <BldgNb>40</BldgNb>
                     <PstCd>030669</PstCd>
                      <TwnNm>Bucuresti</TwnNm>
                      <Ctry>RO</Ctry>
                  </PstlAdr>
                  <Id>
                      <PrvtId>
                         <DtAndPlcOfBirth>
                            <BirthDt>1976-02-14</BirthDt>
                            <CityOfBirth>GL</CityOfBirth>
                            <CtryOfBirth>RO</CtryOfBirth>
                         </DtAndPlcOfBirth>
                      </PrvtId>
                  </Id>
               </Cdtr>
               <CdtrAcct>
                  <Id>
                      <Othr>
                         <Id>5544411121</Id>
                         <SchmeNm>
                            <Cd>BBAN</Cd>
                         </SchmeNm>
                         <Issr>123456</Issr>
                      </0thr>
                  </Id>
               </CdtrAcct>
               <R1tdRmtTnf>
                  <RmtId>111</RmtId>
               </RltdRmtInf>
            </CdtTrfTxInf>
         </PmtInf>
      </CstmrCdtTrfInitn>
   </Document>
</Pmnt>
<Extn xmlns:q1="http://fundtech.com/SCL/CommonTypes">
   <Monitors xmlns="">
      <ServiceMonitors>
         <MF_CDB_DB_STS/>
         <MF_CDB_CR_STS/>
      </ServiceMonitors>
   </Monitors>
   <q1:OperationalSection>
      <q1:D_BUTTON_ID>Submit</q1:D_BUTTON_ID>
```

## 3.7.2 Example 2: Final Approve of an Existing Payment

Provide payment reference (P\_MID), payment time stamp (P\_TIME\_STAMP) and action button (D\_BUTTON\_ID) as FinalApprove.

### 3.7.2.1 Request

```
<?xml version="1.0" encoding="UTF-8"?>
<soapenv:Envelope xmlns:soapenv="http://www.w3.org/2003/05/soap-envelope"</pre>
xmlns:q0="http://fundtech.com/SCL/MessageSubmitService"
xmlns:q1="http://fundtech.com/SCL/CommonTypes" xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
<soapenv:Header>
  <q1:FndtHeader>
  <q1:credentials>
    <q1:UserID>SERVICES</q1:UserID>
   <q1:Role>ADMIN</q1:Role>
   </q1:credentials>
  </q1:FndtHeader>
</soapenv:Header>
<soapenv:Body>
  <q0:MessageSubmitRequest>
   <q0:MsgBatch>
    <q1:FndtHeader>
     <q1:credentials>
     <q1:UserID>audit3</q1:UserID>
     </q1:credentials>
    </g1:FndtHeader>
    <q1:FndtPmntTxInf>
     <q1:FndtMsg>
      <q1:Header>
       <q1:P_MID>11313E2230DI0630</q1:P_MID>
      </q1:Header>
      <q1:Msg>
       <q1:Pmnt/>
       <q1:Extn>
        <q1:ProcessingPersistentInfo>
         <q1:P_OFFICE>US1</q1:P_OFFICE>
         <q1:P_DEPARTMENT>PSV</q1:P_DEPARTMENT>
          <q1:P_TIME_STAMP>2011-03-13 14:22:31.887</q1:P_TIME_STAMP>
        </q1:ProcessingPersistentInfo>
        <q1:OperationalSection>
         <q1:D_BUTTON_ID>FinalApprove</q1:D_BUTTON_ID>
       </q1:OperationalSection>
       </q1:Extn>
      </q1:Msg>
     </q1:FndtMsg>
    </q1:FndtPmntTxInf>
   </q0:MsgBatch>
  </q0:MessageSubmitRequest>
</soapenv:Body>
</soapenv:Envelope>
```

#### 3.7.2.2 Response

Use case 1: The Final Approval step was performed for a payment in pending approval status. (Final approve button is available for this status)

```
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope"</pre>
xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance">
   <soap:Body xmlns:ns1="http://fundtech.com/SCL/CommonTypes">
      <FndtMsgBatch xmlns="http://fundtech.com/SCL/CommonTypes">
          <FndtPmntTxInf>
             <FndtMsg>
                <Header>
                    <P_MID>11313E2230DI0630</P_MID>
                </Header>
                <Msg>
                    <Pmnt/>
                    <Extn>
                       <ProcessingPersistentInfo>
                          <P_IS_HISTORY>0</P_IS_HISTORY>
<P_MSG_STS>COMPLETE</P_MSG_STS>
                           <P TIME STAMP>2011-03-13 14:23:26.432</P TIME STAMP</pre>
                       </ProcessingPersistentInfo>
                    </Extn>
                </Msg>
             </FndtMsg>
          </FndtPmntTxInf>
      </FndtMsgBatch>
   </soap:Body>
</soap:Envelope>
```

Use case 2: The final approval step was performed for a payment in Repair status. (Final approve button is not available for this status), the user gets error code 60084 meaning: The action FinalApprove is not allowed for a message with status REPAIR.

```
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope"</pre>
xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance">
   <soap:Body xmlns:ns1="http://fundtech.com/SCL/CommonTypes">
      <FndtMsgBatch xmlns="http://fundtech.com/SCL/CommonTypes">
         <FndtPmntTxInf>
            <FndtMsg>
                  <D SKIP PERSIST ON ERROR>true
                  <P_MID>11313E1430EZ0219</P_MID>
               </Header>
               <Msg>
                  <Pmnt/>
                  <Extn>
                     <MsgErrors>
                        <M MSGERR LINE>
                            <F MSGERR CODE>60084</F MSGERR CODE>
                            <F MSGERR TIME STAMP>2011-03-13 14:15:34.242// MSGERR TIME STAMP>
                            <F MSGERR SEVERITY>0</F MSGERR SEVERITY>
                            <F_MSGERR_CREATE_DATE>2011-03-13T03:45:34.242-
05:00</f_MSGERR_CREATE_DATE>
                           <F_MSGERR_TIME_ZONE>EST</F_MSGERR_TIME_ZONE>
                           <F_MSGERR_FAULT></F_MSGERR_FAULT>
                            <F_MSGERR_PARAMS>@@ @@STRING@@@@@$TRING@@</F_MSGERR_PARAMS>
                           <F MSGERR DISPLAY>0</F MSGERR DISPLAY>
                           <F MSGERR FIELD LOGICAL ID/>
                        </M_MSGERR_LINE>
                     </MsgErrors>
                     <ProcessingPersistentInfo>
                        <P_IS_HISTORY>0</P_IS_HISTORY>
<P_MSG_STS>REPAIR</P_MSG_STS>
                        <P_TIME_STAMP>2011-03-13 14:14:31.342</P_TIME_STAMP>
                     </ProcessingPersistentInfo>
```

## 3.7.3 Example 3: Cancel a Payment

Cancel processing flow to an existing payment by providing the MID and the action button cancel.

## 3.7.3.1 Request

```
<?xml version="1.0" encoding="UTF-8"?>
<soapenv:Envelope
xmlns:q0="http://fundtech.com/SCL/MessageSubmitService"
xmlns:q1="http://fundtech.com/SCL/CommonTypes"
xmlns:soapenv="http://www.w3.org/2003/05/soap-envelope"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
 <soapenv:Header>
  <q1:FndtHeader>
   <q1:credentials>
    <q1:UserID>SERVICES</q1:UserID>
    <q1:Role>ADMIN</q1:Role>
   </q1:credentials>
  </q1:FndtHeader>
 </soapenv:Header>
 <soapenv:Bodv>
  <ns20:MessageSubmitRequest</pre>
   xmlns:ns10="http://notesservice.pubsub.ws.services.cp.bofa.com"
   xmlns:ns11="http://ws.entitlements.services.cp.bofa.com/
   xmlns:ns12="http://www.bankofamerica.com/cpo/payments/services/approval/v002"
   xmlns:ns13="http://fundtech.com/SCL/CommonTypes"
   xmlns:ns14="http://fundtech.com/SCL/MopSelectionService"
   xmlns:ns15="http://fundtech.com/SCL/MessageLoadService'
   xmlns:ns16="http://fundtech.com/SCL/ProfileListService"
   xmlns:ns17="http://fundtech.com/SCL/StaticDataCommonTypes"
   xmlns:ns18="http://fundtech.com/SCL/QueueListService"
   xmlns:ns19="http://Fundtech.com/prule-metadata-dto.xsd"
   xmlns:ns2="http://payments.cpo.gcib.bofa.com/xsd/paymentorchestrator/sla/V001"
   xmlns:ns20="http://fundtech.com/SCL/MessageSubmitService"
   xmlns:ns21="http://www.bankofamerica.com/xmlschema/resource/metadata/osa/infrastructure/v001"
   xmlns:ns22="http://payments.cpo.gcib.bofa.com/xsd/paymentextn/V001"
   xmlns:ns23="http://payments.cpo.gcib.bofa.com/xsd/paymentlisttype/V001"
   xmlns:ns24="http://payments.cpo.gcib.bofa.com/xsd/paymentservice/V001"
   xmlns:ns25="urn:iso:std:iso:20022:tech:xsd:pain.001.001.03"
   xmlns:ns26="http://payments.cpo.gcib.bofa.com/xsd/paymentutilityservice/V001"
   xmlns:ns4="http://payments.cpo.gcib.bofa.com/xsd/cpsMessageTypes/V001"
   xmlns:ns5="http://payments.cpo.gcib.bofa.com/xsd/commontypes/V001"
   xmlns:ns6="http://payments.cpo.gcib.bofa.com/xsd/fxservice/V001"
   xmlns:ns7="http://pubsubservice.message.ws.services.cp.bofa.com"
   xmlns:ns8="http://pubsubservice.ws.services.cp.bofa.com/xsd/headertypes/V001"
xmlns:ns9="http://payments.baml.com/PaymentsNotificationV001">
   <ns20:MsgBatch>
    <ns13:FndtHeader>
     <ns13:credentials>
      <ns13:UserID>muli2</ns13:UserID>
     </ns13:credentials>
    </ns13:FndtHeader>
    <ns13:FndtPmntTxInf>
     <ns13:FndtMsg>
      <ns13:Header>
       <ns13:credentials>
        <ns13:UserID>Muli 2</ns13:UserID>
       </ns13:credentials>
```

```
<ns13:P MID>10B29H2451640188</ns13:P MID>
      </ns13:Header>
      <ns13:Msg>
       <ns13:Pmnt>
        <ns25:Document>
         <ns25:CstmrCdtTrfInitn>
          <ns25:GrpHdr>
           <ns25:InitgPty>
            <ns25:Id>
             <ns25:OrgId>
              <ns25:0thr>
               <ns25:Id>US1SACOMPUS33XXX</ns25:Id>
              </ns25:0thr>
             </ns25:OrgId>
            </ns25:Id>
           </ns25:InitgPty>
          </ns25:GrpHdr>
          <ns25:PmtInf>
           <ns25:ReqdExctnDt>2011-09-26/ns25:ReqdExctnDt>
          </ns25:PmtInf>
         </ns25:CstmrCdtTrfTnitn>
        </ns25:Document>
       </rd>
</ns13:Pmnt>
       <ns13:Extn>
        <ns13:ProcessingPersistentInfo>
         <ns13:P OFFICE>US1</ns13:P OFFICE>
         <ns13:P DEPARTMENT>PSV</ns13:P DEPARTMENT>
         <ns13:P_TIME_STAMP>2010-11-29 17:24:51.905/ns13:P_TIME_STAMP>
         <ns13:P_IS_HISTORY>0</ns13:P_IS_HISTORY>
        </ns13:ProcessingPersistentInfo>
        <ns13:OperationalSection>
        </ns13:OperationalSection>
       </ns13:Extn>
      </ns13:Msg>
     </ns13:FndtMsg>
    </ns13:FndtPmntTxInf>
   </ns20:MsgBatch>
  </ns20:MessageSubmitRequest>
 </soapenv:Body>
</soapenv:Envelope>
```

### 3.7.3.2 Response

#### Message ID is cancelled.

```
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope"</pre>
xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-
   <soap:Body xmlns:ns1="http://fundtech.com/SCL/CommonTypes">
      <FndtMsgBatch xmlns="http://fundtech.com/SCL/CommonTypes">
         <FndtPmntTxInf>
            <FndtMsg>
                  <D SKIP PERSIST ON ERROR>true/D SKIP PERSIST ON ERROR>
                  <P MID>10B29H2451640188</P MID>
               </Header>
               <Msg>
                  <Pmnt/>
                  <Extn>
                     <MsgErrors>
                       <M MSGERR_LINE>
                           <F_MSGERR_CODE>40227</F_MSGERR_CODE>
                           <F_MSGERR_TIME_STAMP>2010-12-02 10:51:41.613</F_MSGERR_TIME_STAMP>
                           <F_MSGERR_SEVERITY>0</F_MSGERR_SEVERITY>
                           <F_MSGERR_CREATE_DATE>2010-11-30T20:31:41
                           <F_MSGERR_TIME_ZONE>EST</F_MSGERR_TIME_ZONE>
                           <F_MSGERR_FAULT></F_MSGERR_FAULT>
```

```
<F_MSGERR_PARAMS>@@ @@STRING@@</F_MSGERR_PARAMS>
                            <F MSGERR DISPLAY>0</F MSGERR DISPLAY>
                           <F_MSGERR_FIELD_LOGICAL_ID/>
                         </M MSGERR LINE>
                     </MsgErrors>
                     <ProcessingPersistentInfo>
                        <P_IS_HISTORY>0</P_IS_HISTORY>
                        <P_TIME_STAMP>2010-12-01 15:52:26.772</P_TIME_STAMP>
                     </ProcessingPersistentInfo>
                  </Extn>
               </Msg>
            </FndtMsg>
         </FndtPmntTxInf>
      </FndtMsgBatch>
   </soap:Body>
</soap:Envelope>
```

## 3.7.4 Example 4: When an Action is not Allowed for the Queue

- Message is in PEND\_APPROVE and user tries to perform retract
- First step create the message (also demonstrates the quick fill button):

### 3.7.4.1 Request

```
<?xml version="1.0" encoding="UTF-8"?>
<soapenv:Envelope
xmlns:q0="http://fundtech.com/SCL/MessageSubmitService"
xmlns:q1="http://fundtech.com/SCL/CommonTypes"
xmlns:soapenv="http://www.w3.org/2003/05/soap-envelope"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
         xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
 <soapenv:Header>
  <q1:FndtHeader>
   <q1:credentials>
   <q1:UserID>SERVICES</q1:UserID>
    <q1:Role>ADMIN</q1:Role>
   </q1:credentials>
  </q1:FndtHeader>
 </soapenv:Header>
 <soapenv:Body>
  <q0:MessageSubmitRequest>
   <q0:MsgBatch>
    <q1:FndtHeader>
     <q1:credentials>
      <q1:UserID>audit3</q1:UserID>
     </q1:credentials>
    </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>
          <PmtInf>
           <RegdExctnDt>2009-05-04</RegdExctnDt>
           <CdtTrfTxInf>
            <PmtId>
             <InstrId>CTv41as</InstrId>
             <EndToEndId>AA0018</EndToEndId>
            </PmtId>
            <Amt>
             <InstdAmt Ccy="USD">905.00</InstdAmt>
            </Amt>
```

```
</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:P_TEMPLATE_CD>TEMPLATE_UPDATEaf</q1:P_TEMPLATE_CD>
         <q1:P_TEMPLATE_MID>10A04K1340292853</q1:P_TEMPLATE_MID>
        </q1:ProcessingPersistentInfo>
        <q1:OperationalSection>
         <q1:D_BUTTON_ID>CreatePaymentFromTemplate</q1:D_BUTTON_ID>
        </q1:OperationalSection>
       </q1:Extn>
      </q1:Msg>
     </q1:FndtMsg>
    </q1:FndtPmntTxInf>
  </q0:MsgBatch>
 </q0:MessageSubmitRequest>
</soapenv:Body>
</soapenv:Envelope>
```

## 3.7.4.2 Response

```
<?xml version="1.0" encoding="UTF-8"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope"</pre>
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
 <soap:Body
  xmlns:ns1="http://fundtech.com/SCL/CommonTypes">
  <FndtMsgBatch</pre>
     xmlns="http://fundtech.com/SCL/CommonTypes">
   <FndtPmntTxInf>
    <FndtMsg xmlns="http://fundtech.com/SCL/CommonTypes">
      <P_MID>10C23F4124960431</P_MID>
     </Header>
     <Msg>
      <Pmnt/>
      <Extn>
       <ProcessingPersistentInfo>
        <P IS HISTORY>0</P IS HISTORY>
        <P_MSG_STS>PEND_APPROV</P_MSG_STS>
        <P TEMPLATE CD>TEMPLATE UPDATEaf
CD>
        <P_TEMPLATE_NM>TEMPLA</P_TEMPLATE_NM>
        <P_TIME_STAMP>2010-12-23 15:41:25.738</P_TIME_STAMP>
       </ProcessingPersistentInfo>
      </Extn>
     </Msg>
    </FndtMsg>
   </FndtPmntTxInf>
  </FndtMsgBatch>
 </soap:Body>
</soap:Envelope>
```

## Second step – button ID is Retract.

## 3.7.4.3 Request

```
<?xml version="1.0" encoding="UTF-8"?>
<soapenv:Envelope
xmlns:q0="http://fundtech.com/SCL/MessageSubmitService"
xmlns:q1="http://fundtech.com/SCL/CommonTypes"
xmlns:soapenv="http://www.w3.org/2003/05/soap-envelope"</pre>
```

```
xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance">
 <soapenv:Header>
  <q1:FndtHeader>
   <q1:credentials>
    <q1:UserID>SERVICES</q1:UserID>
    <q1:Role>ADMIN</q1:Role>
   </q1:credentials>
  </q1:FndtHeader>
 </soapenv:Header>
 <soapenv:Body>
  <q0:MessageSubmitRequest>
   <q0:MsgBatch>
    <q1:FndtHeader>
     <q1:credentials>
      <q1:UserID>audit3</q1:UserID>
     </q1:credentials>
    </q1:FndtHeader>
    <q1:FndtPmntTxInf>
     <q1:FndtMsg>
      <q1:Header>
       <q1:P_MID>10C23F4124960431</q1:P_MID>
      </q1:Header>
      <q1:Msg>
       <q1:Pmnt/>
       <q1:Extn>
        <q1:ProcessingPersistentInfo>
         <q1:P_OFFICE>US1</q1:P_OFFICE>
         <q1:P_DEPARTMENT>PSV</q1:P_DEPARTMENT>
         <q1:P_TIME_STAMP>2010-12-23 15:41:25.738</q1:P_TIME_STAMP>
        </q1:ProcessingPersistentInfo>
        <q1:OperationalSection>
         <q1:D_BUTTON_ID>Retract</q1:D_BUTTON_ID>
        </q1:OperationalSection>
       </q1:Extn>
      </q1:Msg>
     </q1:FndtMsg>
    </q1:FndtPmntTxInf>
   </q0:MsgBatch>
  </q0:MessageSubmitRequest>
 </soapenv:Body>
</soapenv:Envelope>
```

## 3.7.4.4 Response

```
<?xml version="1.0" encoding="UTF-8"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope"</pre>
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
 <soap:Body
   xmlns:ns1="http://fundtech.com/SCL/CommonTypes">
  <FndtMsgBatch</pre>
    xmlns="http://fundtech.com/SCL/CommonTypes">
   <FndtPmntTxInf>
    <FndtMsg xmlns="http://fundtech.com/SCL/CommonTypes">
    <Header>
     <D_SKIP_PERSIST_ON_ERROR>true
     <P_MID>10C23F4124960431</P_MID>
     </Header>
     <Msg>
      <Pmnt/>
     <Fxtn>
       <MsgErrors>
        <M_MSGERR_LINE>
        <F_MSGERR CODE>60084</F_MSGERR CODE>
        <F_MSGERR_TIME_STAMP>2010-12-23 15:42:41.331// MSGERR_TIME_STAMP>
        <F MSGERR SEVERITY>0</F MSGERR SEVERITY>
         <F_MSGERR_CREATE_DATE>2010-12-22T01:22:41</f_MSGERR_CREATE_DATE>
```

```
<F_MSGERR_TIME_ZONE>EST</F_MSGERR_TIME_ZONE>
         <F_MSGERR_FAULT/>
         <F_MSGERR_PARAMS>@@ @@STRING@@@@,@@ @@STRING@@</f_MSGERR_PARAMS>
         <F MSGERR DISPLAY>0</F MSGERR DISPLAY>
         <F MSGERR FIELD LOGICAL ID/>
        </M_MSGERR_LINE>
       </MsgErrors>
       <ProcessingPersistentInfo>
        <P_IS_HISTORY>0</P_IS_HISTORY>
        <P_MSG_STS>PEND_APPROV</P_MSG_STS>
        <P_TEMPLATE_CD>TEMPLATE_UPDATEaf</P_TEMPLATE_CD>
        <P_TEMPLATE_NM>TEMPLA</P_TEMPLATE_NM>
<P_TIME_STAMP>2010-12-23 15:41:25.738</P_TIME_STAMP>
       </ProcessingPersistentInfo>
      </Extn>
     </Msg>
    </FndtMsg>
   </FndtPmntTxInf>
  </FndtMsgBatch>
 </soap:Body>
</soap:Envelope>
```

### 3.7.5 Example 5: Validate a Payment

3.7.5.1 Use Case: Payment is submitted for validation and only minimal success failure details are required in the response

#### 3.7.5.1.1 Request

Provide payment details and action button (D\_BUTTON\_ID) as Validate.

```
<?xml version="1.0" encoding="UTF-8"?>
<soapenv:Envelope
xmlns:q0="http://fundtech.com/SCL/MessageSubmitService"
 xmlns:q1="http://fundtech.com/SCL/CommonTypes"
xmlns:soapenv="http://www.w3.org/2003/05/soap-envelope"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
         xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
 <soapenv:Header>
  <q1:FndtHeader>
  <q1:credentials>
    <q1:UserID>SERVICES</q1:UserID>
   <q1:Role>ADMIN</q1:Role>
   </gl:credentials>
  </q1:FndtHeader>
 </soapenv:Header>
 <soapenv:Body>
  <q0:MessageSubmitRequest>
   <q0:MsgBatch>
    <q1:FndtHeader>
     <q1:credentials>
     <q1:UserID>audit3</q1:UserID>
     </q1:credentials>
    </al: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>CTv422-002</MsgId>
           <CreDtTm>2017-02-06T06:19:06</CreDtTm>
           <BtchBookg>false</BtchBookg>
           <NbOfTxs>1</NbOfTxs>
```

```
<CtrlSum>700</CtrlSum>
 <Grpg>GRPD</Grpg>
 <InitgPty>
  <Nm>THE US COMPANY</Nm>
  <Id>
   <OrgId>
    <Othr>
    <Id>US1SACOMPUS33XXX</Id>
    </0thr>
   </OrgId>
  </Id>
 </InitgPty>
</GrpHdr>
<PmtTnf>
<PmtMtd>TRF</PmtMtd>
<ReqdExctnDt>2017-02-08</ReqdExctnDt>
 <Nm>THE US COMPANY</Nm>
 <Id>
   <OrgId>
    <Othr>
     <Id>US1SACOMPUS33XXX</Id>
    </0thr>
   </OrgId>
 </Id>
 </Dbtr>
 <DbtrAcct>
 <Id>
   <Othr>
   <Id>8552502</Id>
   </Othr>
 </Id>
 <Ccy>EUR</Ccy>
 </DbtrAcct>
 <DbtrAgt>
 <FinInstnId>
  <BIC>BOFAUS31XXX</BIC>
 </FinInstnId>
 </DbtrAgt>
 <CdtTrfTxInf>
 <PmtId>
   <InstrId>AD_27</InstrId>
   <EndToEndId>Csa40E-27</EndToEndId>
  </PmtId>
  <Amt>
  <InstdAmt Ccy="USD">731</InstdAmt>
  </Amt>
  <ChrgBr>CRED</ChrgBr>
  <CdtrAgt>
  <FinInstnId>
   <BIC>CITIUS33XXX</BIC>
  </FinInstnId>
  </CdtrAgt>
  <CdtrAcct>
   <Id>
    <Othr>
     <Id>3333421212</Id>
    </Othr>
   </Id>
  </CdtrAcct>
  <CtgyPurp>
   <Cd>GDDS</Cd>
  </CtgyPurp>
  <RmtInf>
   <Strd>
    <RfrdDocInf>
     <Tp>
      <CdOrPrtry>
      <Cd>CINV</Cd>
      </CdOrPrtry>
```

```
</Tp>
               <RfrdDocNb>ABC-13679</RfrdDocNb>
              </RfrdDocInf>
              <RfrdDocRltdDt>2017-02-08</RfrdDocRltdDt>
             </Strd>
            </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:ProcessingPersistentInfo>
        <q1:OperationalSection>
         <q1:D_BUTTON_ID>Validate</q1:D_BUTTON ID>
        </q1:OperationalSection>
       </q1:Extn>
      </q1:Msg>
    </q1:FndtMsg>
    </q1:FndtPmntTxInf>
  </q0:MsgBatch>
 </q0:MessageSubmitRequest>
</soapenv:Body>
</soapenv:Envelope
```

### 3.7.5.1.2 Response

Use Case 1.1: Payment was successfully created. The MID is returned along with the message

```
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope"</pre>
xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance">
   <soap:Body xmlns:ns1="http://fundtech.com/SCL/CommonTypes">
     <FndtMsgBatch xmlns="http://fundtech.com/SCL/CommonTypes">
        <FndtPmntTxInf>
           <FndtMsg>
              <Header>
                 <P_MID>10C02A4104J00231</P_MID>
              </Header>
              <Msg>
                 <Pmnt/>
                 <Extn>
                      <MsgErrors>
                        <M_MSGERR_LINE>
                                  <F_MSGERR_CODE>60102</F_MSGERR_CODE>
                                  <F_MSGERR_TIME_STAMP>2017-02-06
09:10:32.880</F_MSGERR_TIME_STAMP>
                                  <F_MSGERR_SEVERITY>0</F_MSGERR_SEVERITY>
                                  <F_MSGERR_CREATE_DATE>2017-02-
06T09:10:32</F_MSGERR_CREATE_DATE>
                                   <F_MSGERR_TIME_ZONE>AEST</F_MSGERR_TIME_ZONE>
                                   <F_MSGERR_FAULT></F_MSGERR_FAULT>
                                   <F_MSGERR_PARAMS>
@ @0001005562885@ @STRING@ @ @ @,@ @EU1@ @
STRING@@@@,@@Any@@STRING@@</F_MSGERR_PARAMS>
```

# 3.7.5.2 Use Case: Payment is submitted for validation and additional details are required in the response

Provide payment details, action button (D\_BUTTON\_ID) as Validate, and an additional instruction regarding the scope returned in the Response.

Add the following to the request to receive a response with the optional information:

#### where:

- outputMode pmntConversionType is the message type, such as pain.001.
- origPmntConversionType is the format of the message type, such as AS-IS (meaning same message type as received), or a quoted message type as pain.001 or pacs.008
- A Format Type (as configured in the XML\_FORMAT\_TYPE\_RELATIONS table that represents the scope out of the full Fndt Message that should be exposed in the Response, such as FULL – for full scope.

The <q1:outputMode> tag must immediately follow the <q0:MessageSubmitRequest> tag. For an example of a request, see Request. For an example of a response, see Response.

## 3.7.5.2.1 Request

The following example includes an optional <q1:outputMode> tag, which must directly follow the <q0:MessageSubmitRequest> tag, for a response that includes a specific message type in the Fndt Message structure.

<q0:MessageSubmitRequest>

```
S">FULL</q1:outputMode>
         <q0:MsgBatch>
            <q1:FndtHeader>
               <q1:credentials>
                  <q1:UserID>HOR2</q1:UserID>
               </q1:credentials>
            </q1:FndtHeader>
            <q1:FndtPmntTxInf>
               <q1:FndtMsg>
               <q1:Header>
                  <!--q1:P_MID forCreation="false"></q1:P_MID-->
                  <P_INIT_SRC_ID>FTR</P_INIT_SRC_ID>
                  <D SKIP PERSIST ON ERROR>true/D SKIP PERSIST ON ERROR>
               </q1:Header>
                  <q1:Msg>
                     <q1:Pmnt>
<Document xmlns="urn:iso:std:iso:20022:tech:xsd:pain.001.001.06">
        <CstmrCdtTrfInitn>
          <GrpHdr>
            <MsgId>TESTTCH001</MsgId>
            <CreDtTm>2016-11-01T06:45:57</CreDtTm>
            <NbOfTxs>1</NbOfTxs>
            <InitgPty>
              <Nm>Tom Hanks</Nm>
              <Id>
                <OrgId>
                  <Othr>
                    <Id>US1CUTOMHA</Id>
                  </Othr>
                </OrgId>
              </Id>
            </InitgPty>
          </GrpHdr>
          <PmtTnf>
            <PmtInfId>TESTSNE V32/PmtInfId>
            <PmtMtd>TRF</PmtMtd>
            <PmtTpInf>
              <InstrPrty>HIGH</InstrPrty>
              <SvcLvl>
                <Prtry>SDVA</Prtry>
              </SvcLvl>
              <CtgyPurp>
                <Cd>SDVA</Cd>
              </CtgyPurp>
            </PmtTpInf>
            <RegdExctnDt>2016-11-21</RegdExctnDt>
            <Dbtr>
              <Nm>Tom Hanks</Nm>
              <Id>
                <OrgId>
                  <Othr>
                    <Id>US1CUTOMHA</Id>
                  </0thr>
                </OrgId>
              </Id>
            </Dbtr>
            <DbtrAcct>
              <Id>
                <Othr>
                  <Id>7770000022</Id>
                </0thr>
              </Id>
            </DbtrAcct>
            <DbtrAgt>
                  <FinInstnId>
                    <ClrSysMmbId>
                         <MmbId>020010001
                     </ClrSysMmbId>
```

```
</FinInstnId>
</DbtrAgt>
<CdtTrfTxInf>
  <PmtId>
      <InstrId>ER${=System.nanoTime().toString().substring(0, 12)}</InstrId>
      <EndToEndId>E${=System.nanoTime().toString().substring(0, 12)}</EndToEndId>
  </PmtId>
  <PmtTpInf>
    <InstrPrty>HIGH</InstrPrty>
    <SvcLvl>
      <Prtry>SDVA</Prtry>
    </SvcLvl>
    <LclInstrm>
      <Prtry>CONSUMER</Prtry>
    </LclInstrm>
  </PmtTpInf>
  <Amt>
    <InstdAmt Ccy="USD">100.00</InstdAmt>
  <ChrgBr>SHAR</ChrgBr>
  <UltmtDbtr>
    <Nm>Tom Hanks</Nm>
    <Pst1Adr>
      <AdrLine>Adr</AdrLine>
    </PstlAdr>
    <Id>
      <PrvtId>
        <Othr>
          <Id>Id</Id>
          <SchmeNm>
            <Cd>ARNU</Cd>
          </SchmeNm>
        </0thr>
      </PrvtId>
    </Id>
  </UltmtDbtr>
  <CdtrAgt>
    <FinInstnId>
            <ClrSysMmbId>
               <MmbId>131000000</MmbId>
            </ClrSysMmbId>
         </FinInstnId>
  </CdtrAgt>
<Cdtr>
  <Nm>Dan Fox</Nm>
  <PstlAdr>
    <StrtNm>Mircea Voda</StrtNm>
    <BldgNb>40</BldgNb>
    <PstCd>030669</PstCd>
    <TwnNm>Bucuresti</TwnNm>
    <Ctry>RO</Ctry>
  </PstlAdr>
  <Id>
    <PrvtTd>
      <DtAndPlcOfBirth>
        <BirthDt>1976-02-14</BirthDt>
        <CityOfBirth>GL</CityOfBirth>
        <CtryOfBirth>RO</CtryOfBirth>
     </DtAndPlcOfBirth>
    </PrvtId>
  </Id>
</Cdtr>
  <CdtrAcct>
    <Id>
        <Id>5544411121</Id>
        <SchmeNm>
          <Cd>BBAN</Cd>
        </SchmeNm>
        <Issr>123456</Issr>
```

```
</Othr>
                </Id>
              </CdtrAcct>
              <RltdRmtInf>
                <RmtId>111
              </RltdRmtInf>
            </CdtTrfTxInf>
          </PmtInf>
        </CstmrCdtTrfInitn>
      </Document>
     </q1:Pmnt>
     <q1:Extn>
        <q1:ProcessingPersistentInfo>
            <q1:P_OFFICE>US1</q1:P_OFFICE>
            <q1:P DEPARTMENT>USD</q1:P DEPARTMENT>
            <q1:P_PAYMENT_TP>FTR</q1:P_PAYMENT_TP>
            <!--q1:P_TIME_STAMP></q1:P_TIME_STAMP-->
         <UserDefinedFields>
             <System>
                   <q1:UDF_CHANGE_NOTES></q1:UDF_CHANGE_NOTES>
                   <q1:UDF_CANCEL_NOTES></q1:UDF_CANCEL_NOTES>
                   <q1:UDF_CLIENT_EXPIRATION_DATE></q1:UDF_CLIENT_EXPIRATION_DATE>
                   <q1:UDF_INITIATED_FROM></q1:UDF_INITIATED_FROM>
                   <q1:CID_DBT></q1:CID_DBT>
                   <q1:CID_CRT></q1:CID_CRT>
                   <q1:UDF_INTRMY_AGT1_ADV></q1:UDF_INTRMY_AGT1_ADV><<q1:UDF_INTRMY_AGT2_ADV></q1:UDF_INTRMY_AGT2_ADV>
                   <q1:CONSUMER>0</q1:CONSUMER>
                   <q1:UDF_CLIENT_AUTHENT></q1:UDF_CLIENT_AUTHENT>
                   <!-- ONLY ON SUBMIT-->
                   <!--UDF_CUST_HAS_REVIEWED></UDF_CUST_HAS_REVIEWED>
                   <UDF_CUST_AWARE_FEE></UDF_CUST_AWARE_FEE>
                   <UDF_CUST_SIG_AUTH></UDF_CUST_SIG_AUTH>
                   <UDF_OBTAIN_AUTH></UDF_OBTAIN_AUTH>
                     <UDF_SIG_VERIFIED></UDF_SIG_VERIFIED>
                     <UDF_CUST_APPEARED></UDF_CUST_APPEARED-->
             </System>
         </UserDefinedFields>
        </q1:ProcessingPersistentInfo>
        <Monitors>
             <ServiceMonitors>
                   <MF_CDB_DB_STS></MF_CDB_DB_STS>
                   <MF_CDB_CR_STS></MF_CDB_CR_STS>
              </ServiceMonitors>
        </Monitors>
        <q1:OperationalSection>
              <q1:D_BUTTON_ID>Validate</q1:D_BUTTON_ID>
        </q1:OperationalSection>
        <q1:MsgNotes>
              <q1:F MSG NOTES TEXT>Note</q1:F MSG NOTES TEXT>
        </q1:MsgNotes>
       </q1:Extn>
      </q1:Msg>
     </q1:FndtMsg>
    </q1:FndtPmntTxInf>
   </q0:MsgBatch>
  </q0:MessageSubmitRequest>
 </soapenv:Body>
</soapenv:Envelope>
```

#### 3.7.5.2.2 Response

The following example shows a response to a request for a specific message enriched will a FULL Fndt Message structure.

```
<soap:Body>
   <FndtMsgBatch xmlns="http://fundtech.com/SCL/CommonTypes">
      <FndtPmntTxInf>
         <FndtMsg>
            <Header>
               <P_MID>HA1BH58426SN2D1W</P_MID>
            </Header>
            <Msg>
               <Pmnt>
                  <Document xmlns="urn:iso:std:iso:20022:tech:xsd:pain.001.001.03">
                     <CstmrCdtTrfInitn>
                        <GrpHdr>
                           <MsgId>TESTTCH001</MsgId>
                           <CreDtTm>2016-11-01T06:45:57.000
                           <Nb0fTxs>1</Nb0fTxs>
                           <InitgPty>
                              <Nm>Tom Hanks</Nm>
                               <Id>
                                 <OrgId>
                                     <Othr>
                                        <Id>US1CUTOMHA</Id>
                                     </0thr>
                                 </OrgId>
                               </Id>
                           </InitgPty>
                        </GrpHdr>
                        <PmtInf>
                           <PmtInfId>TESTSNE_V32
                           <PmtMtd>TRF</PmtMtd>
                           <PmtTpInf>
                               <SvcLvl>
                                 <Prtry>SDVA</Prtry>
                               </SvcLvl>
                           </PmtTpInf>
                           <ReqdExctnDt>2016-11-21</ReqdExctnDt>
                           <Dhtr>
                              <Nm>Tom Hanks</Nm>
                               <Id>
                                 <OrgId>
                                     <Othr>
                                       <Id>US1CUTOMHA</Id>
                                     </Othr>
                                 </OrgId>
                               </Id>
                           </Dbtr>
                           <DbtrAcct>
                               <Td>
                                     <Id>7770000022</Id>
                                 </0thr>
                               </Id>
                           </DbtrAcct>
                           <DbtrAgt>
                              <FinInstnId>
                                 <ClrSysMmbId>
                                     <MmbId>020010001</MmbId>
                                 </ClrSysMmbId>
                              </FinInstnId>
                           </DbtrAgt>
                           <ChrgBr>SHAR</ChrgBr>
                           <CdtTrfTxInf>
                               <PmtId>
                                 <InstrId>ER208817514642</InstrId>
                                 <EndToEndId>E208817515367</EndToEndId>
                               </PmtId>
                               <PmtTpInf>
                                 <SvcLvl>
                                     <Prtry>SDVA</Prtry>
                                 </Svclvl>
                                  <LclInstrm>
```

```
<Prtry>CONSUMER</Prtry>
                  </LclInstrm>
                  <CtgyPurp>
                     <Cd>SDVA</Cd>
                  </CtgyPurp>
               </PmtTpInf>
               <Amt>
                  <InstdAmt Ccy="USD">100.00</InstdAmt>
               </Amt>
               <ChrgBr>SHAR</ChrgBr>
               <UltmtDbtr>
                  <Nm>Tom Hanks</Nm>
                  <PstlAdr>
                     <AdrLine>Adr</AdrLine>
                  </PstlAdr>
                  <Id>
                     <PrvtId>
                        <SchmeNm>
                           <Cd>ARNU</Cd>
                         </SchmeNm>
                        <Othr>
                            <Id>Id</Id>
                        </0thr>
                     </PrvtId>
                  </Id>
               </UltmtDbtr>
               <CdtrAgt>
                  <FinInstnId>
                     <ClrSysMmbId>
                        <MmbId>131000000</MmbId>
                     </ClrSysMmbId>
                  </FinInstnId>
               </CdtrAgt>
               <Cdtr>
                  <Nm>Dan Fox</Nm>
                  <PstlAdr>
                     <StrtNm>Mircea Voda</StrtNm>
                     <BldgNb>40</BldgNb>
                     <PstCd>030669</PstCd>
                     <TwnNm>Bucuresti</TwnNm>
                     <Ctry>RO</Ctry>
                  </PstlAdr>
                  <Td>
                     <PrvtId>
                        <DtAndPlcOfBirth>
                            <BirthDt>1976-02-14</BirthDt>
                            <CityOfBirth>GL</CityOfBirth>
                            <CtryOfBirth>RO</CtryOfBirth>
                        </DtAndPlcOfBirth>
                     </PrvtId>
                  </Id>
               </Cdtr>
               <CdtrAcct>
                  <Td>
                     <Othr>
                        <Id>5544411121</Id>
                     </Othr>
                  </Id>
               </CdtrAcct>
            </CdtTrfTxInf>
         </PmtInf>
      </CstmrCdtTrfInitn>
   </Document>
</Pmnt>
<Fxtn>
   <AuditTrail>
      <M_AUDIT_TRAIL>
         <F_AUDIT_ERROR_CODE>40090/F_AUDIT_ERROR_CODE>
         <F_AUDIT_USER_NAME>HOR2</F_AUDIT_USER_NAME>
         <F_AUDIT_TIME_STAMP>2017-01-11 17:58:42.717/F_AUDIT_TIME_STAMP>
```

```
<F_AUDIT_END_DATE>2017-01-11T02:58:42</f_AUDIT_END_DATE>
                           <F_AUDIT_UPDATE_DATE>2017-01-11T02:58:42</f AUDIT_UPDATE_DATE>
                           <F_AUDIT_ZONE_CODE>EST</F_AUDIT_ZONE_CODE>
                           <F AUDIT ERROR PARAMS>@@Submit@@STRING@@</F AUDIT ERROR PARAMS>
                           <F AUDIT_IS_NEW>false/F_AUDIT_IS_NEW>
                        </M_AUDIT_TRAIL>
                        <M_AUDIT_TRAIL>
                           <F_AUDIT_ERROR_CODE>40033</F_AUDIT_ERROR_CODE>
                           <F_AUDIT_USER_NAME>HOR2</F_AUDIT_USER_NAME>
                           <F_AUDIT_TIME_STAMP>2017-01-11 17:58:42.708</f_AUDIT_TIME_STAMP>
                           <F_AUDIT_END_DATE>2017-01-11T02:58:42</F_AUDIT_END_DATE>
                           <F_AUDIT_UPDATE_DATE>2017-01-11T02:58:42</F_AUDIT_UPDATE_DATE>
                           <F AUDIT ZONE CODE>EST</F AUDIT ZONE CODE>
                           <F_AUDIT_ERROR_PARAMS>@@VERIFY@@STRING@@@@,@@Workflow Determination -
Manual@aSTRING@a@a,@aVERIFY@aSTRING@a@a,@a***@aSTRING@a</F AUDIT ERROR PARAMS>
                           <F AUDIT_IS NEW>false/F AUDIT_IS NEW>
                        </M_AUDIT_TRAIL>
                     </AuditTrail>
                     <ProcessingPersistentInfo>
                        <DebitSide>
                           <P_DBT_MOP>BOOK</P_DBT_MOP>
                        </DebitSide>
                        <P_BASE_AMT>100.0</P_BASE_AMT>
                        <P BASE CCY>USD</P BASE CCY>
                        <P_BASE_MSG_STS>(RECEIVED)</P_BASE_MSG_STS>
                        <P DEPARTMENT>USD</P DEPARTMENT>
                        <P DESTINATION OFFICE>US1</P DESTINATION OFFICE>
                        <P DISPLAY MSG TYPE>PAIN001
                        <P_FINALIZATION_DT>2099-12-31</P_FINALIZATION_DT>
                        <P_INSTR_ID>ER208817514642</P_INSTR_ID>
                        <P_MSG_CLASS>PAY</P_MSG_CLASS>
                        <P_MSG_STS>VERIFY</P_MSG_STS>
                        <P_MSG_TYPE>Pain_001</P_MSG_TYPE>
                        <P_OFFICE>US1</P_OFFICE>
                        <P ORIG MSG TYPE>Pain 001
ORIG MSG TYPE>
                        <P_ORIG_STTLM_AMT>100.00</P_ORIG_STTLM_AMT>
                        <P ORIG STTLM CCY>USD</P ORIG STTLM CCY>
                        <P_ORIG_STTLM_DT>2016-11-21</P_ORIG_STTLM_DT>
                        <P PAYMENT TP>FTR</P PAYMENT TP>
                        <P_PROC_DT>2016-11-21</P_PROC_DT>
                        <P STTLM DT 1B>2016-11-21</P STTLM DT 1B>
                        <P_TIME_STAMP>2017-01-11 17:58:42.719</P_TIME_STAMP>
                        <P_TRX_DIRECTION>O</P_TRX_DIRECTION>
                        <P_TX_ID>TESTSNE_V32</P_TX_ID>
                     </ProcessingPersistentInfo>
                     <OperationalSection>
                        <D_BUTTON_ID>Submit</D_BUTTON_ID>
                     </OperationalSection>
                     <ProcessingTransientInfo>
                        <D CURRENCY CONVERSION TYPE>Base
                        <D_DIRECT_RECEIVER_INDEX>X</D_DIRECT_RECEIVER_INDEX>
                     </ProcessingTransientInfo>
                     <Monitors>
                        <UserMonitors>
                           <MU_COMPLIANCE_FORCE_STS>X</MU_COMPLIANCE_FORCE_STS>
                           <MU_FORCE_STANDARD_VD>X</MU_FORCE_STANDARD_VD>
                           <MU_HANDLE_71G_GAP>X</MU_HANDLE_71G_GAP>
<MU_MISSED_CUTOFF>X</MU_MISSED_CUTOFF>
                           <MU NSF FORCE STS>X</MU NSF FORCE STS>
                           <MU_PARTY_LIMIT_FORCE_STS>X</MU_PARTY_LIMIT_FORCE_STS>
                           <MU_PI_FORCE_STS>X</MU_PI_FORCE_STS>
                           <MU_REQ_FOR_CHARGES_FORCE_STS>X</MU_REQ_FOR_CHARGES_FORCE_STS>
                           <MU_SET_CDT_MOP>X</MU_SET_CDT_MOP>
                           <MU_SPECIAL_INST_STS>X</MU_SPECIAL_INST_STS>
                           <MU_STOP_FLAGS_OVERRIDE_STS>X</MU_STOP_FLAGS_OVERRIDE_STS>
                        </UserMonitors>
                        <ServiceMonitors>
                           <MF_AF_MATCH_STS>X</MF_AF_MATCH_STS>
                           <MF_AF_PROCESS_STS>X</MF_AF_PROCESS_STS>
                           <MF CANCEL MATCH STS>X</MF CANCEL MATCH STS>
```

```
<MF_CANCEL_REQUEST_VALID_STS>X</MF_CANCEL_REQUEST_VALID_STS>
            <MF_CDT_STOP_FLAGS_STS>X</MF_CDT_STOP_FLAGS_STS>
            <MF_COMPLIANCE_VALIDATION_STS>X</MF_COMPLIANCE_VALIDATION_STS>
            <MF CRD FEES POSTING STS>X</MF CRD FEES POSTING STS>
            <MF CREDIT POSTING STS>X</MF CREDIT POSTING STS>
            <MF_CREDIT_R_POSTING_STS>X</MF_CREDIT_R_POSTING_STS>
            <MF_DBT_FEES_POSTING_STS>X</MF_DBT_FEES_POSTING_STS>
            <MF_DBT_STOP_FLAGS_STS>X</MF_DBT_STOP_FLAGS_STS>
            <MF_DEBIT_POSTING_STS>X</MF_DEBIT_POSTING_STS>
            <MF DEBIT_R_POSTING_STS>X</MF_DEBIT_R_POSTING_STS>
            <MF_DIRECT_COVER_GENERATED>X</MF_DIRECT_COVER_GENERATED>
            <MF_FEE_PROC_STS>X</MF_FEE_PROC_STS>
            <MF_GENERATED ANSWER MESSAGE>X</MF_GENERATED ANSWER MESSAGE>
            <MF_GENERATED_CANCEL_REQUEST>X</mf_GENERATED_CANCEL_REQUEST>
            <MF GENERATE REQ CHARGES>X</MF GENERATE REQ CHARGES>
            <MF_INITIAL_CREATE>I</MF_INITIAL_CREATE>
            <MF_LC_MATCH_STS>X</MF_LC_MATCH_STS>
            <MF_LC_PROCESS_STS>X</MF_LC_PROCESS_STS>
            <MF MOP SELECTION STS>X</MF MOP SELECTION STS>
            <MF_NUM_OF_191>X</MF_NUM_OF_191>
            <MF_NUM_OF_210>X</MF_NUM_OF_210>
            <MF_N_MESSAGES_MATCH_STS>X</MF_N_MESSAGES_MATCH_STS>
            <MF_OPIOSN_MATCH_STS>X</MF_OPIOSN_MATCH_STS>
            <MF_OUT_REQ_FOR_CHRG_MATCH_STS>X</MF_OUT_REQ_FOR_CHRG_MATCH_STS>
            <MF_PDM>X</MF_PDM>
            <MF PISN MATCH STS>X</MF PISN MATCH STS>
            <MF PISN PROCESS STS>X</MF PISN PROCESS STS>
            <MF PNL POSTING STS>X</MF PNL POSTING STS>
            <MF_POSTING_STS>X</MF_POSTING_STS>
            <MF_REPRESMT_NOTIF>X</mf_REPRESMT_NOTIF>
            <MF_REQ_FOR_CHARGES_MATCH_STS>X</MF_REQ_FOR_CHARGES_MATCH_STS>
            <MF_REQ_FOR_CHARGES_VALID_STS>X</MF_REQ_FOR_CHARGES_VALID_STS>
            <MF_RTN_OCCURRENCE>X</MF_RTN_OCCURRENCE>
            <MF_SC_MATCH_STS>X</MF_SC_MATCH_STS>
            <MF_SC_PROCESS_STS>X</MF_SC_PROCESS_STS>
            <MF_SPECIAL_INST_STS>X</MF_SPECIAL_INST_STS>
            <MF TIME HOLD>X</MF TIME HOLD>
         </ServiceMonitors>
      </Monitors>
      <ReferenceData>
         <M STTLM CCY PROFILE>
            <F_INSTR_CCY_DRAFT>false</F_INSTR_CCY_DRAFT>
            <F_INSTR_CCY_EURO>IN</F_INSTR_CCY_EURO>
         </M_STTLM_CCY_PROFILE>
         <M DBT MOP PROFILE>
            <F MOP ALLOW NAC MSG>true
ALLOW NAC MSG>
            <F_MOP_CHK_DRAFT_CURRENCY>false/F_MOP_CHK_DRAFT_CURRENCY>
            <F MOP CURRENCY>USD</F MOP CURRENCY>
            <F_MOP_MAXAMOUNT>999999999</F_MOP_MAXAMOUNT>
            <F_MOP_MINAMOUNT>1</F_MOP_MINAMOUNT>
            <F_MOP_MOPDOWN/>
            <F_MOP_NM>BOOK</F_MOP_NM>
            <F_MOP_SENDOUTMSG>true</F_MOP_SENDOUTMSG>
            <F_MOP_SEND_REC_IDCODE>USABA</F_MOP_SEND_REC_IDCODE>
            <F_MOP_SETTLEMENT_ACC>1</F_MOP_SETTLEMENT_ACC>
            <F_MOP_SETT_ACC_EXISTS>false/F_MOP_SETT_ACC_EXISTS>
            <F MOP SPLIT OVER MAX>false/F MOP SPLIT OVER MAX>
         </M_DBT_MOP_PROFILE>
      </ReferenceData>
      <XMLPersistentInfo>
        <X_CDTR_ACCT_ID>5544411121</X_CDTR_ACCT_ID>
      </XMLPersistentInfo>
  </Extn>
</Msg>
   <Pmnt xmlns:q1="http://fundtech.com/SCL/CommonTypes">
      <Document xmlns="urn:iso:std:iso:20022:tech:xsd:pain.001.001.06">
         <CstmrCdtTrfInitn>
            <GrpHdr>
               <MsgId>TESTTCH001</MsgId>
```

```
<CreDtTm>2016-11-01T06:45:57</CreDtTm>
   <NbOfTxs>1</NbOfTxs>
   <InitgPty>
      <Nm>Tom Hanks</Nm>
      <Id>
         <OrgId>
            <Othr>
               <Id>US1CUTOMHA</Id>
            </0thr>
         </OrgId>
      </Id>
  </InitgPty>
</GrpHdr>
<PmtTnf>
  <PmtInfId>TESTSNE V32/PmtInfId>
  <PmtMtd>TRF</PmtMtd>
  <PmtTpInf>
      <InstrPrty>HIGH</InstrPrty>
      <SvcLvl>
         <Prtry>SDVA</Prtry>
      </SvcLvl>
      <CtgyPurp>
         <Cd>SDVA</Cd>
      </CtgyPurp>
   </PmtTpInf>
   <RegdExctnDt>2016-11-21</RegdExctnDt>
  <Dbtr>
      <Nm>Tom Hanks</Nm>
      <Id>
         <OrgId>
            <Othr>
               <Id>US1CUTOMHA</Id>
            </0thr>
         </OrgId>
      </Id>
  </Dbtr>
   <DbtrAcct>
      <Id>
         <Othr>
            <Id>7770000022</Id>
         </0thr>
     </Id>
   </DbtrAcct>
   <DbtrAgt>
      <FinInstnId>
         <ClrSysMmbId>
            <MmbId>020010001</MmbId>
         </ClrSysMmbId>
      </FinInstnId>
  </DbtrAgt>
   <CdtTrfTxInf>
      <PmtId>
         <InstrId>ER208817514642</InstrId>
         <EndToEndId>E208817515367</EndToEndId>
      </PmtId>
      <PmtTpInf>
         <InstrPrty>HIGH</InstrPrty>
         <SvcLvl>
            <Prtry>SDVA</Prtry>
         </SvcLvl>
         <LclInstrm>
            <Prtry>CONSUMER</Prtry>
         </LclInstrm>
      </PmtTpInf>
      <Amt>
         <InstdAmt Ccy="USD">100.00</InstdAmt>
      </Amt>
      <ChrgBr>SHAR</ChrgBr>
      <UltmtDbtr>
         <Nm>Tom Hanks</Nm>
```

```
<PstlAdr>
                     <AdrLine>Adr</AdrLine>
                  </PstlAdr>
                  <Id>
                     <PrvtId>
                        <Othr>
                            <Id>Id</Id>
                            <SchmeNm>
                               <Cd>ARNU</Cd>
                            </SchmeNm>
                         </Othr>
                     </PrvtId>
                  </Id>
               </UltmtDbtr>
               <CdtrAgt>
                  <FinInstnId>
                     <ClrSysMmbId>
                        <MmbId>131000000</MmbId>
                     </ClrSysMmbId>
                  </FinInstnId>
               </CdtrAgt>
               <Cdtr>
                  <Nm>Dan Fox</Nm>
                  <PstlAdr>
                     <StrtNm>Mircea Voda</StrtNm>
                     <BldgNb>40</BldgNb>
                     <PstCd>030669</PstCd>
                     <TwnNm>Bucuresti</TwnNm>
                     <Ctry>RO</Ctry>
                  </PstlAdr>
                  <Id>
                     <PrvtId>
                         <DtAndPlcOfBirth>
                            <BirthDt>1976-02-14</BirthDt>
                            <CityOfBirth>GL</CityOfBirth>
                            <CtryOfBirth>RO</CtryOfBirth>
                        </DtAndPlcOfBirth>
                     </PrvtId>
                  </Id>
               </Cdtr>
               <CdtrAcct>
                  <Id>
                     <Othr>
                         <Id>5544411121</Id>
                         <SchmeNm>
                            <Cd>BBAN</Cd>
                         </SchmeNm>
                        <Issr>123456</Issr>
                     </0thr>
                  </Id>
               </CdtrAcct>
               <RltdRmtInf>
                  <RmtId>111
               </RltdRmtInf>
            </CdtTrfTxInf>
         </PmtInf>
      </CstmrCdtTrfInitn>
   </Document>
</Pmnt>
<Extn xmlns:q1="http://fundtech.com/SCL/CommonTypes">
   <Monitors xmlns="">
      <ServiceMonitors>
         <MF_CDB_DB_STS/>
         <MF_CDB_CR_STS/>
      </ServiceMonitors>
   </Monitors>
   <q1:OperationalSection>
      <q1:D_BUTTON_ID>Submit</q1:D_BUTTON_ID>
   </q1:OperationalSection>
   <q1:MsgNotes>
```

Actions on Payments Errors

## 4 Errors

## 4.1 Generic Errors

Code	Description	Notes
28560	An error has occurred while trying to perform this action	
40087	Service [service name] failure	
40071	[Office name] is not a valid Office	Office was not found in cache
40127	Service [service name] failure, (last step: [Last step name])	
3104	Payment currency should equal to debit account or credit account currency	Error message reported when neither the Debit nor Credit account's currency is in the payment's currency. Message is routed to the Repair queue.
10002	Interface severe error during processing. Reason: [Reason for the crash]	The Alerts are generated as part of the transaction and thus are either persisted into MQ or the entire transaction is rolled back and the alert will be generated when the transaction is completed after the system is available again
40104	Rule type ID [Rule type ID] – [Rule type description] - was not found	Error message which will be issued when message processing, mandatory rule type was not found, (e.g. department, business area, payment classification etc)
60000	The data content of this field may not contain a / as its first character, nor as its last character; nor may it contain // (two consecutive slashes) anywhere within its contents.	
60001	Instr Id is empty	
60002	Instr Id length should not exceed 16 characters	
60003	Instr Id format is invalid	
60004	Instr Id is invalid, should not start or end with a slash / and should not contain two consecutive slashes //.	
60005	Sttlm date is empty	
60006	Sttlm ccy is empty	
60007	Sttlm amount is empty	
60008	Sttlm date is invalid	
60009	Year in the Sttlm date is invalid	
60010	Sttlm ccy is invalid	
60011	Sttlm amount is invalid. Number of decimal digits in amount exceeds maximum allowed for the currency	
60012	Sttlm amount is invalid, the integer part of amount should contain at least one digit	

Actions on Payments Errors

Code	Description	Notes
60013	Decimal separator in Sttlm amount is incorrect, should be a single comma	
60014	Instd ccy/Instd amount is empty	
60015	Instd ccy is invalid	
60016	Instd amount is invalid	
60017	Instd amount is invalid, the integer part of amount should contain at least one digit	
60018	Decimal separator in Instd amount is incorrect, should be a single comma	

## 4.2 Static Data Related Error Codes

Code	Description	Notes
77787	Input parameter(s) [missing parameter names] missing.	An input parameter is missing.

## 4.3 Message Processing Related Error Codes

Code	Description	Notes
77782	Message was not found for MID [missing MID]	MID not found in MINF
3104	Payment currency should equal debit account or credit account currency	Error message reported when neither the Debit nor Credit account currency is in the payment's currency. Message is routed to the Repair queue.

Actions on Payments Appendix A

## **Appendix A**

## **List of System Users**

GPP users are specified in the System User menu, or in DB in USERS table. For more information, see GPP Online Help.

## **List of System Entitlements**

GPP users are associated with an appropriate entitlement. Entitlement is a profile in GPP specified in the Entitlement menu. For more information, see GPP Online Help.

### **Document Preservation**

## **Message Load Service**

Maintenance	Query
Any change in message attributes	Select t.* from LOGICAL_FIELDS
List of supported documents	Select DOCUMENT_ID from XML_DOCUMENT_TYPES
List of supported message output values	Select distinct XML_TYPE from LOGICAL_FIELDS_XPATH union
	select distinct FORMAT_TYPE from XML_FORMAT_TYPE_RELATIONS

## **Message Submit Service**

Maintenance	Query
List of messages that are allowed for creation	MESSAGEBUTTONS.AVAILABLE_FOR_PAYMENT_CREATION <> 0
List of message buttons	Select BUTTONID, BUTTONDESCRIPTION from MESSAGEBUTTONS
Service screen sets	Select PRULES.CONDITIONS_AS_TEXT, PRULES.RULE_ACTION from OBJECT_PRULES inner join PRULES on PRULES.UID_PRULES = OBJECT_PRULES.RULE_UID where OBJECT_PRULES.RULE_TYPE_ID = 108 and RULE_UID such as %WSI%;
List of applicable action buttons per message status	Select * from MESSAGE_FIELDS_SETTING where FIELDS_GROUP_ID = SERVICES_INTERFACE

## **Appendix B: Glossary**

This table lists the terms used in this document:

Term	Description
GPP	Global PAYplus
Logical field ID	Messages attribute description. With GPP use of logical fields that are associated to different XML paths, it is possible to define a message attribute, its type, its display name and other attributes. For example, the Sttlm amt describes the settlement amount of the outgoing payment. The logical field ID is used behind the scenes and is unique (X_STTLM_AMT)
LOGICAL_FIELDS_XPATH	Describes a different XML path location & element name for the logical field ID for different message types (like PACS008, PAIN 001).
	For example: X_STTLM_AMT has different XML path in PACS 008 (/IntrBkSttlmAmt tag name: IntrBkSttlmAmt).
	Note that the path may be a relative path. For full path, refer to the parent path ID that is specified under the logical field.
MID	Message ID –a unique identifier generated by GPP for each Created/Incoming payment
MINF	Message information table in the database. Stores all messages in the system. Primary key: P_MID
PACS	Payments Clearing and Settlement
PAIN	Payment Initiation
PDO	Payment Data Object (PDO)
SOA	Service-Oriented Architecture