



# TEMENOS

The software specialist for banking and finance

# TPH Day 5

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## Learning Objectives

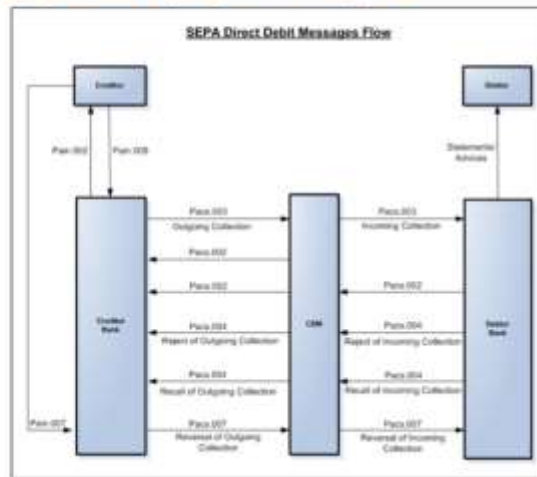
### Objectives

- Workshop
  - SEPA DIRECT DEBIT
    - PAIN 008
    - PACS 003
- Overview Instant Payments
- Overview PSD2
- Other Features



## Direct Debits

- What is a direct debit?
- An arrangement made with a bank that allows a third party to transfer money from a person's account on agreed dates, typically in order to pay bills.



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The diagram shown above denotes the direct debit flow in US ACH clearing. US ACH direct debits are supported out of the box in TPH.

Direction

**Send to** the clearing house – Direct Debit Initiation

Instruction to debit a debtor and pay the beneficiary in our books

**Receive from** the clearing house – Incoming direct debit

Instruction to debit the debtor in our books and credit the beneficiary

Direct Debit (DD) is the simplest way for an organisation to collect regular or occasional payments from their Customers account with another bank. It saves time, reduces the cost of collection and puts cleared funds directly into their bank account. A Direct Debit is the payment of an agreed amount collected from a customer's bank account by an originator on request. The amounts and dates may vary from payment to payment

## Direct Debit Mandates

- What is a direct debit mandate?

*An account holder can authorise a company to collect **direct debit** payments. The client signs a **debit mandate** form giving the requesting company permission to **debit** their account with a fixed or variable monthly value. This value can be recurring or once-off.*

- Where do we record mandates?

- DD.DDI

The authority to debit the account of a client at another bank (or internally within T24) usually requires the completion of a direct debit instruction (DDI) form that the client gives to the organisation (Direct Debit Originator) through which the DD is to be collected. Although it is now increasingly popular for paperless mandates to be created where the client is not present the process is essentially the same except the paperless version is not usually signed.

The Direct Debit Instruction includes details such as:

- Name and address of Bank or Building society that will collect the DD payment (Originator).
- Name and address of the Bank that will pay the funds
- Sort code of the Bank that is to be debited.
- Customer Bank Account number
- Customer Bank Account holder details.

The Direct Debit Originator forwards the completed direct debit instruction to the Customer's Bank (which can be T24 itself) where the debit account is maintained. Should the details be incorrect, the Customer's Bank can reject the DDI.

## Direct Debits

- Accept Customer to Bank (C2B) Payment Collection Requests
- Clear Customer to Bank (C2B) Payment Orders [Inter-bank leg]
- Settle Customer to Bank (C2B) Payment Orders
- Exceptions and Investigations relating to C2B Payment Orders
- Provide Customer Status Reports on C2B Payment Orders



The SEPA Direct Debit setup is able to receive/accept/map and process any DDI, including pain.008 (Direct Debit Initiation) xml messages. SEPA Pain.008 file received from client channel will always have batch booking indicator as 'True' which means that the transactions in the file will be treated as a batch always. The total amount credited to the customer will be the parent transaction and the individual transactions for various debtors will be considered as individual/child transactions. As part of the DDI Inward Mapping, the Batch file will be validated for file duplicate check, checksum (hash total), against XSD scheme, standard technical file requirements (Total amount of the file, total number of transactions per file, total amount per batch, total number of transactions per batch etc.) and determination of processing company.

Based on the message acceptance configuration for the client channel and message type, customer status report of the file validation status (accepted or rejected) is sent to the customer.

Once the file is successfully validated, a parent transaction for the total credit is created in the system where the creditor will be credited for the batch amount. Individual transactions are not created payment system at this moment.

If the requested collection date of the batch file is in the future and beyond the max allowed days defined for the message type from that particular channel then the parent transaction will be warehoused immediately (not rejected) and no functional validation steps will be executed for the parent transaction (will be warehoused by the first warehouse check in the process flow). Individual transactions are still not

created at this moment.

If the requested collection date of the batch file cannot be met by the system (because of settlement shift or cut off shift) then the settlement date is bumped to next possible date and the file is not rejected.

Once the parent is finalised (status 600), then the children will be released for mapping. And upon successful processing of all the children, the status of the payment is updated to 999.

## Clearing Transaction Types – Direct Debit

Business Event	Transaction Type	ISO Message	Version
Direct Debit Initiation	DD	Pain.008	02
Direct Debit	DD	Pacs.003	02
Direct Debit Reject	RJ	Pacs.002	03
Return Debit Transfer/Direct Debit	RF	Pacs.004	02
Debit Refunds	RD	Pacs.004	02
Customer payment (DD) reversal	RV	Pain.007	02
Direct Debit Reversal	RV	Pacs.007	02



Direct Debit Initiation – DD - Receive and Execute Customer to Bank direct debit collection requests.

Direct Debit collection requests received from Creditors will be validated and routed through the appropriate clearing based on the requested collection date and cut-off time. Payments with a future value date can be warehoused and processed on the due date.

Payments that are finalised successfully, will be forwarded to the Clearing in pacs.003 message format or any other supported native clearing format.

Settlement entries will be raised immediately or later on the settlement date depending on whether the Clearing settles before knowing the status of the collection items (Pre-Settled) or after the status is known (Post Settled).

Direct Debit – DD - Receive and process Bank to Bank Direct Debit payment orders to debit the debtor in the books of the processing bank.

Direct Debits will be executed successfully if the debit instruction is supported with appropriate mandates and there is sufficient funds in the debtor account. Otherwise the debit item is rejected or returned.

Direct Debit Reject – RJ - Direct Debit Rejection is negative confirmation of direct debit item received by the debtor bank.

Payments Hub can send an outbound Direct Debit rejection message (pacs.002) when a direct debit instruction received from the Clearing cannot be processed successfully



(Example - Debtor mandate is not present, insufficient funds in debtor account).  
Framework also allows for transformation of Rejection messages in non-ISO format to support native clearing formats.

Payments Hub can receive inbound Direct debit reject message (pacs.002) and mark a previously sent collection item as “Rejected”. “Rejected” direct debits will be excluded for settlement.

Return Debit Transfer/Direct Debit – RF - Direct Debits can be returned after the settlement date, if they are within the allowed time period of the clearing. Returns are initiated by the debtor bank.

TPH supports automated and manual return of incoming direct debits that are unsuccessful.

For outgoing returns, TPH will generate pacs.004 message or any other native clearing message format for supported clearings.

Direct Debit returns received by the Creditor Bank for debits previously originated is also supported. TPH can receive such returns as pacs.004 messages and process them STP.

Native Clearing formats for DD return will be supported as a feature of the relevant Clearing.

Debit Refunds – RD - Direct Debits can be returned manually, at the request of the debtor, within the allowed time period, if it is supported by the Clearing.

For outgoing DD refunds, TPH will generate pacs.004 message. Native clearing formats for DD refund will be supported under the respective Clearings.

TPH also supports receipt of DD refunds from Debtor Bank through the clearing and process them by debiting the Creditor who initiated the Direct Debit.

Customer payment (DD) Reversal – RV - creditor Bank can receive a Payment (Direct Debit) reversal request from the Creditor in the form of a pain.007 message.

TPH can support receipt of Customer Payment reversal message (pain.007) to reverse a previously initiated direct debit. Reversals accepted are processed STP by debiting the Creditor initiating the reversal and crediting the beneficiary.

An outgoing pacs.007 message will be generated for DD reversals to the clearing. Native clearing formats can be supported under the relevant Clearing feature.

Direct Debit Reversal – RV - Debtor Bank can receive an incoming DD reversal from the Creditor Bank through the Clearing.

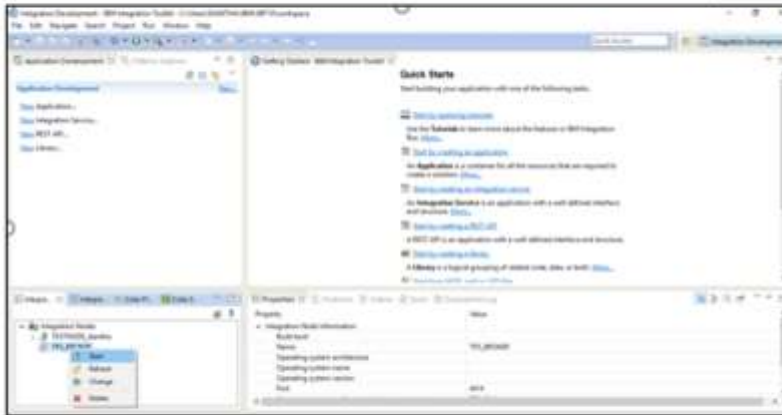
TPH can receive DD reversals (pacs.007) and creditor the debtor account.



Workshop – Process an SEPA Direct Debit Payment Initiation

## SEPA Direct Debit- Open the IBM Integration Toolkit

**Open the IBM Integration Toolkit – 10.0.0.9 in the folder IBM Integration BUS – 10.0.0.9**



Select TPH\_BROKER, right click and press Start to start the Broker.

## SEPA Direct Debit

Select the XML message from the folder  
C:\Temenos\R18\Env\Slot01\Data\T24\UD\PP\OriginalBackupMsgFolder



Name	Date modified	Type	Size
Pain.001	10/30/2017 8:02 PM	XML Document	3 KB
<b>pain.008_05</b>	<b>10/13/2017 12:58</b>	<b>XML Document</b>	<b>3 KB</b>
pain.008_Bulk_01	10/13/2017 2:52 PM	XML Document	7 KB
pain.008_Bulk_02	10/13/2017 3:36 PM	XML Document	7 KB

## SEPA DIRECT DEBIT

**Edit the selected message with Msg ID, Ctrl Sum(Check the individual transaction amount and the total amount of the file is tallied)**

```

1  #include <stdio.h>
2  #include <string.h>
3  #include <math.h>
4  #include <stdlib.h>
5  #include <unistd.h>
6  #include <sys/types.h>
7  #include <sys/stat.h>
8  #include <fcntl.h>
9  #include <sys/time.h>
10 #include <sys/mman.h>
11 #include <sys/wait.h>
12 #include <sys/socket.h>
13 #include <sys/un.h>
14 #include <sys/uio.h>
15 #include <sys/eventfd.h>
16 #include <sys/signalfd.h>
17 #include <sys/timerfd.h>
18 #include <sys/prctl.h>
19 #include <sys/ptrace.h>
20 #include <sys/procfs.h>
21 #include <sys/utsname.h>
22 #include <sys/syscall.h>
23 #include <sys/sysinfo.h>
24 #include <sys/time.h>
25 #include <sys/times.h>
26 #include <sys/timex.h>
27 #include <sys/uio.h>
28 #include <sys/ucred.h>
29 #include <sys/xattr.h>
30 #include <sys/zfs.h>
31 #include <sys/zfs_ioctl.h>
32 #include <sys/zfs_ondisk.h>
33 #include <sys/zfs_refint.h>
34 #include <sys/zfs_vfsops.h>
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99 #include <sys/zfs_vfsops.h>
100 #include <sys/zfs_vfsops.h>

```



- Change the Msg Id and Amount to avoid the Duplicate of Payment.
- Value date of the payment must be always the future dated transactions.

## SEPA DIRECT DEBIT

Paste the edited message in the folder  
**C:\Temenos\R18\Env\Slot01\Data\T24\UD\PP\BulkDDInput**



### Note:

- After you paste in the above folder, the message should disappear.
- If the message disappears in the folder, check the mqsibackout folder in the same location to find out for any failure files.

## SEPA DIRECT DEBIT

### Check the status of the file in the Received Files

Received File Details: ESB-d01613c9-0de4-4e1c-9103-9740b13e7d9c

View

Audit

Initiating Party Details

Message/File Reference	ESB-d01613c9-0de4-4e1c-9103-9740b13e7d9c
File Name	DD-Initiation-pain.D01.D01.05.6.xml
Originating Reference	3M5G20PARC29
Received Date Time	20180727T110419999
Channel	DDI
Single Multiple Indicator	S
Message Format	pain.008.D01
Message/File Status	MAAPMED
File Type	DDI
Queue Name	TT9-DDI
ACK/NACK Generated Indicator	N
File Header TestCode	P
File Header Creation DateTime	20180717T093047123
Originating Source	DDI

Currently in this Model Bank Version viewing the status of the file in PP.INPUT.FILE, but in future check the status of the file in PPT.RECEIVEDFILEDETAILS.

## View Dashboard

### Pending and Processed Payment Status changed to Message Mapping

Bank Menu	→
Customer Relationship	→
Customer	→
CRM	→
Account	→
Account Management	→
Product Catalog	→
Retail Operations	→
Admin Operations	→
Risk Management	→
Payment Services	→
Corporate Operations	→
Treasury Operations	→
Private Operations	→
Finance	→
Business Tools	→
Payment Hub	→
New Payment Order	→
Payment Inquiries	→
Pending Payments	→
Pending and Processed Payments	→
Pending Processed Payments - Party	→
Pending Processed Payments - Totals	→

Pending and Processed Payments											
Company	FT Number	Ccy	Amnt	Acc Comp	Acc Item	Acc Ccy	Date	Cust Ref	Sender Ref	Status Code	Description
SWK	SWK1010623-FT-001	EUR	43.01					230K5700000FAM00001		6	Completed - Message Mapping



## Run STPFLOW.MEDIUM Service

### Run BNK/PAYMENT.STPFLOW.MEDIUM service

YCAL SERVICE: BNK/PAYMENT.STPFLOW.MEDIUM

Development 1:  Parameters: STPFLOW.Login

Service Status:  Must Profile:  Service Status:

PERCENT STPFLOW.LOGIN  
Parameters: STPFLOW.Login

Date: 10/07/2019  Date: 10/07/2019

Service Control: ☐ Stop ☐ Start ☒ Auto

Service Time:

Time Out:

### Pending and Processed Payment Status for Parent moved to 19 Waiting – Warehouse Queue

Pending and Processed Payments

Company	IT Identifier	Ccy	Acct	Acct Comp	Acct Num	Acct Ccy	Date	Cost Ref	Sender Ref	Status Code	Description
BNK	BNK18188PDA4CLBLL	EUR	111.02	BNK	01001401000010001	EUR	10 JUL 2019			19	Waiting - Warehouse Queue

The parent moved to the warehouse queue since DD is a future value transaction.

## Run Inward.Mapping Service to Create Child Payment

### Run Inward.Mapping service

TSA SERVICE: BNK/INWARD.MAPPING

Description: INWARD MESSAGE MAPPING

Service Name: INWARD.MAPPING Web Profile: INWARD MESSAGE MAPPING Service Status: ON

User: SAF.SAF 2017-2018

Service Control: ☐ Stop ☐ Start ☒ Auto

Service Time:

Time Out:

### Pending and Processed Payment Status moved to 706

Pending and Processed Payments

Company	FT Number	Ccy	Amnt	Acc Comp	Acc Num	Acc Ccy	Date	Cost Ref	Sender Ref	Status Code	Description	
BNK	BNK17167C8PFLJ3	EUR	31.21	BNK	EUR14320001000	EUR	17 APR 2017	Originator000000		706	Waiting Clearing	on

BNK/INWARD.MAPPING service should be running, the child transaction will be created and the status of the transaction is 706 – Waiting Clearing.

## PP.CLEARING.FREQUENCY

Set the cut off time in PP.CLEARING.FREQUENCY

PP.CLEARING.FREQUENCY STOP

	Cut Off*	Status
<input type="radio"/>	00:00	0000000000
<input type="radio"/>	00:05	0000000000
<input type="radio"/>	00:10	0000000000
<input type="radio"/>	00:15	0000000000
<input type="radio"/>	00:20	0000000000
<input type="radio"/>	00:25	0000000000
<input type="radio"/>	00:30	0000000000
<input type="radio"/>	00:35	0000000000
<input type="radio"/>	00:40	0000000000
<input type="radio"/>	00:45	0000000000
<input type="radio"/>	00:50	0000000000
<input type="radio"/>	00:55	0000000000
<input type="radio"/>	01:00	0000000000
<input type="radio"/>	01:05	0000000000
<input type="radio"/>	01:10	0000000000
<input type="radio"/>	01:15	0000000000

## Run BNK/CLEARING.SETTLEMENT.SERVICE

The screenshot displays the AWS IAM console configuration for the 'TSA Service' role. The 'Permissions' tab is active, showing the 'AWS\_IAM' policy. The 'Permissions summary' section indicates that the role has 1 policy attached, granting it permissions to manage IAM users and groups. The 'Permissions' section shows the 'AWS\_IAM' policy is attached to the role.

## Processed Payment

In case of DD Payments where "settlement shift" in Channel Cutoff is applicable , then payment will move from 706 to an intermediary status 710.

PP-CHANNEL CUTOFF STEP2:R18-11-20161011

Company ID	0006
Channel Name	STEP2
Currency Code	EUR
C.T.R.B.T.R. Indicator	<input checked="" type="radio"/> A <input type="radio"/> B <input type="radio"/> C
Payment Direction	-
Priority	-
Message Type	-
Secure	-
Cutoff Time	23:49
Cutoff Time With P.R.	23:49
Settlement Shift	5
P.R. Shift	0
Cutoff Shift	5
Acceptance	<input checked="" type="radio"/> Accept <input type="radio"/> Abort
Start Date	31-OCT-2016
End Date	30-Nov-1111

- ☐ A **pacs.003** message is generated when the payment is successful and can be viewed in the **Sent File Details**.
- ☐ Sent message (pacs.003) to Clearing House can be viewed in the folder **C:\Temenos\R18\Env\Slot01\Data\T24\UD\PP\DDOutput**

## Understand the Audit Trail

[illegible]



Workshop – Process an incoming PACS003

## SEPA Direct Debit – Incoming PACS 003

Select the XML message from the folder

C:\Temenos\R18\Env\Slot01\Data\T24\UD\PP\OriginalBackupMsgFolder



	Name	Date modified	Type	Size
Quick access	PACS.003(test)	1/8/2018 6:24 PM	XML Document	4 KB



## SEPA DIRECT DEBIT

Edit the selected message with Msg ID, Ctrl Sum(Check the individual transaction amount and the total amount of the file is tallied)

[illegible]

- Change the Msg Id and Amount to avoid the Duplicate of Payment.
- Value date of the payment must be always the future dated transactions.

## SEPA DIRECT DEBIT - Incoming

Paste the edited message in the folder  
**C:\Temenos\R18\Env\Slot01\Data\T24\UD\PP\STEP2Input**



Name	Date modified	Type	Size
mqsibackout	7/4/2018 3:00 PM	File folder	
mqsitransitin	7/4/2018 3:07 PM	File folder	
Tpecs.003-001.047	7/4/2018 3:07 PM	File	4 KB

### Note:

- After you paste in the above folder, the message should disappear.
- If the message disappears in the folder, check the mqsibackout folder in the same location to find out for any failure files.

## SEPA DIRECT DEBIT

### Check the status of the file in the Received Files

Received File Details: 9825897076.D0	
View	Audit
Initiating Party Details	
Message/File Reference	9825897076.D0
File Name	space-2023-09-1-947
Originating Reference	9825897076.D0
Received Date Time	20230901100754000
Company ID	9825897076.D0
Channel	STCHS
Single Multiple Indicator	C
Message Format	XML
Message/File Status	MAILED
Queue Name	STCHS
ACK/NACK Generated Indicator	N
File Header Test Code	P
File Header Service Identifier	000
File Header Creation Date Time	20230901100754000
File Header Sending Institution	9825897076.D0
File Header Receiving Institution	9825897076.D0
Originating Source	STCHS

Currently in this Model Bank Version viewing the status of the file in PP.INPUT.FILE,  
but in future check the status of the file in PPT.RECEIVEDFILEDETAILS.

## Run STPFLOW.MEDIUM Service

### Run BNK/PAYMENT.STPFLOW.LIGHT service



### Pending and Processed Payment Status for the incoming payment moved to 999 – Payment Complete

Company	FT Number	Ccy	Acct	Acc Comp	Acc Name	Acc Ccy	Date	Cust Ref	Sender Ref	Status Code	Description	
BNK	BNK10000000000000000000	EUR	6010	BNK	EUR14000000000000000000	EUR	04.08.2018	TC00000000000000000000	00100000000000000000	999	Payment complete	

The parent moved to the warehouse queue since DD is a future value transaction.

## View Payment Details

Company	FT Number	Ccy	Amnt	Acc Comp	Acc Num	Acc Ccy	Date	Cust Ref	Sender Ref	Status Code	Description	
BVA	BVA70185DFJLHJC	EUR	40.08	BVA	EUR7402800810001	EUR	04-JUL-2018	TODAY12.1240	301754130AY12.1240	999	Payment complete	

Report: EDS View Screens    [DE781856NPNY](#)

### Payment Processing Information

Status	999	Processing Company	8444
Transaction Reference Number	BVA70185DFJLHJC	Processing Date	04-JUL-2018    04-JUL-2018
Sender's Reference Number	301754130AY12.1240	Priority	1
Related Reference	TODAY12.1240	Product	928P RST
Source	STEP2	Output Channel	LEADER
Direction	X	Transaction Currency	EUR
Transfer Type	C	Transaction Amount	40.08
Incoming Message Type	9999002	Charge Option	999
Req Collection Date	04-JUL-2018    04-JUL-2018	Schema	928

[View Payment Details - Contd](#)[illegible]

## View Posting Details

Company	FT Number	Ccy	Amnt	Acc Comp	Acc Num	Acc Ccy	Date	Cust Ref	Sender Ref	Status Code	Description
000	000101000P_0_000	EUR	60.00	000	0001400000000000	EUR	04_AUG_2018	000000121200	001004100000121200	999	Payment complete

Payment Information

Results 1 - 1 of 1

Company ID

000

FT Number

000101000P\_0\_000

Options

Posting Lines

Posting Lines

Results 1 - 1 of 1

Prtg Line No	Header Key	Acc Comp ID	Acc Name	Acc Ccy	Deb Ccr Ind	Ccy	Amnt	Value Date	Rev Ind
1	ACCA001000000000	000	100000	EUR	0	EUR	60.00	20180704	<a href="#">View Statement</a>
2	ACCA001000000000	000	0001400000000000	EUR	0	EUR	60.00	20180704	<a href="#">View Statement</a>
3	ACCA001000000000	000	100000	EUR	0	EUR	2.00	20180704	<a href="#">View Statement</a>
4	ACCA001000000000	000	000000	EUR	0	EUR	2.00	20180704	<a href="#">View Statement</a>

### Posting Entries (PACS 003) :

Debit Client Account  
 Credit Suspense Account  
 Debit Client Account for Charges  
 Credit P&L Account for Charges

## Understand the Audit Trail

[illegible]



## Understand the Audit Trial - Contd

[illegible]

## View POR.TRANSACTION

[illegible]

## View POR.TRANSACTION - Contd

[illegible]

Pending Main Account Debit C Y	64.0	
Pending Main Account Credit	107.00	
Pending Main Account Debit C Y	64.0	
Pending Charge Amount Debit	0	
Pending Charge Amount Credit C Y	20.00	
Required Collection Date	01 JUL 2018	01 JUL 2018
Currency Market	0	
Commodities/Fees	0	
Bulk Reference Issuing	2018-0001 (Sales) - 2018-0001 (Fees) (2018)	

# Overview of Instant Payments

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## What is Instant Payments?

- "Instant payments" are electronic (credit transfer) payments available 24/7/365 and resulting in immediate or close to immediate interbank clearing of the transaction and crediting of the payee's account with confirmation to the payer (within seconds of payment initiation).
- Temenos Payment Hub (TPH) supports processing of "Instant Payments" using an Instant Payments Framework and supports SEPA Instant Credit Transfer (SCT<sup>INST</sup>) Instant Payments..



- Instant payments systems are already established or are in design in several countries inside and outside the European Union (EU).
- Instant payments adoption is fast expanding in person-to-business (P2B), person-to-person (P2P) and business-to-business (B2B) segments.
- Increase in digitization has enabled 24/7 interaction between customers and businesses and hence retail promotions with instant offers, instant delivery, require guaranteed instant payment.
- The need for instant funds availability to match the physical delivery of goods for e/m-commerce business transactions, need for a cost effective and secure method to make payments for goods and services at Point of Sale (POS) etc., require an efficient and secure instant payment system.

## Instant Payment - Overview

- European Payments Council (EPC) has announced a SEPA Instant Credit Transfer (SCT<sup>INST</sup>) payment scheme to deliver a liquidity-efficient pan-European instant payment service.
- It allows payment service providers in SEPA to offer a SEPA-wide euro credit transfer product to customers. SCT<sup>INST</sup> will be automated, based on use of open standards and best practices of straight through processing ("STP") without manual intervention
- These payments Contains the time zone while time stamping payments to be sent to the Clearing
- For instance, EBA INST requires all payment initiations to the Clearing House to be time stamped with UTC time zone as the base

European Payments Council (EPC) has announced a SEPA Instant Credit Transfer (SCT<sup>INST</sup>) payment scheme to deliver a liquidity-efficient pan-European instant payment service. It allows payment service providers in SEPA to offer a SEPA-wide euro credit transfer product to customers. SCT<sup>INST</sup> will be automated, based on use of open standards and best practices of straight through processing ("STP") without manual intervention.

## RTGS vs INSTANT

RTGS	INSTANT PAYMENTS
<ul style="list-style-type: none"> <li>• Single credit transfers with settlement on the same day (immediate)</li> </ul>	<ul style="list-style-type: none"> <li>• Single credit transfers with settlement within <b>seconds</b> of initiating the payment</li> </ul>
<ul style="list-style-type: none"> <li>• Settlement of RTGS is always Gross Settlement</li> </ul>	<ul style="list-style-type: none"> <li>• It can be either Gross Settlement/Net Settlement</li> </ul>
<ul style="list-style-type: none"> <li>• Feedback sent to sender after the payment processed</li> </ul>	<ul style="list-style-type: none"> <li>• Instant Feedback sent to Sender</li> </ul>
<ul style="list-style-type: none"> <li>• Available only in working hours</li> </ul>	<ul style="list-style-type: none"> <li>• Available 24/7/365</li> </ul>
<ul style="list-style-type: none"> <li>• Time stamp not required in this case</li> </ul>	<ul style="list-style-type: none"> <li>• Payment timestamped for instant payments</li> </ul>



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An RTGS payment is also an immediate payment. Meaning, it is a single credit transfer payment and is processed as soon as it is received and the beneficiary is credited at the end of the processing cycle. Settlement for a RTGS payment is always gross settlement.

An instant payment is also like a RTGS payment, except that it is immediate and has number of SLAs relating to time that need to be adhered to be termed as an instant payment.

A payment is termed instant as the entire payment needs to be processed within a specific time frame which is usually in seconds – 10 to 20 seconds depending on the clearing.

These payments are usually targeted to retail customers for their online banking transactions, standing orders. This is also aimed at corporate customers who may use this to pay salaries, dividends, interest etc.

For instance, an instant payment

Needs to be time stamped once all the details in the payment initiation have been validated.

Once time stamped, there is a specific time limit within which that payment needs to be sent to the Clearing. If this time limit is exceeded, Clearing will reject the payment. When sending the message to the clearing, system need not debit. It can debit on receiving a positive confirmation from the clearing.

Beneficiary bank needs to be receive the payment within a specific time frame from the Time Stamp in the payment else will reject it

Settlement of instant payments is always net settlement. The Direct Participant (DP) settles with the Clearing House (CSM or CH) at specified time intervals during the day. The number of times the settlement happens during the day differs from one clearing to another.



## Message Types used in Instant Payments

Payment Message types used in Instant Payments :

- Pain.001 – For payment initiation from customers/channels/bank upstream systems
- Pacs.008
  - For credit transfer requests from Indirect Participants (IPs)
  - For credit transfer requests from and to Clearing House (CSM)
  - For credit transfers forwarded to IPs
- Pacs.002 – Confirmation messages from and to CSM

## Message Types used in Instant Payments

- Pain.002 – Confirmation messages to customers/channels/bank upstream systems
- Pacs .028 – Investigation message
- Camt 056 – Recall request for Cancellation
- Pacs.004 – Payment Return/Refund
- Camt 029 – Negative Recall Answer

## Participants in an Instant Payments

- Ordering Party/Ordering Institution
- Processing Bank
- Clearing House
- Account with Institution
  - Beneficiary Bank
  - Indirect Participant
- Beneficiary



Ordering Party/Ordering Institution – Party that initiates the payment request

- Customer from a channel (Internal channel, mobile channel etc). This can be a Temenos Channel where Payment Order is exposed. The debit party would be the customer
- A bank may choose to use its own channel solution. In which case, the payment initiation will be received from the bank's upstream systems. The debit party would be the customer
- An indirect participant could have received a payment initiation request from its customer which it would forward to the direct participant. The debit party would be the IP
- A bank (direct participant) might initiate a payment to pay dividend, interest etc to its customers. The debit party could be an internal account or a P&L account.

Processing Bank – Party that processes the payment and sends to the Clearing House

This would always be the direct participant to the clearing

Clearing House

Account With Institution – The bank where the beneficiary has an account with

- This could be the processing bank or
- The IP on behalf of whom the DP is processing the payment or

Beneficiary – The credit party of the payment

- Could be the customer in the books of the DP
- Could be the customer in the books of the IP .

## Types of Instant Payments

- Instant Payments can be classified into 2 categories.
  - INST – Settled within a specific time limit(in seconds)
    - Example : Credit Transfers
  - NRINST – Settled within the same day
    - A NRINST payment is the same as an instant payment except that it need not to be settled within a specific time limit (represented in seconds). Instead, it needs to be settled within the same day.
    - Example : Standing Orders

NRINST payments can be received with a future date. In such cases, it needs to be warehoused and released on the day it has been requested for. For example: Standing Order

A standing order is usually created for a future date. When such a payment is created, since the date is in the future, system would warehouse the payment and on the day that it gets released from the warehouse, it gets processed.

## Time Stamping of Instant Payments

- Only the direct participant who sends the payment request to the Clearing should time stamp the payment
- Payment should be time stamped after
  - All validations are successful
  - Debit account is valid and has no restrictions
  - Balance is available in the debit account to cover transaction amount plus charges (if any)
  - Payment has passed filtering check (if configured to do so)
  - Payment can be routed to the instant payment clearing channel
- Time stamp will be stored in the pacs008 sent to the clearing in tag AcceptDateTimeStamp
- Time stamp, once calculated and stored, remains unchanged in the entire payment roundtrip.



The format of Time stamp is shown below:

Time Stamp is always expressed in UTC time format (YYYY-MM-DDThh:mm:ss.sssZ),  
local time with UTC offset format (YYYY-MM-DDThh:mm:ss.sss+/-hh:mm),

Note on the time format:

00:00:00 = Beginning of a calendar day

24:00:00 = End of a calendar day

sssZ - Fractions of second in time format

Decimal fractions of seconds may be included. In this case, the involved parties agree on the maximum number of digits that are allowed.

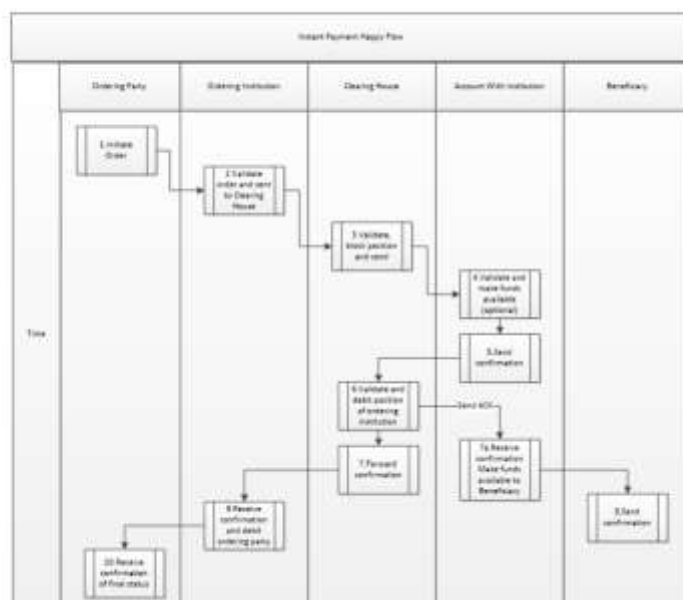
## How to Identify Instant Payment

- Instant Payments can be identified in ISO20022 XML messages using the tag Lcl Instrm Code

```
GrpHdr
+PmtTpInf
++LclInstrm
+++Cd
```

For all instant payments, charge type would only be 'SHA' red.

## Process Flow



- An instant payment is also like a RTGS payment, except that it is immediate and has number of SLAs relating to time that need to be adhered to be termed as an instant payment.
- A payment is termed instant as the entire payment needs to be processed within a specific time frame which is usually in seconds – 10 to 20 seconds depending on the clearing.
- These payments are usually targeted to retail customers for their online banking transactions, standing orders. This is also aimed at corporate customers who may use this to pay salaries, dividends, interest etc.
- Needs to be time stamped once all the details in the payment initiation have been validated.
- Once time stamped, there is a specific time limit within which that payment needs to be sent to the Clearing. If this time limit is exceeded, Clearing will reject the payment.
- When sending the message to the clearing, system need not debit. It can debit on receiving a positive confirmation from the clearing.
- Beneficiary bank needs to be receive the payment within a specific time frame from the Time Stamp in the payment else will reject it
- Settlement of instant payments is always net settlement. The Direct Participant (DP) settles with the Clearing House (CSM or CH) at specified time intervals during the day. The number of times the settlement happens during the day differs from one clearing to another.

## Instant Payment

- Maximum processing time of the clearing is 5 seconds and the exception timeout deadline is 7 seconds
- Originator bank should be able to send an investigation message or a repeat request to the clearing inquiring the status of the instant payment after 7 seconds.
- As far as posting is concerned system will Reserve the amount , Book payment and send the payment to the Clearing House.
- Upon receipt of confirmation from clearing, it will mark payment as completed or reverse payment (Based on positive or negative confirmation)
- Sometimes banks Debit On Pay Confirmation : Reserve and send the payment to the Clearing House. Upon receipt of confirmation from clearing, book the payment or cancel reservation (Based on positive or negative confirmation)



## Instant Payment

- When Clearing sends a negative confirmation for an originated credit transfer (Original transaction), the status of original transaction will be rejected
- Bank would reverse the original transaction along with any charges applied for the payment. No new charges will be calculated for the payment
- Channel is available 24/7 for processing instant payments. System will assume all days are working days and will not perform holiday checks.
- When an instant payment is received, and processed a confirmation is sent to the Clearing. Beneficiary bank then expects a technical handshake via the Interface layer for the confirmation message sent. In some cases, a Clearing may not support technical handshake and will only send a confirmation message (pacs.002).

# Overview of PSD2

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## PSD2

- PSD2 also called the Revised Payments Services Directive, widens the scope of the regulatory framework of the original Payment Services Directive to cover new services and players and additional geographies and currencies.
- Transparency
  - Article 65 = Confirmation of available funds
  - Article 66 = Rules on access to payment account in the case of payment initiation services
- Payment Processing
  - One Leg "Out" - If the initiator or beneficiary of the payment is in a PSD2 country for execution time (Value Dating) and Charges, to follow PSD2 rules
  - Value Dating and Charging rules are also applicable for payments within EU, in all currencies.

PSD2 widens the scope of the PSD by covering new services and players as well as by extending the scope of existing services (payment instruments issued by payment service providers that do not manage the account of the payment service user), enabling their access to payment accounts. It will enable Payment service providers (PSPs) to launch innovative, safe and easy-to-use digital payment services and to provide consumers and retailers with effective, convenient and secure payment methods in the European Union (EU) and European Economic Area (EEA).

In general PSD2 was introduced for the following reasons:

Fixing elements of PSD1

Extending elements of PSD1

## One Leg Out Transactions

- PSD2 is applicable only where PSP is in EU/EEA: One-Leg principle – one participant PSP is in EU/EEA and the other one is non-EU/EEA and payment transaction is either in EU/EEA currency or foreign currency.
- One Leg Principle means:
  - Leg-in:
    - Transaction currency is either in EU-EEA currency or foreign currency
    - Originating party and the initiating bank are outside EU-EEA country
    - Beneficiary party and the beneficiary bank are within EU-EEA country
  - Leg-out:
    - Transaction currency is either in EU-EEA currency or foreign currency
    - Originating party and the initiating bank are within EU-EEA country
    - Beneficiary party and the beneficiary bank are outside EU-EEA country

### **Non-member state currency payments within the EU/EEA**

The rules from the Payment Services Directive are extended to include non-member state currency payments that have both payer and payee in the EU/ EEA.

## PSD2 – Simulation Process

- Before initiating a payment a payer should be provided with the execution time of the payment so that they make an informed decision whether or not to proceed with the payment
- For this purpose the Payment Order (PO) application display to the Customer a field called "Credit Value Date"
- Before initiating a payment a payer should be provided with details of any payers charges and commissions that will be levied for processing the payment so that they make an informed decision whether or not to proceed with the payment.
- Payment Order (PO) application to display to the customer also these new information related to the new charges.



Before submitting a payment, a payer gets the following details so that they make an advance decision whether to proceed with the payment or not:

- Execution time of the payment
- Details of any payer's charges and commissions that will be levied for processing the payment
- Actual or reference (indicative) exchange rate

## PSD2 – Simulation Process

- If the payment is confirmed by the customer within the cut-off time of the channel and within the acceptable time (time between validation and execution must be acceptable )then the payment system cannot change the payer's charges during the life cycle of the payment.
- Before initiating a cross currency payment a payer should be informed of an actual or reference (indicative) exchange rate so that they can make an informed decision whether or not to proceed with the payment.
- Payment Order (PO) application will display to the Customer also the Exchange rates
- After receiving a simulation request, in case of currency conversion on the debit side ,TPH will return back to the PO the value of the actual debit exchange rate or indicative rate (current date rate of exchange for future execution dated payment or mid-rate for a FX limit breach) .
- In a simulation process flow, credit side FX rate will not be calculated . It will be performed after the payment is confirmed by the customer (Execute mode).

A payment can be simulated multiple times from PO.

## PSD2 – Simulation Process

- Charge Details
  - Charge Option
  - Charge details (Fee type, Description , Fee currency, Fee amount in fee currency, Charge account/main account currency , Fee amount in debit charge account/main account currency)
- FX
  - Actual FX rate
  - Indicative rate when requested execution date is in future or when there is a FX threshold breach
- Date
  - Credit Value Date
  - Processing Date
- Cut off time (Channel cut off)
- PSD Compliant Indicator
  - Both legs PSD compliant
  - One leg out (Processing bank alone is EU/EEA region)
- Errors and warnings if any

## PSD2 – Simulation Process

- Payment confirmed by customer before cut off time and within the simulation expiry time
- Charge not recalculated
- Date not recalculated
- FX rate not recalculated unless it was an indicative rate



# Other Features

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## Introduction to FATF

- The FATF Recommendations are the internationally endorsed global standards against money laundering and terrorist financing
- It increase transparency and enable countries to successfully take action against illicit use of their financial system.
- FATF SR VII governs the ordering party details that are sent as part of SWIFT customer transfers only.
- Allow checking for ordering party details and hence eliminate the risks relating to anti money laundering and terrorist financing.
- Allow both European and non European law related checks for ordering party details.

FATF can be classified into 2 sections:

### **European Regulation :**

According to the law in Europe BOTH parties (Ordering and Beneficiary party) must have his account with a bank in EU. If this is the case, then, it is sufficient that the ordering party account number and name are alone specified in Tag 50.

If only one party or none has his account in EU, then, Account Number, Name and Address for ordering party in Tag 50 are mandatory.

A payment instruction can come with a value in Tag 52 (Ordering Institution). In this case, the country of the ordering institution will be checked to see if it is in the EU (Not the sender in this case).

Payments in favor of own clients must be checked if the information to the ordering customer is sufficient according to the legal requirements.

When the ordering institution account (Field 52) - if this is empty, then use sender bank country. This payment is in favour of one of the bank's own customers (Non-banks).

### **Non European Regulation :**

For any customer transfers received and sent out, ordering party details should contain account number, name and address in tag 50.

## Functionality of FATF

- FATF regulation to meet the European regulation as well as non European regulation is available and configured to enable the regulation check.
- Message type supported for this functionality would be MT103 and MT101 for Swift messages. All charge types will be supported.
- MT103/MT101 is received via SWIFT network
- MT103 is received from a named specific channel (Not SWIFT) when it is from a Custody system.
- Payment can be keyed via Order Entry
- The FATF validations make it compatible for all the messages with clearing type as CT or DD or Blank.

## FATF Configuration

Payment Hub  
Static Data GUI  
Company  
Company Properties

CompanyProperties ID	Home Country Code	Home Currency Code	Region	Time Zone	End Date	EnableFATFReg
ENR-2016-1021	GB	USD	ALL	Europe/Berlin	31 DEC 2099	Y

Market Entry Method ☒ Standard

Enable FATF Reg ☐ N ☒ Y ☐ E

Update Cash Position ☐ Y ☒ H

Refill Request ☐ S ☐ M

F00RateRegCutoff

CurrencyMarket

FX Margin ☐ Premium ☐ Discount

FX Margin Percentage

### Path:

Admin Menu > Payment Hub > Static Data GUI > Company Properties

Enabling FATF regulation is configurable. Set the field 'Enable FATF Reg' to either E or Y depending on the level of check to enable the regulation. Set it to N or leave the field blank if regulation check is not required.

## Payment processing with Option 'E' Configuration - Order Entry

[illegible]

**Operator keyed in MT103 with sufficient ordering party details**

A MT103 payment is keyed in using the mid office screen - Order Entry. Both, the ordering party and beneficiary are in EU and FATF has been enabled with option 'E' (According to European Law). Since, account number and name are sufficient, payment does trigger any FATF errors.

## Payment processing with Option 'E' Configuration- Order Entry Contd

Debit Credit Info		Error Information		Change Information		Routing Information		Additional Information		Audit	
Debit Side Information						Credit Side Information					
Debit Account Company	<input type="text" value="0000"/>					Credit Account Company	<input type="text" value="0000"/>				
Order Party Type	<input type="radio"/> F <input type="radio"/> B										
Order Flag	<input type="text" value=""/>										
Debit Account Number	<input type="text" value="00100"/>		<input type="text" value="0000"/>	Debit Account Number	<input type="text" value="00100"/>		<input type="text" value="0000"/>	Yes	Credit Account Number	<input type="text" value="14100"/>	
Debit Account Number	<input type="text" value=""/>			Debit Account Number	<input type="text" value=""/>				Credit Account Number	<input type="text" value=""/>	
Debit Account Currency	<input type="text" value="USD"/>			Debit Account Currency	<input type="text" value="USD"/>				Credit Account Currency	<input type="text" value="USD"/>	
Debit Account	<input type="text" value="0.00"/>			Debit Account	<input type="text" value="0.00"/>				Credit Account	<input type="text" value="14.00"/>	
Debit Customer Rate	<input type="text" value="0.0000000000"/>			Debit Customer Rate	<input type="text" value="0.0000000000"/>			Yes	Credit Customer Rate	<input type="text" value=""/>	
Debit Customer Spread	<input type="text" value="0.00"/>			Debit Customer Spread	<input type="text" value="0.00"/>			Yes	Credit Customer Spread	<input type="text" value=""/>	
Debit Treasury Rate	<input type="text" value="0.0000000000"/>			Debit Treasury Rate	<input type="text" value="0.0000000000"/>			Yes	Credit Treasury Rate	<input type="text" value=""/>	
Debit Exchange Rate	<input type="text" value=""/>			Debit Exchange Rate	<input type="text" value=""/>				Credit Exchange Rate	<input type="text" value=""/>	

## Payment processing with Option 'E' Configuration - Order Entry Contd

<b>Debit</b> Value Date: 30.06.2019 Value Date: 09.06.2019	<b>Debit</b> <input type="radio"/> Yes Value Date: Invoiced: Flag:	<b>Credit</b> Value Date: 30.06.2019 Value Date: 09.06.2019	<b>Credit</b> <input type="radio"/> Yes Value Date: Invoiced: Flag:
<b>Ordering</b> Account: Order: BIC: Name: Address: Town/Postal: : Town/Postal: : Country: Indicator: VAT Detail: Main Amt: Indicator: VAT Detail: Main Amt: Indicator:	<b>Beneficiary</b> Tag Option: Account: BIC: Name: Address: Town/Postal: : Town/Postal: : Country: Indicator: VAT Detail: Main Amt: Indicator:		

## Payment processing with Option 'Y' Configuration - Order Entry

[illegible]



## Payment processing with Option 'Y' Configuration - Order Entry Contd

Order Entry Incoming Invoice (ZTR) - 10/10/16 (1999)

Save

Print

Cancel

Refresh

Help

Order Entry

Invoice Entry

Invoice Entry

Invoice Entry

Invoice Entry

Invoice Entry

Order Entry

Invoice Entry

Invoice Entry

Invoice Entry

Invoice Entry

Invoice Entry

Order Entry

Invoice Entry

Invoice Entry

Invoice Entry

Invoice Entry

Invoice Entry

## Payment processing with Option 'Y' Configuration - Order Entry Contd

[illegible]

## Payment processing with Option 'Y' Configuration - Errors

The screenshot displays the MT103 payment entry interface. On the left, the 'Ordering' section contains fields for 'Account', 'BIC', 'Name', 'Address', 'Town/PostalC', 'Country', and 'Residence'. The 'Beneficiary' section on the right includes fields for 'Tag Option', 'Account', 'BIC', 'Name', 'Address', 'Town/PostalC', 'Country', and 'Residence'. A red error message box in the top right corner states: 'Please resolve the entry before it is processed.' Below this, a red 'X' icon is followed by the text: 'Ordering Account, Ordering Account or Name or BIC is mandatory'. The Temenos logo is visible in the bottom right corner of the screen.

### **Operator keyed in MT103 with insufficient ordering party details**

A MT103 payment is keyed in using the mid office screen - Order Entry. Both, the ordering party and beneficiary are in EU and FATF has been enabled with option 'Y' (According to Non European Law). Since, account name and address are mandatory and not present in the payment, system throws an error.

## STP Payment – Insufficient Ordering details

[illegible]

## Payment Reversal



TPH now has the option to reverse a payment which is already booked. This option is enabled to allow banks the flexibility to reverse payments which were erroneous. Reversing a payment through this option will only reverse the “Accounting Entries” for the payment. If the original payment was in Outgoing Payment or an incoming payment, the bank has to separately intimate the Receiving Bank /Sending Bank for appropriate transfer of funds.

For payments which are already archived, the original payment cannot be reversed. A new transaction has to be created using Order Entry screen with message type as “RVSL”.

In case the transaction cannot be reversed or rejection is received from DDA, the reversal will not be allowed and the transaction will be restored to the previous business status.

## Payment Reversal - Features

- Erroneous Transaction
- Booked Transaction
- Not Archived
- Reversal using original FX, Value dates & Fees
- New Contra entry (OE) for Archived using "RVSL"
- Advise based on original advise sent



System will now have the ability to reverse a transaction in case of errors/mistakes. The features are:

- \* System provides ability to the user for reversal of transactions in TPH that have been

successfully booked.

- \* System only allows transaction reversal on payments that have not been archived yet.

O User will initiate a Posting Reversal from the Posting Reversal GUI. This GUI will be standard T24 GUI (same as Parked payments GUI) following 4 eye/ 6 eye principle.

- o The payment submitted for reversal will be sent to reversal specific authorization queue for authoriser's approval to complete the reversal request.

- o An entry will be made in the audit trail mentioning all the user-ids (entry user id / authorizer's user id) along with the actions (authorize/reject)

- o All fees/charges will be reversed and no additional charges for reversal can be applied.

- o Original FX rate applied will be used for reversal.

- o Original Value Date applied will be used for reversal.

- o A reversal advice will be sent against the original advice sent.

- \* System will allow creation of a new contra payment via Order Entry screen for reversing an archived payment.

- \* A new message type (RVSL) is introduced in the system to create manual

transaction (contra payment). New product, client condition product, fee-product and statement lines will be set up based on this message type

## Cancellation, Queries, Answers and Free Format Message

- Cancellation of Payment (MT192/292)
  - Outward Cancellation Request
  - Inward Cancellation Accept
- Queries (MT195/295 & MT196/296)
  - Raise Queries
  - Answer Received Queries
- Free format message (MT199/299)



This feature enables to cancel payment request, raise queries, free format messages and send answers for SWIFT queries.

**Inward Cancellation Requests:** It is used to accept/reject inward cancellation requests (MT192/MT292) received for incoming TPH payments. Response can be sent as Answer (MT196/MT296) or a Free Format Message (MT199/MT299)

**Outward Cancellation Requests:** It is used to send cancellation request (MT192/MT292) outgoing messages

**Payment Investigations (Queries/Answers):** It is used to send queries (MT195/MT295) for the outgoing TPH payments. It can also be used to send answers (MT196/ MT296) for incoming queries

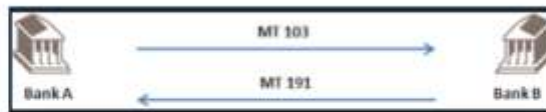
**Payment Investigations (Free Format Messages (MT199/MT299)):** It is used to send free format Messages for the outgoing TPH payments.



## Claims Processing

### Customer Credit Transfer:

- MT103 received from ABN with Charge Type as OUR and Beneficiary account is with TPH Bank. The charge amount included in tag 71G of incoming SWIFT is insufficient to cover TPH Bank charges.
- TPH bank sends MT191 (Claim) message to ABN for the difference in Charge amount and amount received in 71G of incoming MT103.



For Incoming Payments with OUR charges, when the charges received from the Sending Bank are insufficient, a claim can be raised.

PP allows configuration to define the generation of Claims. It includes:

Claim Type – MT191 (raise MT191)

Claim Towards – SENDER or OTHER BIC

Claim BIC – Specific BIC where OTHER BIC is defined

Claim Basis – Periodic

Claim Period – Daily, Weekly or Monthly (M)

Individual or Group Claim - For grouped claims, as MT191 may not be able to hold the complete claim details, one or multiple M199 will be generated and sent.

Settlement for claims is received as MT202. Such payments are routed to Manual Repair for the Operator to key in the Claim Account, if only the Processing company BIC is present in the payment.

When settling the claim using Order Entry, the 'Incoming Message Type' field will be defaulted to value 'CLMPMT' to denote that it is a claim payment.

MT202 can be used for a normal Bank Transfer and also to settle claims. To identify if the Bank Transfer is for a Claim received for a payment in PP, a new payment message type value is introduced in PP.MSGPAYMENTTYPETPH as 'CLMPMT'.

The difference in the OUR charge amount sent and the charge amount calculated by the payments hub is specified under 'Claim Amount'. After calculation of the actual claim amount, "Related Payment Status" is set as "P" (Pending) indicating that the

claim payment is yet to be processed.

After the calculation of the actual claim amount, payment hub prepares the claim payments for claims processing at EOD. This is achieved by setting "Related Payment Status" as "R" and "Claims Status" as "P"

During EOD, jobs responsible for claims processing picks up all the claim payments to be processed for the date and generates payment order for each claim

## Track and trace mechanism (TRIP)

- Update source system/external system with status updates
- Invoked for specific payment status in TPH
- Configurable
- Should be simple updates
  - Transaction boundary within TPH



The clients actually want to know is if/when their payments are delayed or fail to be executed. So, those cases are the ones the present component needs to focus on.

Payment monitoring systems provide real-time tracking of payment transactions with an aim to streamline processing times and provide customer satisfaction. An STP payment takes less than a second to become complete, so there is nothing much to record about it, except that it was successfully executed.

This component is responsible for providing the track and trace system with the details and status of the payment transaction, in various stages of the payment workflow.

The “Track and Trace” (a.k.a. TRIP), responsible for informing different client channels about the payments statuses. TPH will feed the external system, but this is the one responsible for handling data.

As any other component in the payment engine, also “Track and Trace” is company specific. The component Works independently from the workflow, not influencing in any way the workflow, neither in terms of performance, nor in terms of stability.

## Non Stop Support

- Payment Hub process transactions seamlessly 24X7
- It allows full transaction processing (i.e Input, Authorize, Delete and Reverse) while the close of business processing is running
- The services which are required for payment processing need to be run 24/7 and should not be stopped/started during EOD and SOD



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All the jobs that needed to start and stop the services are made 'ADHOC' to support Non Stop processing.

In case a client chooses not to use Non Stop or has not purchased Non Stop, then the jobs which are defined as ADHOC need to be set to run Daily.

### **Date Change**

As part of this change, as soon as PP COB is initiated, cycling of dates is the first business activity. (i.e) All online payment transactions (Payments coming in via channels, payments from Payment Order, payments keyed in using Order Entry, payments repaired using Repair screen, payments manually released from various queues (Warehouse, FIAT queue, Filtering Queue, Risk Filter etc) need to use the cycled date.

All COB jobs use the Dates record which has CompanyCode-COB as the key while all online transactions use the record with key 'CompanyCode' (Cycled dates).

The following activities via Manual Payment Processing is enabled during COB.

Creating Order Entry Payments

Amending Order Entry Payments which are unauthorised

Authorising Order Entry Payments

Amending payments in Repair

Authorising payments in Repair

Reverse existing payments

Release payments from Warehouse  
Release payments from FIAT Queue

## What Did We Learn?

### Conclusion

- What is Direct Debit?
- Process Direct Debit SEPA transfer
  - PAIN 008
  - PACS003
- Overview of Instant Payments
- Overview of PSD2
- Other Features



Thank You



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