General Information (Origin of Request)		
☐User Requirements Document (URD)		
☒User Detailed Functional Specification (UDFS)		
☒User Handbook (UHB)		
☐Other User Functional or Technical Documentation (SYS)		
Request raised by: 4CB	**Institute:** 4CB	**Date raised:**
Request title: Multiplex Editorial Change Request on CLM/CRDM/ESMIG/RTGS UDFS R2023.JUN, BDM/BILL/DWH UHB R2023.JUN		**Request ref. no:** CSLD-0123-SYS
Request type: Common		
1. Legal/business importance parameter:		**2. Market implementation efforts parameter – Stakeholder impact:**
3. Operational impact:		**4. Financial impact parameter:**
5. Functional/ Technical impact:		**6. Interoperability impact:**
Requestor Category: Eurosystem		**Status:** Approved

_____

Reason for change and expected benefits/business motivation:

The editorial changes listed below are related to the Central Liquidity Management UDFS R2023.JUN, Common Reference Data Management System UDFS R2023.JUN, Eurosystem Market Infrastructure Gateway UDFS R2023.JUN, Real-Time Gross Settlement UDFS R2023.JUN, Business Day Management UHB R2023.JUN, Billing UHB R2023.JUN, Data Warehouse UHB R2023.JUN. Their incorporation into the UDFS R2023.JUN and UHB R2023.JUN is required for clarifying the documentation underlying the software. Please note that the changes referring to UDFS R2023.JUN and UHB R2023.JUN will also be reflected, when relevant, into the schema documentation published in MyStandards.

_____

Proposed wording for the Change request:

BDM UHB

1 EUROSYSTEM UPDATE [Internal review]: page 35 (BDM UDFS-chapter 3.1.2.2. ReturnBusinessDayInformation(camt.019)), MyStandards T2-CoCo – ReturnBusinessDayInformation – camt.019

Introduction of three new codes for camt.019 message stemming from T2S CR0762

MyStandards T2-CoCo – ReturnBusinessDayInformation – camt.019

camt.019 Document/RtrBizDayInf/RptOrErr/BizRpt/BizDayOrErr/BizDayInf/SysSts/Sts/Prtry/Id addition of 3NTC, 4NTC and 5NTC

BILL UHB

2 EUROSYSTEM UPDATE [T2S SDD-PBR-0088, PBI-223418]: page 59 (BILL UHB-chapter 2.2.5.1.1 Outbound Messages – Search/List screen), page 62 (BILL UHB-chapter 2.2.5.1.2 Outbound Message – Details screen); Outbound messages for BILL; page 85 (BILL UHB-chapter 4.2.2.9 Outbound Messages – Search/List screen); page 85 (BILL UHB-chapter 4.2.2.10 Outbound Messages – Details screen)

Outbound Messages Screens will be added to BILL GUI in order to allow the users to search and display:

- camt.077/admi.007 received in BILL

The new screens will be described into BILL UHB.

BILL UHB-chapter 2.2.5.1.1 Outbound Messages – Search/List screen, page 59 [new chapter]

Context of Usage

This screen contains a number of search fields. By inputting the relevant data, you can search for subscribed outbound messages and those sent compulsory. The search result will be displayed in a list, which is sorted by the values of the 'Delivery Date and Time' column in descending order (default setting). Only messages subscribed via message subscription rules and those messages compulsory sent will be displayed. After selecting an entry, you can proceed further by clicking on the buttons below. Users can see Outbound Messages under their datascope.

There is no usage restriction for this screen.

Screen Access

I*Billing >> Services >> Outbound Messages >> Search*

Privileges

To use this screen, the following Privileges are needed:

I Outbound Message List Query

I Outbound Message Details Query

Screenshot

Illustration 1: Outbound Messages – search/list screen

Outbound Message – Search Criteria	
Fields Description	
Outbound Individual Message Identification	Enter the identification of the outbound individual message. Required format is: max. 35x characters.
Inbound Individual Message Identification	Enter the identification of the inbound individual message. Required format is: max. 35x characters.
Network Service	Select the name of the network service.
Receiving Party Short Name	Enter or select the short name of the receiving party. Required format is: max. 35x characters.
Party Technical Address	Enter the technical address (i.e. distinguished name) of the receiving party. Required format is: max. 256 characters (UTF-8 except '<'; '>'; '&')
Sender Message Reference	Enter the identification of the message as assigned by the message sender. Required format is: max. 35x characters.
Outbound Queuing Status	Select the outbound queuing status of the message from the possible values: I True I False I All (default value)
Delivery Date and Time from	Enter or pick the lower bound of the search range for the calendar date and time of the system entry of the outbound message. The 'Delivery Date and Time from' date and time must be a valid calendar date/time earlier than the 'Delivery Date and Time to' date and time. This field is mandatory. Required format is: YYYY-MM-DD hh:mm:ss
Delivery Date and Time to	Enter or pick the upper bound of the search range for the calendar date and time of the system entry of the outbound message. The 'Delivery Date and Time to' date and time must be a valid calendar date/time later than the 'Delivery Date and Time from' date and time. This field is mandatory. Required format is: YYYY-MM-DD hh:mm:ss

Outbound Messages – List	
Delivery Timestamp	Shows the date and time when the message was delivered.
Outbound Individual Message Identification	Shows the identification of the outbound individual message.
Inbound Individual Message Identification	Shows the identification of the inbound individual message.
Sender Message Reference	Shows the identification of the outbound message as assigned by the message sender.
Outbound Queuing Status	Shows the outbound queuing status of the message.
Message Type	Shows the ISO 20022 request type of the message.
Delivery Business Date	Shows the business date when the related service started the delivery of the message.
Network Service	Shows the name of the network service.
Receiving Party Short Name	Shows the short name of the receiving party.
Party Technical Address - Sender	Shows the technical address (i.e. distinguished name) of the receiving party.

Buttons

Search	This function enables the User to start a search according to the criteria entered. The results are displayed in a list on the same screen.
Reset	This function enables the User to reset the selected outbound message.
Related Inbound Message	This function enables the User to display the inbound messages related to the selected outbound message.
Details	This function enables the User to display the details of the selected outbound message.

BILL UHB-chapter 2.2.5.1.2 Outbound Message – Details screen, page 62 [new chapter]

Context of Usage

This screen displays detailed information on the selected outbound message. Only messages subscribed via message subscription rules and those messages compulsory sent will be displayed.

You can check the data and proceed further by clicking on the buttons below.

There is no usage restriction for this screen.

Screen Access

I Billing >> Services >> Outbound Messages >> Outbound Messages – Search/List screen >> Click on the Details button

l Billing >> Services >> Inbound Messages >> Inbound Messages – Search/List screen >> click on the Related Outbound Messages button

l Billing >> Services >> Inbound Messages >> Inbound Messages – Search/List screen >> click on the Search and/or Details button >> Inbound Message – Details screen >> click on the Related Outbound Messages button

Privileges   To use this screen, the following Privileges are needed:

l Outbound Message Details Query

Screenshot

Illustration 2: Outbound Message – details screen

Fields Description	Outbound Message – Details screen	
	Delivery Timestamp	Shows the calendar date and time when the outbound message was delivered in the related service.
	Outbound Individual Message Identification	Shows the technical identification of the outbound individual message.
	Inbound Individual Message Identification	Shows the technical identification of the inbound individual message.
	Sender Message Reference	Shows the identification of the outbound message as assigned by the message sender.
	Outbound Queuing Status	Shows the outbound queuing status of the message.
	Network Service	Shows the name of the network service from the dropdown menu.
	Delivery Business Date	Shows the business date when the related service started the delivery of the message.
	Receiving Party Short Name	Shows the short name of the receiving party from the dropdown menu.
	Party Technical Address	Shows the technical address (i.e. distinguished name) of the receiving party.
	Message Information	
	Message Information	Shows detailed information of the request.
		The content of the message is only displayed in case of small messages. Bigger messages can be displayed via the separate message export icon.
		Pressing this icon exports the message based on the xml document. In addition, root elements are present at the beginning and the end of the exported document. On top of the export, additional information about 'Time', 'User' and 'Screen of export' is available for documentation purpose.

BILL UHB-chapter 4.2.2.9 Outbound Message – Search/List screen, page 85 [new chapter]

Privilege	Privilege Code	Screen Criteria
Outbound Message List Query	DDQ_OutboundMessListQuery	n/a
Outbound Message Details Query	DDQ_OutboundMessDetailsQuery	n/a

BILL UHB-chapter 4.2.2.10 Outbound Message – Details screen, page 85 [new chapter]

Privilege	Privilege Code	Screen Criteria
Outbound Message Details Query	DDQ_OutboundMessDetailsQuery	n/a

3 EUROSYSTEM UPDATE [INC000000366282]: page 100 (DWH UHB chapter 4.2.2.2 Delivery - Save the report for an external file (A2A) – Step 10); Conflict resolution

In case the report name is used unchanged for the filename, the choice for "conflict resolution" needs to be made carefully to prevent overwriting of files prior to sending.

Step 10: After you activated the "**Save report as an external file**" checkbox, further options are presented.

Figure 3 - **My content - STF01 Standing Facility information - Run in background - Advanced Delivery - Save report as an external file**

The "**Name**" field presents the name of the report. The default value is the name of the report, as it is known in DWH. Please note, that by leaving the default name in place you need to prevent the generated file from being overwritten by a file with the same name but stemming from other users. For this, please change the value for "Conflict resolution" to one of the two following choices:

- Make the file names unique and append a timestamp

- Make the file names unique and append a sequence number

Figure 4 - **My content - STF01 Standing Facility information - Run in background - Advanced Delivery - Save report as an external file – Conflict resolution**

Please do not change the default value in the "**Location**" field, as this is the place where the report is stored before it is delivered to your party via A2A. Changing the default value in the 'Location' field will result in reports not being sen~~t~~ via A2A. The folder is not accessible via the GUI and only for storing the report before it is delivered via A2A.

Step 11: Click on the "**Done**" button ( ).

4 EUROSYSTEM UPDATE [INC000000365584]: page 100 (DWH UHB-chapter 5.10.1 STF01 – Standing facility information); Make party BIC an optional criteria

In order for CBs to be able to run the report for all their parties in one go, the search criteria "Party BIC" needs to be made optional.

Prompt description

STF01 – Report description – prompt screen

Field label	Description
Date From	You can select the date by clicking on the calendar. This field is mandatory.
Date To	You can select the end date of the period, for which the report should contain the data by clicking on the calendar. For valid report result, the current day cannot be selected. This field is mandatory.
Party BIC	You can use this search and select prompt to search for the party BIC or short name. One, several or all parties can be selected. This field is optional~~mandatory~~.

Table 1 - **STF01 - Prompt description**

5 EUROSYSTEM UPDATE [INC000000364900], page 247f (DWH UHB-chapter 5.12.1 TRN01 - Cash transfer (order) search and details); Add additional mandatory prompt „Credited/debited party BIC" and make prompt „Sender/Receiver BIC" optional, add fields for Credited party BIC, Credited party name, Debited party BIC and Debited party name to list screen

For CBs the search for credited/debited Party BIC is more important than the search for sender/receiver BIC.

Screenshot – prompt

Figure 5 - **TRN01 prompt (2) - by business characteristics**

*Figure 6*5 **- TRN01 prompt (3) - by business characteristics**

Prompt description

The TRN01 offers the possibility to execute the report in two ways. The first way is "**Select by Transaction Reference**" the other way is "**Search by Business Characteristics**".

Having chosen a selection by transaction reference, you may enter any reference such as message ID, a UETR, an End-To-End ID, an instruction ID etc.

Having chosen a selection by business related criteria, you can enter business related search criteria.

When the DWH finds at least one transaction, a view on all transactions, which match the entered business criteria is opened. Here you can choose a certain transaction by double click for a view on its detailed data.

TRN01 – Report description – prompt screen	
Field label	**Description**
Search by transaction reference	
Reference	You can use this field to search with any reference that can be contained in a cash transfer. This field is mandatory.

Search by Business Characteristics	
Date From	You can select the date by clicking on the calendar. This field is mandatory.
Date To	You can select the end date of the period, for which the report should contain the data by clicking on the calendar. For valid report results, current day cannot be selected. This field is mandatory.
Debited / Credited party BIC	You can use this drop-down field to select the BIC of the debited resp. credited party The possible values are built from parties within the user's data scope. This field is mandatory.
Sender / Receiver BIC	You can use this drop-down field to select the BIC of the sending resp. receiving party The possible values are built from parties within the user's data scope. This field is optionalmandatory.
Message Type	You can use this drop-down field to restrict the result list to one message type. Possible Values: l camt.050 l pacs.004 l pacs.008 l pacs.009 l pacs.010 l pain.998 (ASTI) This field is optional.

Service Type	This drop-down field offers the possibility to select between the services CLM or RTGS. This field is optional.
Status	You can use this drop-down field to restrict the result list to one status. Possible Values: l Partially settled l Revoked l Rejected l Settled l Warehoused This field is optional.
Amount from/to	You can use these fields to search for a certain amount or amount range. This field is optional.

Table 2 - **TRN01 - Prompt description**

Screenshot - output screen

Figure 7 - **TRN01 output (3) - by business characteristics**

CBXXAQD0XXX - CSLD BBK QM DWH Test CB1

Transaction Detail

Business Date	2023-02-01
Entry Timestamp	2023-02-01 10:00:39.363
UETR	466b59d9-4f73-4211-8cd5-c3b621db2971
End-to-End Reference	E020109595254605
Instruction Identification	TC13
Transaction Identification	7401859
Clearing System Reference	Not provided
Setlement Reference	Not provided
Sender Message Reference	B020109595254605
Message ID	B020109595254605
Transaction Reference Number	7401859
Message Type	pacs.010
Sender BIC	CBXXAQD0XXX
Sender Name	CSLD BBK QM DWH Test CB1
Receiver BIC	TRGTXETTCLM
Receiver Name	
Debited Party BIC	PBAAAQD0XXX
Debited Party Name	CSLD BBK QM DWH Test CB1-PB1
Credited Party BIC	CBXXAQD0XXX
Credited Party Name	CSLD BBK QM DWH Test CB1
Debited Account BIC	PBAAAQC001X
Debited Account Number	MACASHPBAAAQD0XXXEUR0A01
Type of Debited Account	Main Cash Account
Credited Account BIC	CBXXAQC001X
Credited Account Number	CLMCBKCBXXAQC001XEUR0001
Type of Credited Account	CLM CB Account
Amount of Payment	1,778.77
Currency of Payment	EUR

Output description

TRN01 – **Report description** – **output screen** – **list of cash transfers**	
Field label	**Description**
Date	Above the table you can see the date of the transaction search "at"
Currency	Above the table you can see the currency of the transaction
One table for "**Debited party** ~~Sender~~ **BIC**" and one table for "**Credited party** ~~Receiver~~ **BIC**". In each table every cash transfer order is listed with following data (sorted by transaction reference number):	
Transaction Reference Number	Transaction reference; technical identifier of the transfer.
Sender Message Reference	Identification of the message, which is delivered by the sender.
Message Type	Message type Possible values: ǀ camt.050 ǀ pacs.004 ǀ pacs.008 ǀ pacs.009 ǀ pacs.010

	l pain.998 (ASTI)
	l **Unknown**
Service	Service for which the data is displayed.
	Possible values:
	l CLM
	l RTGS
Sender BIC	BIC of the sending party (can be empty)
Receiver BIC	BIC of the receiving party (can be empty)
Status	Status of the cash transfer order.
	Possible values:
	l Warehoused
	l Settled
	l Revoked
Debited Account Number	Debited account number
	The account number is not displayed if it does not belong to data scope of the user.
Debited Account BIC	Debited account BIC
Credited Account Number	Credited account number
	The account number is not displayed if it does not belong to data scope of the user.
Credited Account BIC	The BIC of the credited account
Amount	Amount of payment

Table 3 - **TRN01 - Output description**

TRN01 – **Report description** – **details**	
Field label	**Description**
Entry Timestamp	Timestamp of entry in CLM/RTGS
UETR	Universal-End-to-End-Transaction Reference
End-to-End Reference	End-to-End-Transaction Reference
Instruction Identification	Instruction Identification

Transaction Identification	Transaction Identification
Clearing System Reference	Clearing System Reference
Settlement Reference	Settlement Reference
Sender Message Reference	Sender Message Reference
Message ID	Message ID
Transaction Reference Number	Technical Identifier of the transfer
Message Type	Message Type Possible values: I camt.050 I pacs.004 I pacs.008 I pacs.009 I pacs.010 I pain.998 (ASTI)
Sender BIC	Party BIC of the sender (can be empty)
Sender Name	Sender Name (can be empty)
Receiver BIC	Party BIC of the receiver (can be empty)
Receiver Name	Receiver name (can be empty)
Debited party BIC	Debited party BIC
Debited party name	Debited party name
Credited party BIC	Credited party BIC
Credited party name	Credited party name
Debited Account BIC	Debited account BIC
[…]	[…]

Table 4 - **TRN01 - Report description - Details**

6 EUROSYSTEM UPDATE [INC000000364819]: page 304f (DWH UHB-chapter 6.1 Functional security); Add scheduling to normal user groups

Especially for co-managers (which are mostly not eligible for advanced user role) it is vital to be able to schedule predefined reports.

User Groups and Roles

In CRDM two privileges for the usage of DWH are available: Data Warehouse Normal User and Data Warehouse Advanced User. Each of these privileges is linked to one role/group in DWH. Ther roles/groups define the DWH capabilities, assigned to user.

User groups	Can be assigned to party type	DWH Role	Description
Normal	Central Bank Payment Bank Ancillary System	Consumers	Members can read, ~~and~~ execute and schedule public content, such as predefined ~~as~~ reports.
Advanced	Central Bank	Authors	Members have the same access permissions as Consumers. They can also schedule a report and create user defined reports or adapt predefined reports.

Table 5 - **Functional security - User Groups and Roles**

7 EUROSYSTEM UPDATE [Internal review]: page 167, (DWH UHB-chapter 5.5.1 DXE01 – Data extraction reports: Party reference data), page 169 (DWH UHB-chapter 5.5.2 DXE02 – Data extraction reports: Cash account reference data), page xxx (DWH UHB-chapter 5.5.3 DXE03 – Data extraction reports: Cash account aggregation group), page xxx (DWH UHB-chapter 5.5.4 DXE04 – Data extraction reports: Cash account balance and liquidity), page xxx (DWH UHB-chapter 5.5.5 DXE05 – Data extraction reports: Cash transfer orders), page xxx (DWH UHB-chapter 5.5.6 DXE06 – Data extraction reports: Cash transfer orders); Remove changes introduced with Multiplex editorial CR 111, Eurosystem Updates 128 and 129

Removal of output file description for the predefined reports DXE01 – DXE06 and add reference to annex.

DWH UHB-chapter 5.5.1 DXE01 – Data extraction reports: Party reference data, page 167
(…)

Output description

The report output sent via A2A consists of one file described in detail in chapter 8.3.4~~hereafter~~.

DWH UHB-chapter 5.5.2 DXE02 – Data extraction reports: Cash account reference data, page 169

(…)

Output description

The report output sent via A2A consists of one file described in detail in chapter 8.3.5~~hereafter~~.

DWH UHB-chapter 5.5.3 DXE03 – Data extraction reports: Cash account aggregation group, page xxx

(…)

Output description

The report output sent via A2A consists of one file described in detail in chapter 8.3.6 ~~herafter~~.

DWH UHB-chapter 5.5.4 DXE04 – Data extraction reports: Cash account balance and liquidity, page xxx

(…)

Output description

The report output sent via A2A consists of one file described in detail in chapter 8.3.7~~herafter~~.

The Cash account balance and liquidity file provides the end-of-day states of various balances in CLM-RTGS for a cash account. The DWH does not receive an intraday history. CLM-RTGS always overwrites the record when an amount changes.

No.	Logical Name	Data Type	Mandatory/ Optional	Definition
1	Cash Account Identifier	INTEGER	Mandatory	This field specifies the hash key to identify uniquely the link between the Cash Account Liquidity Link and the Cash Account Liquidity Satellite tables.
(…)				

Table 29 - DXE04 - Output description

DWH UHB-chapter 5.5.5 DXE05 – Data extraction reports: Cash transfer orders, page xxx

(…)

Output description

The report output sent via A2A consists of one file described in detail in chapter 8.3.8herafter.

This file provides all cash transfers of a central bank for a given T2 business day.

No.	Logical Name	Data Type	Mandatory/ Optional	Definition
1	Cash Transfer Identifier	DECIMAL(16,0)	Mandatory	This attribute contains the technical identifier of the cash transfer order in CLM or RTGS.
(…)				

Table 31 - DXE05 - Output description

DWH UHB-chapter 5.5.6 DXE06 – Data extraction reports: Cash transfer orders, page xxx

(…)

Output description

The report output sent via A2A consists of one file described in detail in chapter 8.3.9herafter.

This file provides the execution times of business events on a specific user-selected business day.

No.	Logical Name	Data Type	Mandatory/ Optional	Definition
1	Business Day	DATE	Mandatory	This field specifies the business day of a Eurosystem market infrastructure.
(…)				

Table 33 - DXE06 - Output description

8 EUROSYSTEM UPDATE [Internal review]: page 479f (DWH UHB-chapter 8.3 DXE file documentation); Add chapter containing details to DXE report files

DXE reports (DXE01 – 06) are generating files for which the documentation needs to be annexed to the DWH UHB

8.3 DXE file documentation
8.3.1 Introduction

NCBs need an adequate technical solution to extract granular data from the DWH for T2 Services. NCBs require the national extractions of data from the data warehouse (DWH). The purpose of these extractions are to provide the local applications with granular data from the T2 Service so that they can be combined with national payment system data and collateral data, and to share the data with respect to TARGET Services Guidelines with other Directorate Generals for analytical and research purposes (e.g. via a common data lake).
This specification replaces the current section of the DWH User Handbook that describes the DEX02 report, as the feedback on the current report emphasised that the documented solution is not fit-for-purpose for the following reasons:

- In order not to exceed the ESMIG file limitation of 99MB, the requirement in the UHB is that users to schedule the DEX02 report per Party BIC and for a single business day.
- Central banks with a significant number of payments banks and ancillary systems would require significant effort to configure and schedule the reports.
- Multiple record types in a single file is very complex to process by the receiving application
- Combining different functional data objects (e.g. transaction, account, participant and event data) in one record in an output file would
- - increase the file size due to repetitive information;
- - repeat general information, for instance about business day events, multiple times when data extractions are split;
- - increase the complexity of the technical processing in local central bank environments.

In order to address the shortcomings that the central banks raised, the new reporting solution for the DEX02 reporting foresees

- The separation of the DEX02 report into six distinct reports (now named DXE01 – DXE06 to avoid confusion) that extracts a set of specific business data per report so that the report complexity is minimised;
- The elimination of the scheduling of the report by Party BIC, i.e. the provision of the data in each report by central bank;
- Removes repetitive information that results from the reporting by Party BIC.
- In order to simplify the joining of data, the reports will provide both the internal reference data technical identifiers as well as the externally visible business identifiers.

8.3.2 General Information

8.3.2.1 Scheduling

The scheduling of the DXE reports can take place for the current month, the current week or the current business day. Central banks with large transactional volumes should schedule their report on a daily basis for more manageable file sizes. Central banks with lower transactional volumes can schedule their reports on a weekly or monthly basis.

8.3.2.2 File splitting

File splitting will be implemented for files that exceed the maximum file size of 99 MB.

8.3.2.3 File and Field Conventions

The interface will provide the extracted data in comma-separated files (csv). The files are encoded in UTF-16 Little Endian. The respective UDFS or UHB (CLM, RTGS or CRDM) document the full character set.
Fields will be provided without any start or ending delimiter (e.g. ""). As this is a valid character in few cases and can lead to misinterpretation or an abnormal termination.

Character type set:

Format Type	Definition
CHAR (n)	String with exactly n UTF-8 characters, is padded with blanks on right side
VARCHAR (n)	String with n UTF-8 characters maximum
DEC (p, s)	The precision (p) is the total number of binary or decimal digits excluding the sign. The scale (s) is the total number of binary or decimal digits to the right of the decimal point A dot '.' is used as decimal point. Decimals without decimal places will end with ".". Field is padded with "0" on left side First digit is a blank or minus
SMALLINT	Number, up to 5 digits
INTEGER	Number, up to 10 digits
DATE	Date in format "yyyy-mm-dd" with no time zone indication
TIME	Time in format "hh:mm:ss" with no time zone indication in CET/CEST
TIMESTAMP	Date in format "yyyy-mm-dd hh:mm:ss.mmmmmm" with no time zone indication in CET/CEST

- In case of NULL in csv, two separators will be provided after each other with no content in between. Date 9999-01-01 and Timestamp with 9999-01-01-00.00.00.000000 are NULL.
- Each line ends with line feed (LF, hexadecimal "0x0A").
- The general separator for attributes is a TAB (hexadecimal "09"). A TAB is not used at the end of a line.

8.3.3 Relationship between Files

8.3.3.1 Use of Technical Identifiers

The interface files provide for reference data both a unique technical identifier and a business identifier. The technical identifier is always unique and should be used to link reference data to transactional data even though the transactional data contains the business identifiers of reference data redundantly.

8.3.3.2 Party to Cash Account Reference Data File Relationship

Each cash account has a mandatory relationship to a party. The cash account reference data contains the party identifier as the attribute to link a party to a cash account.
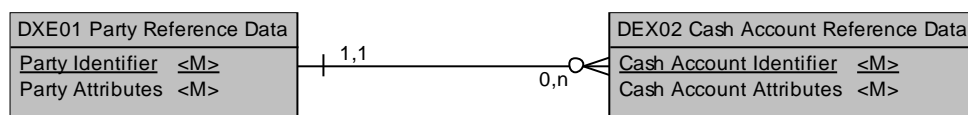
8.3.3.3 Cash Account Balance and Liquidity to Reference Data File Relationships

Each cash account balance and liquidity is uniquely identified through a combination of a business day and a cash account identifier. The cash account balance also has a relationship to party reference data.

```
┌─────────────────────────────────┐   ┌─────────────────────────────────┐   ┌─────────────────────────────────────┐
│ DXE01 Party Reference Data      │   │      DXE06 Business Day         │   │ DXE02 Cash Account Reference Data   │
├─────────────────────────────────┤   ├─────────────────────────────────┤   ├─────────────────────────────────────┤
│ Party Identifier    <M>         │   │ Business Date          <M>      │   │ Cash Account Identifier    <M>      │
│ Party Attributes  <M>           │   │ Business Day Attributes  <M>    │   │ Cash Account Attributes   <M>       │
└─────────────────────────────────┘   └─────────────────────────────────┘   └─────────────────────────────────────┘
```

```
                    ┌──────────────────────────────────────┐
                    │ DXE04 Cash Account Balances and      │
                    │              Liquidity               │
                    ├──────────────────────────────────────┤
                    │ Cash Account Balance Attributes  <M> │
                    └──────────────────────────────────────┘
```
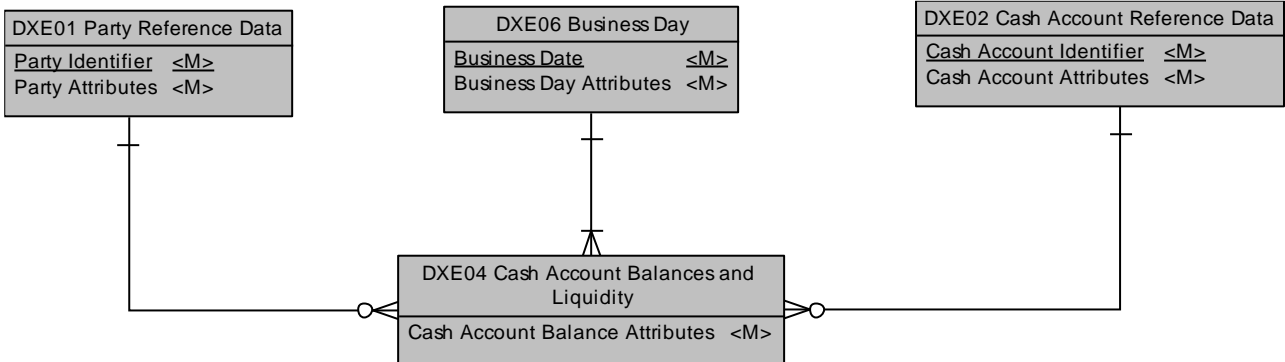
8.3.3.4 Cash Transfers to Reference Data File Relationships

Each cash transfer has a relationship to cash account reference data as well as to the party of the cash account. Each cash transfer specifies the cash account identifier and the party identifier.

```
┌─────────────────────────────────┐                           ┌─────────────────────────────────────┐
│ DXE01 Party Reference Data      │                           │ DXE02 Cash Account Reference Data   │
├─────────────────────────────────┤                           ├─────────────────────────────────────┤
│ Party Identifier    <M>         │                           │ Cash Account Identifier    <M>      │
│ Party Attributes  <M>           │                           │ Cash Account Attributes   <M>       │
└─────────────────────────────────┘                           └─────────────────────────────────────┘
          1,1                                                              1,1
                    ┌──────────────────────────────────────┐
              0,2   │ DXE04 Cash Transfer Orders           │   0,2
                    ├──────────────────────────────────────┤
                    │ Cash Transfer Identifier    <M>      │
                    │ Cash Transfer Attributes   <M>       │
                    └──────────────────────────────────────┘
```
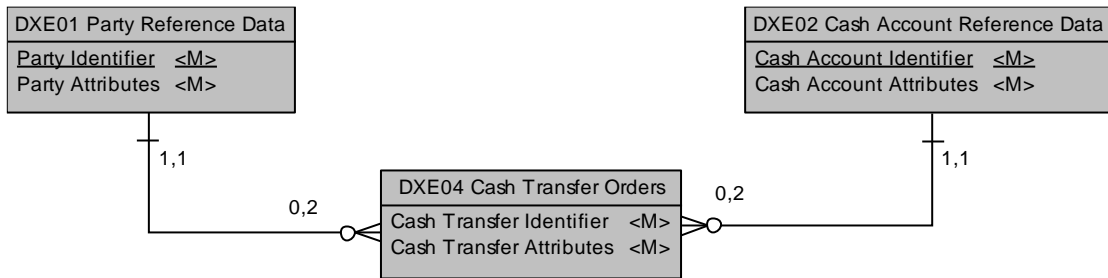
8.3.3.5 Aggregation Group to Reference Data File Relationships

Each aggregation group has a relationship to cash account reference data as well as to the party of the cash account. An attribute in the aggregation group determine whether the relationship pertains to the cash account or the party.

8.3.4 DXE01 - Party Reference Data File Specification

A party in CRDM denotes any legal or organisational entity required in a Eurosystem market Infrastructure for processing. In this context, the party reference data file contains the attributes of party in their state as of the business day that the user selected.

No.	Logical Name	Data Type	Mandatory/ Optional	Definition
1	Party Identifier	INTEGER	Mandatory	This attribute contains the unique technical identifier of the Party in Common Reference Data Management (CRDM) or in CRSS for historic data.
2	Business Day	DATE	Mandatory	This field specifies the business day of the Eurosystem market infrastructure for which the extraction took place.
3	System entity	VARCHAR(4)	Mandatory	This field contains the unique system entity mnemonic of a system entity in Common Reference Data Management (CRDM).
4	LEI	VARCHAR(20)	Optional	This field contains the Legal Entity Identifier that identifies a party according to ISO 17442.
5	BIC	VARCHAR(13)	Mandatory	This field contains the Business Identifier Code of a party according to ISO 9362.
6	Country Code	VARCHAR(2)	Mandatory	This field contains the ISO country code of the jurisdiction in which the party is legally registered.
7	Party Long Name	VARCHAR(350)	Mandatory	This field contains the full legal name of a party.
8	Party Short Name	VARCHAR(35)	Mandatory	This field contains the user-define mnemonic to identify a party.
9	Party Type	VARCHAR(4)	Mandatory	This field provides the classification of the party in CRDM to identify its role in the respective Eurosystem market infrastructure. Code Description T2SO Operator NCBK Central Bank PMBK Payment Bank ANSY Ancillary System
10	Party Opening Date	DATE	Mandatory	This fields defines the actual date that the CSD or NCB established the contractual relationship with the party, i.e. the date from which the party is eligible to process its business transactions on the Eurosystem market infrastructure.
11	Party Close Date	DATE	Mandatory	This field defines the actual date that the contractual relationship of the party with CSD or NCB ended, i.e. the date as of which the party no longer is eligible to process its business transactions on the Eurosystem market infrastructure.
12	Deletion Status	VARCHAR(4)	Mandatory	This field specifies whether the record is active or is logically deleted. Code Description DELE Deleted ACTV Active

8.3.5 DXE02 - Cash Account Reference Data File Specification

The cash account reference data file contains the attributes of a cash account in their state as of the business day that the user selected.

No.	Logical Name	Data Type	Mandatory/ Optional	Definition
1	Cash Account Identifier	INTEGER	Mandatory	This attribute contains the unique technical identifier of the cash account in Common Reference Data Management (CRDM)
2	Cash Account Number	VARCHAR(34)	Mandatory	This field documents the externally visible cash account number that uniquely identifies a cash account across all Eurosystem market infrastructure services.
3	Cash Account BIC	VARCHAR(11)	Optional	This field specifies the BIC of the cash account according to ISO 9362.
4	Business Day	DATE	Mandatory	This field specifies the business day of a Eurosystem market infrastructure.
5	Currency Code	CHAR(3)	Mandatory	This field specifies the ISO currency code for the cash account.
6	Linked Cash Account Identifier	INTEGER	Optional	This field specifies the cash account identifier of the linked cash account. The determination of whether a link from one cash account to another cash account exists takes place using this attribute. When this field specifies a value, then this field contains a valid cash account to which the cash account, as identified by the cash account identifier, is linked.
7	Linked Cash Account Number	VARCHAR(34)	Optional	This field specifies the cash account number of the linked cash account. The determination of whether a link from one cash account to another cash account exists takes place using this attribute. When this field specifies a value, then this field contains a valid cash account to which the cash account, as identified by the cash account number, is linked.
8	Linked Cash Account Type	VARCHAR(4)	Optional	This field determines whether the cash account has a linked cash account associated to it in the CRDM data. CLM-RTGS does not use this field for its processing. This field also specifies the type of cash account to which the cash account is linked. Code Description RDCARTGS DCA CMCA CLM Main cash account CCACCLM CB account ▪
9	Party Identifier	INTEGER	Mandatory	This field specifies the unique party identifier of the party in Common Reference Data (CRDM) that holds the cash account.

No.	Logical Name	Data Type	Mandatory/ Optional	Definition
10	Account Type	VARCHAR(4)	Mandatory	This field provides the role of the cash account in a Eurosystem market infrastructure Code Description *RTGS:* RDCA RTGS DCA RCBA RTGS CB account ATEC AS technical account for procedures A and B (ATEC) ATEC AS technical account for procedures C and E (ATEC) ATEC AS technical account for procedure D (ATEC) AGAC AS guarantee funds account RSAA RTGS sub-account RTAC RTGS dedicated transit account *CLM:* CMCA CLM Main cash account CCAC CLM CB account ONDP Overnight deposit account) MGLD Marginal lending account CEMA ECB mirror account CECB CB ECB account CTEC CLM technical account for ECONS II CTTS CLM dedicated transit account for T2S CTTI CLM dedicated transit account for TIPS CTRT CLM dedicated transit account for RTGS *ECONS2:* ECCA Contingency Cash Account ECCB CB Contingency Account ECTA Contingency Technical Account ECTR Contingency Transit Account *T2S:* RTGS RTGS Dedicated Transit Account NCBA T2S Central Bank Account CSHA T2S Dedicated Cash Account *TIPS* TACC TIPS Accounts TTAC Transit Accounts TAST TIPS Ancillary System Transaction Account
11	Ceiling Amount	DECIMAL(31,0)	Optional	This field specifies the ceiling (highest amount) for the balance on a on a cash account, the breach of which result in a notification to the cash manager.
12	Closing Date	DATE	Mandatory	This field defines the actual date that cash account is no longer eligible for settlement on the Eurosystem market infrastructure.
13	Floor Amount	DECIMAL(31,0)	Optional	This field specifies the floor lowest amount) for the balance on a on a cash account, the breach of which result in a notification to the cash manager.
14	Opening Date	DATE	Mandatory	This field defines the actual date that cash account is eligible for settlement on the Eurosystem market infrastructure.

No.	Logical Name	Data Type	Mandatory/ Optional	Definition
15	Credit Based Only Flag	SMALLINT	Mandatory	This field specifies whether the cash account is a credit-based only account, i.e. whether the cash account owner must maintain a positive balance on the cash account to settle pending cash transfer orders. Code Description T Account is credit based only F Account is not credit based only

8.3.6 DXE03 - Cash Account Aggregation Group File Specification

This report extracts for all parties and cash accounts of a central bank, the aggregation groups of which a party or cash account is a member (depending on the type of aggregation). A party/cash account may be assigned to multiple groups of the same type depending on the aggregation group type.

No.	Logical Name	Data Type	Mandatory/ Optional	Definition
1	Party or Cash Account Identifier	INTEGER	Mandatory	This attribute contains the unique technical identifier of the cash account or the party in Common Reference Data Management (CRDM) depending on the value in the field *Party or Account*.
2	Party or Account	CHAR(1)	Mandatory	This field specifies the type of identifier that the grouping contains. Code Description P Party C Cash Account
3	Business Day	DATE	Mandatory	This field specifies the business day of a Eurosystem market infrastructure.
4	Aggregation Leader Party BIC	CHAR(13)	Optional	This field contains the Business Identifier Code of the aggregation party leader according to ISO 9362.
5	Cash Account Number or Party BIC	VARCHAR(34)	Mandatory	This field documents the externally visible cash account number that uniquely identifies a cash account across all Eurosystem market infrastructure services or the Party BIC, depending on the value in the field *Party or Account*.
6	Aggregation Group Type	VARCHAR(4)	Mandatory	This field specifies the type of grouping for parties or cash accounts. Code Description BANK Banking Group ACCM Account Monitoring Group LQTR Liquidity Transfer Group SETL Settlement Bank Account Group
7	Aggregation Group Name	VARCHAR(35)	Mandatory	This field specifies the data aggregation name. This column is restricted to the SWIFT X Character Set via BRs at U2A and A2A level.

8.3.7 DXE04 - Cash Account Balance and Liquidity File Specification

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The Cash Account Liquidity file provides the end-of-day states of various balances in CLM-RTGS for a cash account. The DWH does not receive an intraday history. CLM-RTGS always overwrites the record when an amount changes.

No.	Logical Name	Data Type	Mandatory/ Optional	Definition
1	Cash Account Identifier	INTEGER	Mandatory	This attribute contains the unique technical identifier of the cash account in Common Reference Data Management (CRDM)
2	Cash Account Number	VARCHAR(34)	Mandatory	This field documents the externally visible ISO 20022 cash account number that uniquely identifies a cash account across all services.
3	Cash Account Holder Party BIC	VARCHAR(13)	Mandatory	This field specifies the party BIC of the cash account holder as a party in in Common Reference Data Management (CRDM).
4	Business Day	DATE	Mandatory	This field specifies the business day of the Eurosystem market infrastructure for which the extraction took place.
5	Liquidity	DECIMAL(31,2)	Optional	This field specifies the available liquidity for the cash account.
6	Liquidity Position	DECIMAL(31,2)	Mandatory	This field specifies the position of the liquidity.
7	Liquidity at Start of Day	DECIMAL(31,2)	Mandatory	This field specifies the liquidity at the start of the day
8	Account Type	SMALLINT	Mandatory	This field specifies the type of account. Code Description 0 RTGS DCA 1 RTGS CB account 3 AS technical account for procedures A and B 4 AS technical account for procedures C and E 5 AS technical account for procedure D 7 AS guarantee funds account 9 RTGS sub-account 40 RTGS dedicated transit account 100 MCA 101 CLM CB account 105 Overnight deposit account 106 Marginal lending account 111 ECB mirror account 112 CB ECB account 113 CLM technical account for ECONS II 130 CLM dedicated transit account for T2S 135 CLM dedicated transit account for TIPS 140 CLM dedicated transit account for RTGS
9	Country Code CB	CHAR(2)	Mandatory	This field specifies the country code of the central bank.
10	Pending Urgent Reservation	DECIMAL(31,2)	Optional	This field specifies the pending urgent priority reservation.
11	Position of the Urgent Reservation	DECIMAL(31,2)	Optional	This field specifies the position of the urgent priority reservation.

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No.	Logical Name	Data Type	Mandatory/ Optional	Definition
12	Urgent Reservation at Start of Day	DECIMAL(31,2)	Optional	This field specifies the amount of the urgent priority reservation at the start of the day.
13	Pending High Reservation	DECIMAL(31,2)	Optional	This field specifies the pending high priority reservation.
14	Position of the High Reservation	DECIMAL(31,2)	Optional	This field specifies the position of the high priority reservation.
15	High Reservation at Start of Day	DECIMAL(31,2)	Optional	This field specifies the amount of the high priority reservation at the start of the day.
16	Limit Disabled Flag	SMALLINT	Optional	This field specifies the whether all bilateral limits for the current day are zero or set to zero so that for this participant no bilateral or multilateral limits should be applied. Code Description 0 No - there are bilateral limits 1 Yes - neither multilateral limit nor bilateral limits will be applied
17	Defined Multilateral Limit	DECIMAL(31,2)	Optional	This field specifies the extended relationship limit ('collecting' limit).
18	Defined Multilateral Limit Timestamp	TIMESTAMP	Optional	This field specifies the date and time of the last update of the multilateral limit.
19	Pending Multilateral Limit	DECIMAL(31,2)	Optional	This field specifies the multilateral limit amount to be activated. It is an intra-day change (reduction) of the multilateral limit, which cannot be activated at present because of a higher claim of the limit. Nevertheless, it is taken into account by the entry disposition process in order to reduce the claim to the desired limit amount.
20	Pending Multilateral Limit Timestamp	TIMESTAMP	Optional	This field specifies the timestamp of the last activation of the multilateral limit.
21	Claimed Multilateral Limit of an Algo	DECIMAL(31,2)	Optional	This field specifies the current amount of a multilateral limit that the settlement algorithm reserved at the start of day.
22	Position of the Multilateral Limit	DECIMAL(31,2)	Optional	This field specifies the current (permanently updated) position of the multilateral limit.
23	Multilateral Limit at Start of Day	DECIMAL(31,2)	Optional	This field specifies the multilateral limit at the beginning of the day.
24	Bilateral Limits Sum	DECIMAL(31,2)	Optional	This field specifies the total of all bilateral limits.
25	Bilateral Limits Sum Timestamp	TIMESTAMP	Optional	This field specifies the date and time of the last update of the sum of the bilateral limits.

No.	Logical Name	Data Type	Mandatory/ Optional	Definition
26	Bilateral Limit Positions Sum	DECIMAL(31,2)	Optional	This field specifies the sum of all current positions of the bilateral limit.
27	Amount of Automatic Marginal Lending used	DECIMAL(31,2)	Optional	This field specifies the amount of automatic marginal lending used.
28	Amount of Marginal Lending on Request used	DECIMAL(31,2)	Optional	This field specifies the amount of marginal lending on request used.
29	Pending CBO Reservation	DECIMAL(31,2)	Optional	This field specifies the pending amount of the CBO reservation, i.e. it is the amount change to the CBO reservation that CLM could not yet apply. If a reservation order can only be partly changed, it is set with the remainder.
30	Position of the CBO Reservation	DECIMAL(31,2)	Optional	This field specifies the current (permanently updated) position of the CBO reservation.
31	CBO Reservation at Start of Day	DECIMAL(31,2)	Optional	This field specifies the amount of the CBO reservation at the beginning of the day. It is taken over from the standing order amount for a CBO reservation and may be less than that amount if it can only be partly executed. The amount can also be 0 if no standing order exists.
32	Pending Seizure of Funds Reservation	DECIMAL(31,2)	Optional	This field specifies the pending amount of the seizure of funds reservation. If a reservation order can only be partly set, it is set with the remainder.
33	Liquidity Position of the Seizure of Funds Reservation	DECIMAL(31,2)	Optional	This field specifies the current (permanently updated) position of the seizure of funds reservation. The funds are not part of the current liquidity position. The seizure of funds reservation is always taken away from the current liquidity position. It is different from the CBO reservation, which is always part of the liquidity position.
34	Seizure of Funds Reservation at Start of Day	DECIMAL(31,2)	Optional	This field specifies the amount of the seizure of funds reservation at the beginning of the day. It is taken over from the seizure of funds reservation position amount at the end of the previous business day.
35	Credit Line	DECIMAL(31,2)	Optional	This field specifies the granted disposition fund (credit line). Entries exist for Default MCAs. They can be adjusted by GUI orders, 'modify credit line' requests or 'connected payments'.
36	Credit Line at Start of day	DECIMAL(31,2)	Optional	This field specifies the granted disposition fund (credit line) at the beginning of the day (carried-over from the previous business day) for those cash accounts that have a credit line. The field is zero for all other types of cash accounts.

No.	Logical Name	Data Type	Mandatory/ Optional	Definition
37	Pending Credit Line	DECIMAL(31,2)	Optional	This field specifies the pending credit line amount, i.e. the amount change to the credit line that CLM could not yet apply. If a credit line change order per U2A or connected payment cannot not settled the pending amount is stored here.
38	Pending Credit Line Mark	SMALLINT	Optional	This field specifies the pending credit line mark. Code Description 0 None 1 Fixed 2 Delta

8.3.8 DXE05 - Cash Transfers Orders/Cash Transfer File Specification

This file provides all cash transfers of a central bank for a given T2 business day.

No.	Logical Name	Data Type	Mandatory/ Optional	Definition
1	Cash Transfer Identifier	DECIMAL(16,0)	Mandatory	This attribute contains the technical identifier of the cash transfer order in CLM or RTGS.
2	Credit Cash Account Identifier	INTEGER	Mandatory	This attribute contains the unique technical identifier of the credit cash account in Common Reference Data Management (CRDM).
3	Credit Cash Account Number	VARCHAR(34)	Mandatory	This field documents the externally visible ISO 20022 credit cash account number that uniquely identifies a cash account across all services.
4	Credit Cash Account Holder Party BIC	VARCHAR(13)	Mandatory	This field specifies the party BIC of the credit cash account holder as a party in in Common Reference Data Management (CRDM).
5	Business Day	DATE	Mandatory	This field specifies the business day of a Eurosystem market infrastructure.
6	Debit Cash Account Identifier	INTEGER	Mandatory	This attribute contains the unique technical identifier of the debit cash account in Common Reference Data Management (CRDM).
7	Debit Cash Account Number	VARCHAR(34)	Mandatory	This field documents the externally visible ISO 20022 debit cash account number that uniquely identifies a cash account across all services.
8	Debit Cash Account Holder Party BIC	VARCHAR(13)	Mandatory	This field specifies the party BIC of the debit cash account holder as a party in in Common Reference Data Management (CRDM).
9	Related AS Party Identifier	INTEGER	Optional	This field specifies the unique technical identifier of the ancillary system as a party in in Common Reference Data Management (CRDM).
10	Related AS Party BIC	VARCHAR(13)	Optional	This field specifies the party BIC of the ancillary system as a party in in Common Reference Data Management (CRDM).

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No.	Logical Name	Data Type	Mandatory/ Optional	Definition
11	Related AS Counterpart Identifier	INTEGER	Optional	This field specifies the unique technical identifier of the counterpart ancillary system as a party in in Common Reference Data Management (CRDM).
12	Related AS Counterpart BIC	VARCHAR(13)	Optional	This field specifies the Party BIC of the counterpart ancillary system as a party in in Common Reference Data Management (CRDM).
13	From Service	VARCHAR(4)	Mandatory	This field documents the source service or service component that originated the cash transfer. Code Description CLMT2 Service Central Liquidity Management RTGST2 Real-time Gross Settlement T2STARGET2-Securities TIPS TARGET Instant Payments
14	To Service	VARCHAR(4)	Mandatory	This field documents the target service or service component that settles the cash transfer. Code Description CLMT2 Service Central Liquidity Management RTGST2 Real-time Gross Settlement T2STARGET2-Securities TIPS TARGET Instant Payments
15	Currency Code	CHAR(3)	Mandatory	This field specifies the three-character ISO 4217 currency code.
16	Unique End-to-End Transaction Reference (UETR)	VARCHAR(40)	Optional	This field contains a universal unique identifier to provide an end-to-end reference for a payment transaction (payment order). Usage: pacs.008, pacs.009, pacs.010 and camt.050.
17	Instruction Identifier	VARCHAR(35)	Optional	This field shows the unique identification, set by the message sender, to identify the instruction (payment order). Usage: pacs.008, pacs.009, pacs.010 and camt.050 (although optional for camt,050).
18	End-to-End Identification	VARCHAR(35)	Optional	This field shows the unique identification, set by the instruction initiator, to identify the instruction (payment order) and be passed on, unchanged, throughout the entire end-to-end-chain. Usage: pacs.008, pacs.009, pacs.010 and camt.050

No.	Logical Name	Data Type	Mandatory/ Optional	Definition
19	Cash Transfer Property	SMALLINT	Mandatory	This field documents the high-level category into which the cash transfer order falls for processing in CLM-RTGS. Code Description 0 Original payment 1 Return payment 2 Original cancelled 3 Not bookable
20	Message Type	VARCHAR(15)	Mandatory	The field specifies the ISO 20022 message type from which the cash transfer order was generated. ▪ pain.998 ▪ camt.050 ▪ camt.056 ▪ pacs.004 ▪ pacs.009 ▪ pacs.008 ▪ pacs.010 ▪ UNKNOWN
21	Settlement Type	SMALLINT	Mandatory	This field specifies the process that settled the cash transfer order. Code Description 0 Pending (not yet booked) 1 Entry disposition 2 Express algorithm 3 Settlement of a connected payment 4 AS settlements not booked by Entry disposition or algorithm 11 Algorithm 1 12 Algorithm 2 13 Algorithm 3 14 Algorithm 4 15 Algorithm 5 20 Liquidity transfer and other immediately booked ICM orders 80 End-of-day booking
22	Settlement Timestamp	TIMESTAMP	Mandatory	This field specifies the actual date and time that the cash transfer order settled.
23	First Processing Timestamp	TIMESTAMP	Optional	This field specifies the actual date and time of the first processing of an MGPY2000 cash transfer order. It is used to monitor the performance of processing in RTGS.
24	First Queuing Timestamp	TIMESTAMP	Mandatory	In the case that the processing queues a cash transfer order for settlement, this field specifies the actual date and time that initial queuing of the cash transfer order took place. The contents of this field does not change if a subsequent queueing of the cash transfer order take place. This field does not specify a value if a cash transfer order settles without queueing.

No.	Logical Name	Data Type	Mandatory/ Optional	Definition
25	Original Amount	DECIMAL(31,2)	Optional	This field specifies the instructed amount of the cash transfer order.
26	Cash Transfer Status Before Currency Specific Closing	SMALLINT	Optional	This field specifies the final state of a cash transfer order at the end-of-day closing for a settlement currency. Code Description 005 Warehoused 015 Queued 020 Earmarked 505 Settled 506 Partially settled 515 Rejected 520 Revoked
27	Cash Transfer Status	SMALLINT	Mandatory	This field specifies the current processing status of a cash transfer order. However, at end of the business day, the status specifies the final state of the cash transfer order. Code Description 62 warehoused 561 settled 562 not settled due to removal EOD or during the day 563 reversed 565 payment revoked including disagreement after blocking 566 cancelled
28	Error Code	VARCHAR(4)	Mandatory	This field specifies an error code in the case an error occurs in the processing of the cash transfer order.
29	AS Balance After Booking Debit	DECIMAL(31,2)	Optional	This field documents the balance of the debited cash account after the settlement of an AS transfer order. For example, in the case of AS return account.
30	AS Balance After Booking Credit	DECIMAL(31,2)	Optional	This field documents the resulting balance an AS subaccount or AS mirror account balance of the credited cash account after the settlement of an AS transfer order. RTGS report this balance in an AS Transfer Notice of a cross-AS cash transfer (CR493).
31	Entry Timestamp	TIMESTAMP	Mandatory	Timestamp of the first entry of the data. Part of the update control block.

No.	Logical Name	Data Type	Mandatory/ Optional	Definition
32	Classification	VARCHAR(10)	Mandatory	This field provide the category and classification of the transfer order according to the Eurosystem statistical classification framework. Code Description *For CLM:* C.10.00 CLM Intra C.10.20 CLM LT RTGS C.10.30 CLM LT T2S C.10.40 CLM LT TIPS C.11.01 Open Market Operations C.11.02 Standing Facilities C.11.03 Reserve and Account Management C.11.04 Inter Central Bank transactions C.11.05 Connected payments for credit line changes C.11.06 Non-euro area Central Bank operations C.11.09 Other (including cash transactions) C.12 Billing C.13 TARGET Balances C.14.01 Levelling out of closed accounts C.14.02 ECONS2 back transfers C.14.03 Seizure of funds C.19 Other *For RTGS:* R.20.00 RTGS Intra R.20.10 RTGS LT CLM R.20.30 RTGS LT T2S R.20.40 RTGS LT TIPS R.21.01 Payments Interbank R.21.02 Payments Customer R.21.09 Other R.22.01 AS Transactions HVPS R.22.02 AS Transactions RPS R.22.03 AS Transactions IPS R.22.04 AS Transactions SSS R.22.05 AS Transactions FXS R.22.06 AS Transactions MMS R.22.07 AS Transactions CCP R.22.09 AS Transactions Other R.23.01 Levelling out of closed accounts R.29 Other
33	Liquidity Transfer Type	VARCHAR(10)	Mandatory	This field specifies categorises liquidity transfer orders according to their processing characteristics in T2. Code Description A Automated I Immediate Q Rule-based Queued R Rule-Based Floor/Ceiling S Standing order N/A Not applicable

No.	Logical Name	Data Type	Mandatory/ Optional	Definition
34	Liquidity Transfer Direction	VARCHAR(10)	Mandatory	This field provides for a liquidity transfer order the category for the exchange of funds. Code Description S Intra-service liquidity O Outgoing liquidity I Incoming liquidity T Technical liquidity transfer (only for CLM) N/A Not applicable
35	Settlement Window	VARCHAR(10)	Mandatory	This field specifies the period during the T2 business day in which the cash transfer order settled. Code Description 1 CLM real-time settlement – Transactions settled during the CLM Real Time Settlement phase 2 RTGS real-time settlement I – Transactions settled during the RTGS Settlement Window 1 3 RTGS real-time settlement II – Transactions settled during the RTGS Settlement Window 2 N/A Not applicable
36	Initiator Type	VARCHAR(10)	Mandatory	This field documents the type of party that instructed the cash transfer order. Code Description A Orders instructed by a third party which is an AS B Orders instructed by a third party which is a central bank C Orders instructed directly by the credit participant D Orders instructed directly by the debited participant P Orders instructed by a third party which is neither an AS nor a central bank S System generated transactions
37	Return Transaction	VARCHAR(10)	Mandatory	This field documents whether the cash transfer order is a return payment. Code Description N Not return payment Y Return payment

No.	Logical Name	Data Type	Mandatory/ Optional	Definition
38	Contingency Payments	VARCHAR(10)	Mandatory	This field documents whether the cash transfer order is a contingency payment. Code Description M Mandated payments – payments that a central bank instructs on behalf of its RTGS Account Holder in contingency situations B Back-up payments – payments inputted via an RTGS function on exceptional basis when an RTGS Account Holder through an incident on its side loses its ability to send payment orders to RTGS N Regular intra-bank payment orders N/A Not applicable
39	Component System Payments	VARCHAR(10)	Mandatory	This field documents whether the cash account involved in the cash transfer order belong to the same central banks or different central banks. Code Description E Extra-Component system payments, for which the debited and the credited accounts belong to different central banks I Intra-Component system payments, for which the debited and the credited accounts belong to the same central bank
40	Intragroup Transactions	VARCHAR(10)	Mandatory	This field specifies whether the cash transfer order is intra-group. Code Description N/A Not applicable Y intra-group cash transfer N Not an intra-group cash transfer
41	Correspondent Banking	VARCHAR(10)	Mandatory	This field provides the corresponding banking classification of the cash transfer order. Code Description N/A Not applicable B the transaction is correspondent banking on both sending and receiving sides N the transaction is not correspondent banking on either side R the transaction is correspondent banking on the receiving side and not on the sending side S the transaction is correspondent banking on the sending side and not on the receiving side

No.	Logical Name	Data Type	Mandatory/ Optional	Definition
42	CLM Central Bank Operation Subtype	VARCHAR(10)	Optional	This field provides the classification for the central bank operation underlying the cash transfer order. Code Description N/A Not applicable MLA Automated Marginal Lending MLO Marginal Lending on request (setting-up order) MLR Marginal Lending reimbursement MLI Interest payment for Marginal Lending ODO Overnight Deposits (setting-up-order) ODV Overnight Deposits reverse order ODR Overnight Deposits refund ODI Interest payment for Overnight Deposits OMR Repayment of principal or interest OMS Set-up of operation RMI Interest payment for minimum reserves REI Interest payment for excess of reserves RMP Penalties for minimum reserves RAI Interest payment on accounts RMO Other reserve management transactions SFO Other standing facilities transactions
43	RTGS Intra Settlement Service Liquidity Transfers	VARCHAR(10)	Optional	This field provides the classification for RTGS intra-service liquidity transfers Code Description 1 RTGS DCA to RTGS DCA – Intra-service liquidity transfers between two RTGS DCAs 2 RTGS DCA to RTGS sub-account (AS settlement procedure C) – Liquidity transfers from an RTGS DCA to a linked sub-account dedicated to an an-cillary system using the AS settlement procedure C. 3 RTGS DCA to Ancillary System Technical Ac-count (AS settlement procedure D) – Liquidity transfers from an RTGS DCA to the technical account related to an ancillary system using AS settlement procedure D 4 RTGS technical/sub-account to RTGS DCA (AS settlement procedure C) – Liquidity transfers from a technical or linked sub-account dedi-cated to an ancillary system using the AS settle-ment procedure C to an RTGS DCA 5 Ancillary System Technical Account to RTGS DCA (AS settlement procedure D) – Liquidity transfers from a technical account related to an ancillary system using AS settlement procedure D to an RTGS DCA 6 RTGS DCA to Ancillary System guarantee accounts – Liquidity transfers from an RTGS DCA to the guarantee account of an ancillary system 7 Ancillary System guarantee accounts to RTGS DCA – Liquidity transfers from the guarantee ac-count of an ancillary system to an RTGS DCA N/A Filter not applicable

No.	Logical Name	Data Type	Mandatory/ Optional	Definition
44	RTGS Ancillary System Settlement Procedure	VARCHAR(10)	Optional	The filter provides the classification for the AS settlement procedure. Code Description A AS settlement procedure A B AS settlement procedure B C AS settlement procedure C D AS settlement procedure D E AS settlement procedure E N/A Filter not applicable
45	Originator BIC	CHAR(11)	Optional	This field specifies the BIC of the originator of the cash transfer when the ISO message underlying the cash transfer specifies it in line with the definition in the Statistical Classification Framework Mapping.
46	Beneficiary BIC	CHAR(11)	Optional	This field specifies the BIC of the beneficiary of the cash transfer when the ISO message underlying the cash transfer specifies it in line with the definition in the Statistical Classification Framework Mapping.

8.3.9 DXE06 - Business Day File Specification
This file provides the execution times of business events on a specific user-selected business day.

No.	Logical Name	Data Type	Mandatory/ Optional	Definition
1	Business Day	DATE	Mandatory	This field specifies the business day of a Eurosystem market infrastructure.
2	Event Code	VARCHAR(4)	Mandatory	This field documents an event the T2 schedules and executes during the business day. Code Description for CLM Events CT01 Load CLM business day CSOD Change of business day CRTI Start of CLM RTS CESO Execution of standing orders in CLM CSCC Start of currency specific closing CSMW Start of non-optional maintenance window CEMW End of non-optional maintenance window CECC End of currency specific closing CSOM Start of optional maintenance window CEOM End of optional maintenance window CCII Cut-off for CLM RTS T2DP Data propagation for T2 CEOD Start of EoD processing CCSF General cut-off for standing facilities CCML CB cut-off for marginal lending on request CCOS EoD - close of service Code Description for RTGS Events RT01 Load RTGS business day RSOD Change of business day RRTI Start of RTGS RTS RESO Execution of standing orders in RTGS RSCC Start of currency specific closing RSMW Start of non-optional maintenance window REMW End of non-optional maintenance window

No.	Logical Name	Data Type	Mandatory/ Optional	Definition
				RECCEnd of currency specific closing RRII Start of RTGS RTS II RSIC Start of settlement window for interbank and customer payments RSOM Start of optional maintenance window REOM End of optional maintenance window RCOC Cut-off for customer payments RCII Cut-off for RTGS RTS II RLSO Execution of standing orders after last settlement attempt in RTGS REOD Start of EoD processing RCOS EoD - close of service
3	Scheduled Timestamp	TIMESTAMP	Mandatory	This field specifies the date and time at which the execution of the event is to take place during the business day.
4	Actual Timestamp	TIMESTAMP	Mandatory	This field specifies the date and time at which the execution of the event has been rescheduled to during the business day. This timestamp contains the value of the scheduled timestamp (TS_SCHED) when there was no rescheduling.

CLM UDFS

9 EUROSYSTEM UPDATE [SDD-PBR-092_PBI-224087]: Change only in MyStandards

Multiplicity change in the CLM camt.006_ReturnTransaction

Multiplicity change of the element <Owner> in the CLM camt.006_ReturnTransaction

xpath	Multiplicity from	Multiplicity to
/Document/RtrTx/RptOrErr/BizRpt/TxRpt/TxOrErr/Tx/AcctNtry/Acct/**Ownr**	[1..1]	[0..1]

CRDM UDFS

10 EUROSYSTEM UPDATE [INC000000370229]: page 92 (CRDM UDFS-chapter 1.3.3.3. Description of the entities- 6. Direct Debit Mandate)

Removal of reference to Payment Bank User

This entity includes all Direct Debit Mandate reference data. An authorised ~~Payment Bank~~ user can create and maintain Direct Debit Mandate entities on the Accounts ~~owned by its Party~~ under its data scope.

ESMIG UDFS

11 EUROSYSTEM UPDATE [SDD-PBR-0083]: page 28 (ESMIG UDFS-chapter 1.5.3.1 Technical message validation for TARGET Services (excluding TIPS), page 34 (ESMIG UDFS-chapter 1.5.4.2.1.2. Timeout and oversized management), page 55 (ESMIG UDFS 2.2 List of business rules and error codes), MyStandards T2-CoCo – ReceiptAcknowledgement – admi.007

Introduction of changes on admi.007 in order to avoid schema validation errors and provision of a more complete description of the fields of the BAH when sending non-registered ISO20022 messages.

ESMIG UDFS-chapter 1.5.3.1 Technical message validation for TARGET Services (excluding TIPS), page 28

Besides the schema validation, the messages received by ESMIG may require some additional technical checks before they can be successfully forwarded to the TARGET service back-end. In the context of TARGET Service (excluding TIPS), these additional checks are enforced by the business interface of the relevant Service/Component. The aim of this check is the detection of potential inconsistencies in the format of the message, e.g. due to cross-field validation. Always with regards to all the TARGET services excluding TIPS, for non-registered ISO20022 messages (for which a DRAFT prefix is present in the XML namespace declaration) there is no need to specify the DRAFT prefix inside the BAH as well. For instance, whether the payload contains a DRAFT4camt.xyz message, the XML BAH field <MsgDefIdr> has to be filled in truncated, as camt.xyz.

ESMIG UDFS-chapter 1.5.4.2.1.2 Timeout and oversized management, page 34

Example 2:

```xml
<?xml version="1.0" encoding="UTF-8"?>
<!—TARGET Service cannot respond to the query request within the timeout limit.-->
<Document xmlns="urn:iso:std:iso:20022:tech:xsd:admi.007.001.01">
      <RctAck>
            <MsgId>
                  <MsgId>NONREF</MsgId>
            </MsgId>
            <Rpt>
                  <RltdRef>
                        <Ref>NONREF</Ref>
                  </RltdRef>
                  <ReqHdlg>
                  <StsCd>I074</StsCd>
                  <Desc>ICAA001 - TheARGET service cannot replyspond to the query request
                  within the timeout limit. Store and forward network service will be
                  used.
                  </Desc>
                  </ReqHdlg>
            </Rpt>
      </RctAck>
</Document>
```

In the example 3 a ReceiptAcknowledgement referring to an incoming message is sent to the corresponding party falling under the scope of "oversized management".

Example 3:

```xml
<?xml version="1.0" encoding="UTF-8"?>
<!--TARGET Service cannot respond via message based network service due to size restriction-->
<Document xmlns="urn:iso:std:iso:20022:tech:xsd:admi.007.001.01">
    <RctAck>
        <MsgId>
            <MsgId>NONREF</MsgId>
        </MsgId>
        <Rpt>
            <RltdRef>
                <Ref>NONREF</Ref>
            </RltdRef>
            <ReqHdlg>
            <StsCd>I076</StsCd>
            <Desc>ICAA002 - TheARGET service cannot replyspond via message based
            network service due to size restriction. File store and forward network
            service will be used.
            </Desc>
            </ReqHdlg>
        </Rpt>
    </RctAck>
</Document>
```

ESMIG UDFS-chapter 2.2 List of business rules and error codes, page 55

BR NAME	DESCRIPTION	INBOUND MESSAGE	REPLY MESSAGE	REASON CODE	ERROR TEXT
ICSA010	The digital signature has to be valid.	head.001	admi.007	I071	Digital signature is not valid.
ICSA010	The digital signature has to be valid.	head.002	admi.007	I071	Digital signature is not valid.
ICAA001	The invoked TARGET service responds to the query request within the timeout limit. Message based or file based store and forward network service will be used.	any query message	admi.007	I074	TheARGET service cannot replyspond to the query request within the timeout limit. Store and forward network service will be used.

BR NAME	DESCRIPTION	INBOUND MESSAGE	REPLY MESSAGE	REASON CODE	ERROR TEXT
ICAA002	The invoked TARGET service responds to the query request via file store and forward network service as the query response exceeds the real time message based network service size (oversize handling).	any query message	admi.007	I076	The~~ARGET~~ service cannot re~~ply~~spond via message ~~based~~ network service due to size restriction. File store and forward network service will be used.
ICAA003	The invoked TARGET service responds to the query request as the query response exceeds the file store and forward network service size limit.	any query message	admi.007	I077	The ~~invoked TARGET~~ service cannot respond to the query due to size restriction.

MyStandards T2-CoCo –ReceiptAcknowledgement – admi.007
admi.007 Amendment on the error text description of the /Document/RctAck/Rpt/ReqHdlg/Desc tag in admi_007OversizedAndTimeout_example.xml

RTGS UDFS

12 RTGS UDFS EUROSYSTEM UPDATE [SDD-PBR-083]: page 935 - 1415 (RTGS UDFS-chapter 13.1 Index of validation rules and error codes); Pacs.004 and Pacs.008 Error description update

Pacs.004 Validation Rule and Error description update – Exchange Rate rules (slightly modified error description compared to CR CSLD-0111)
Pacs.008 Error description update – Exchange Rate rules

[…]

Inbound message type	Response message type	Rule source	Validation rule ID	Validation rule description	Error code	Error description	Xpaths of inbound message elements for validation	Xpath of response message code element	Source rule name
pacs.004	pacs.002	ISO	IV00030	If ChargesInformation is present, then (Returned)InstructedAmount must be present.	X048	Invalid message content for (Returned)InstructedAmount when ChargesInformation is present	PmtRtr/TxInf/RtrdInstdAmt PmtRtr/TxInf/ChrgsInf	FIToFIPmtStsRpt/TxInfAndSts/StsRsnInf/Rsn/Prtry	ChargesInformationAndReturnedInstructedAmountRule
pacs.004	pacs.002	ISO	**IV00040**	If ReturnedInstructedAmount is present and the currency is different from the currency in ReturnedInterbankSettlementAmount, then ExchangeRate must be present.	**X049**	Invalid message content for ExchangeRate when (Returned)InstructedAmount with other currency is present	PmtRtr/TxInf/XchgRate PmtRtr/TxInf/RtrdIntrBkSttlmAmt/Ccy PmtRtr/TxInf/RtrdInstdAmt/Ccy PmtRtr/TxInf/RtrdInstdAmt	FIToFIPmtStsRpt/TxInfAndSts/StsRsnInf/Rsn/Prtry	ReturnedInstructedAmountAndExchangeRate1Rule
pacs.004	pacs.002	ISO	**IV00050**	If ReturnedInstructedAmount is present and the currency is the same as the currency in ReturnedInterbankSettlementAmount, then ExchangeRate is not allowed.	**X050**	Invalid message content for ExchangeRate when (Returned)InstructedAmount with same currency is present	PmtRtr/TxInf/XchgRate PmtRtr/TxInf/RtrdIntrBkSttlmAmt/Ccy PmtRtr/TxInf/RtrdInstdAmt/Ccy PmtRtr/TxInf/RtrdInstdAmt	FIToFIPmtStsRpt/TxInfAndSts/StsRsnInf/Rsn/Prtry	ReturnedInstructedAmountAndExchangeRate2Rule
[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]

			]			]			
pacs.008	pacs.002	ISO	**IV00040**	If InstructedAmount is present and the currency is different from the currency in InterbankSettlementAmount, then ExchangeRate must be present.	**X049**	Invalid message content for ExchangeRate when (Returned)InstructedAmount with ~~different~~ other currency is present	FIToFICstmrCdtTrf/CdtTrfTxInf/XchgRate FIToFICstmrCdtTrf/CdtTrfTxInf/IntrBkSttlmAmt/Ccy FIToFICstmrCdtTrf/CdtTrfTxInf/InstdAmt/Ccy FIToFICstmrCdtTrf/CdtTrfTxInf/InstdAmt	FIToFIPmtStsRpt/TxInfAndSts/StsRsnInf/Rsn/Prtry	InstructedAmountAndExchangeRate1Rule
pacs.008	pacs.002	ISO	**IV00050**	If InstructedAmount is present and the currency is the same as the currency in InterbankSettlementAmount, then ExchangeRate is not allowed.	**X050**	Invalid message content for ExchangeRate when (Returned)InstructedAmount with same currency is present	FIToFICstmrCdtTrf/CdtTrfTxInf/XchgRate FIToFICstmrCdtTrf/CdtTrfTxInf/IntrBkSttlmAmt/Ccy FIToFICstmrCdtTrf/CdtTrfTxInf/InstdAmt/Ccy FIToFICstmrCdtTrf/CdtTrfTxInf/InstdAmt	FIToFIPmtStsRpt/TxInfAndSts/StsRsnInf/Rsn/Prtry	InstructedAmountAndExchangeRate2Rule
[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]	[…]

Table 424 - RTGS business rules