

General Information (Origin of Request)			
<input type="checkbox"/> User Requirements Document (URD) <input checked="" type="checkbox"/> User Detailed Functional Specification (UDFS) <input type="checkbox"/> User Handbook (UHB) <input type="checkbox"/> Other User Functional or Technical Documentation (SYS)			
<b>Request raised by:</b> T2-WG		<b>Institute:</b> Central Bank	<b>Date raised:</b> February 2024
<b>Request title:</b> Introduction of interim balances in camt.053 ( <i>BankToCustomerStatement</i> ) that are subject to pagination			<b>Request ref. no:</b> T2-0139-UDFS
<b>Request type:</b> Common	<b>Classification:</b> enhancement	Scope	<b>Urgency:</b> Normal
<b>1. Legal/business importance parameter:</b>		<b>2. Market implementation efforts parameter – Stakeholder impact:</b>	
<b>3. Operational impact:</b>		<b>4. Financial impact parameter:</b>	
<b>5. Functional/ Technical impact</b>		<b>6. Interoperability impact:</b>	
<b>Requestor Category:</b> L2		<b>Status:</b> 4CB detailed assessment	

#### Reason for change and expected benefits/business motivation:

The camt.053 message (*BankToCustomerStatement*) reports at the end of the day all settled entries for the current business day. It is produced by RTGS/CLM at EoD for each account in the system for which the account owner has configured to have a statement produced. The statement message is then sent to appropriate recipients based upon subscription and routing.

If the size of the statement of accounts exceeds 32 MB, it is subject to pagination, i.e. the statement of accounts is divided into several messages/pages each with a maximum of 32 MB. Roughly said, pagination occurs in case of approximately more than 32.000 bookings to be included in one camt.053.

According to current specifications, the camt.053 statement of accounts – both for RTGS and CLM – only provides the opening and closing balances on all pages of the account statement. Thus, even if the camt.053 statement of accounts consists of several pages due to pagination, each page only states the opening and closing balances on all pages. Interim balances on the individual pages are not foreseen.

This might create difficulties to automatically process account statements with more than one page in the banks' internal applications: Account statements with more than one page might be rejected by the banks' internal applications in the reconciliation process and require a manual post-processing. This in turn requires high manual effort and contains the risk of incorrect loading of statements of accounts, e.g. by duplicating or missing account statements.

The change request is supported by payment banks, especially those that might be confronted – on a regular or exceptional basis – with paginated statement of accounts.

To allow for a holistic view, the following additions should be made:

- In past's TARGET2 MT950, interim balances are included, i.e. current T2 specifications deviate from familiar TARGET2 behaviour. However, it has to be noted that pagination might have occurred more often in the "old" MT world than it will be the case in T2 due to different limits that trigger a pagination (2,000 characters in TARGET2/MT950 vs 32 MB in T2/camt.053). Thus, in T2 less institutions might be confronted with pagination. This, however, does not mitigate the risk/manual burden for those institutions that receive paginated statement of accounts.
- Other major market infrastructures as well as global messaging market practice initiatives follow the approach of including interim balances. CBPR+ and HVPS+ already considers interim balances. Thus, T2 would be fully in line with the HVPS+ Guideline in opting for the inclusion of interim balances.
- In T2S and TIPS, the camt.053 message, if , does not include interim balances neither. To underline, this CR

only covers the inclusion of interim balances in paginated T2 (= CLM and RTGS) camt.053 statement of accounts messages (*BankToCustomerStatement*).

[Note: camt.053 used in the context of general ledger is not considered by this change request.]

### Description of requested change:

The camt.053 statement of accounts message – both in RTGS and CLM – should make use of the balance subtype <INTM>.

Concretely:

- If the statement of accounts only consists of one page, the starting balance is <OPBD> (Balance at SoD).  
→ This is no change to current specifications.
- If the statement of accounts only consists of one page, the closing balance is <CLBD> (Balance at EoD).  
→ This is no change to current specifications.
- If the statement of accounts consists of more than one page (i.e. camt.053 is subject to pagination), the **starting balance on the first page** of the statement of accounts is <OPBD> (Balance at SoD). → This is no change to current specifications.
- If the statement of accounts consists of more than one page (i.e. camt.053 is subject to pagination), the **starting balance on the following pages** (page number > 1) is the **INTM balance** (interim balance) **of the previous page**. It is displayed with <SubTp> = INTM. → This is not covered by current specifications and thus part of this change request.

page 1 of 3 pages / first page	page 2 of 3 pages	page 3 of 3 pages / final page
<pre>&lt;StmtPgntr&gt; &lt;PgNb&gt;1&lt;/PgNb&gt; &lt;LastPgInd&gt;false&lt;/LastPgInd&gt; &lt;/StmtPgntr&gt;  .  .  .  &lt;Bal&gt; &lt;Tp&gt; &lt;CdOrPrtry&gt; &lt;Cd&gt;OPBD&lt;/Cd&gt; &lt;Tp&gt;</pre>	<pre>&lt;StmtPgntr&gt; &lt;PgNb&gt;2&lt;/PgNb&gt; &lt;LastPgInd&gt;false&lt;/LastPgInd&gt; &lt;/StmtPgntr&gt;  .  .  .  &lt;Bal&gt; &lt;Tp&gt; &lt;CdOrPrtry&gt; &lt;Cd&gt;OPBD&lt;/Cd&gt; &lt;/CdOrPrtry&gt; &lt;SubTp&gt; &lt;Cd&gt;INTM&lt;/Cd&gt; &lt;/SubTp&gt; &lt;/Tp&gt;</pre>	<pre>&lt;StmtPgntr&gt; &lt;PgNb&gt;3&lt;/PgNb&gt; &lt;LastPgInd&gt;true&lt;/LastPgInd&gt; &lt;/StmtPgntr&gt;  .  .  .  &lt;Bal&gt; &lt;Tp&gt; &lt;CdOrPrtry&gt; &lt;Cd&gt;OPBD&lt;/Cd&gt; &lt;/CdOrPrtry&gt; &lt;SubTp&gt; &lt;Cd&gt;INTM&lt;/Cd&gt; &lt;/SubTp&gt; &lt;/Tp&gt;</pre>

- If the statement of accounts consists of more than one page (i.e. camt.053 is subject to pagination), the **closing balance on pages not being the last page** is shown with the subtype **INTM** and contains the sum of the opening interim balance on that page plus the bookings on that given page. → This is not covered by current specifications and thus part of this change request.
- If the statement of accounts consists of more than one page (i.e. camt.053 is subject to pagination), the **closing balance on the last page** of the statement of accounts is <CLBD> (Balance at EoD). → This is no change to current specifications.  
This closing balance is the final closing balance of the whole account statement. It must correspond to the interim opening balance of the last page plus the sum of the bookings listed on the last page.

page 1 of 3 pages / first page

```
<StmtPgntn>
<PgNb>1</PgNb>
<LastPgInd>false</LastPgInd>
</StmtPgntn>

.
.
.

<Bal>
<Tp>
<CdOrPrtry>
<Cd>CLBD</Cd>
</CdOrPrtry>
<SubTp>
<Cd>INTM</Cd>
</SubTp>
</Tp>
```

page 2 of 3 pages

```
<StmtPgntn>
<PgNb>2</PgNb>
<LastPgInd>false</LastPgInd>
</StmtPgntn>

.
.
.

<Bal>
<Tp>
<CdOrPrtry>
<Cd>CLBD</Cd>
</CdOrPrtry>
<SubTp>
<Cd>INTM</Cd>
</SubTp>
</Tp>
```

page 3 of 3 pages / final page

```
<StmtPgntn>
<PgNb>3</PgNb>
<LastPgInd>true</LastPgInd>
</StmtPgntn>

.
.
.

<Bal>
<Tp>
<CdOrPrtry>
<Cd>CLBD</Cd>
</CdOrPrtry>
</Tp>
```

- The current message pagination (/Document/BkToCstmrStmt/GrpHdr/MsgPgntn) on group header element is to be **changed to statement pagination** (/Document/BkToCstmrStmt/Stmt/StmtPgntn) on statement level as part of this change request to remain ISO 20022 compliant. In consequence the currently used element block **message pagination** (/Document/BkToCstmrStmt/GrpHdr/**MsgPgntn**) is to be removed.
- The change request covers camt.053 (*BankToCustomerStatement*) both in RTGS and CLM.
- The change request does not intend to adapt camt.053 (*General Ledger*) in CLM.

**Submitted annexes / related documents:****Proposed wording for the Change request:****High level description of impact:****Impacts on other projects and products:****Outcome/Decisions:**

**Preliminary assessment:****Findings:**

The creation process of the camt.053 statement of account in the RTGS and CLM backend processing has to be adjusted:

- Change the message attributes used to indicate pagination
- Add steps to calculate the interim balances of the opening/closing balance which has to be reported for the current page
- Update the logic which is used to fill the opening/closing balance of the statement of account for RTGS and CLM
- Add the new SubType 'INTM' in case of pagination for the opening and/or closing balance

The schema and examples in MyStandards have to be adjusted.

The message details and examples given in the UDFS have to be adjusted.

**Financial impact:**

Low

**Open issues/ questions to be clarified by the originator:**

No further open issues/questions identified.

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**EUROSYSTEM ANALYSIS – GENERAL INFORMATION**

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			Process	User Interaction	Business Data Definition	Non-functional Requirements
COMMON	CENTRAL LIQUIDITY MANAGEMENT (CLM)	GENERAL	CLM Payment Order			
			CLM Liquidity Transfer Order			
			CLM Liquidity Reservation			
		CENTRAL BANK SERVICES	Modify Credit Line			
			Connected Payments			
			Overnight Deposit			
			Marginal Lending			
			Minimum Reserve Management			
			EoD General Ledger Files			
		GENERAL	RTGS Payment Order			
			Queue Management			
			RTGS Liquidity Transfer Order			
			RTGS Liquidity Reservation			
			RTGS Services for Ancillary Systems (AS)			
	CB SERVICES					
			ESMIG			
			CRDM			

<b>CENTRAL BANK SERVICES</b>	Business Day				
	User Roles and Access				
	Information and Reporting				
	Data Warehouse Services				
	Billing				
	Legal Archiving				
	Contingency Settlement				

<b>Impact on major documentation</b>									
<b>Document</b>	<b>Chapter</b>	<b>Change</b>							
Impacted UDFS chapter									
Impacted IDFS chapter									
IDFS Screens									
Additional deliveries for Message Specification(UDFS, MyStandards, MOP contingency templates)									
UHB									
Impacted DTS chapter									
Internal training materials									
External training materials									
Other documentations									
Links with other requests									
Links	Reference	Title							
<b>OVERVIEW OF THE IMPACT OF THE REQUEST ON THE T2SYSTEM AND ON THE PROJECT</b>									
<b>Summary of functional, development, infrastructure and migration impacts</b>									
<b>Impact on other TARGET Services and projects</b>									
T2S: No impact on T2S was identified stemming from this CR.									
TIPS: No impact on TIPS was identified stemming from this CR.									
ECMS: No impact on ECMS was identified stemming from this CR.									

**Risk analysis**

No risks has been identified during the preliminary assessment

**Security analysis**

No adverse effect has been identified during the preliminary assessment.