Common Global Implementation Market Practice

Workgroup-2: Bank to Customer Reporting Best-Practices and Use Cases

ISO 20022 camt.053.001.08
ISO 20022 camt.052.001.08
ISO 20022 camt.054.001.08

Version 1.1

August 2023

William Porto
JPMorgan Chase
Facilitator, CGI Workgroup-2

Contents

Change Control

Version	Date	Notes
1.0	2023-08	
1.1	2023-08	- Formatting changes - Rearranged the order of certain sections - Added "Therefore the CGI Best-Practice is not to include an Interim Balance value between pages" to the "camt.052.001.08 Interim balances between pages" section.

Contributing Members

CGI would like to thank the following contributing members for their continual participation

Bala Krishna Chirumamilla	Deutsche Bank AG
Pascal Evesque	Société Générale S.A.
Boris Gigon	SIX Group
Ankush Gupta	ING
Kiyono Hasaka	SWIFT
Ludwig Hennick	Merk Group
Justin John	Citibank
François Lemaire	FIS
Peter Noonan	Electrolux
Volker Oppermann	UniCredit
Michael Pawlisz	JPMorgan
William Porto	JPMorgan, WG-2 Facilitator
Matthias Riegel	SAP
Mario Reichel	PPI AG
Kerstin Schoenwitz	Deutsche Bank AG
Pascal Spittler	IKEA
Santhosh Sridharan	Deutsche Bank AG
Andrew Tarling	Bank of America
Christiaan van Willigen	ING

Introduction

The Common Global Implementation (CGI) initiative is a set of global working groups, composed of Financial Institutions, corporates ERP vendors, and market infrastructures who have agreed to work together in a collaborative, non-competitive space on the use of ISO 20022 messages and other related activities. The goal is to simplify implementation for corporate users and thereby promoting wider acceptance of ISO 20022 as the common XML standard used between corporates and banks. Although CGI expresses ISO 20022 in XML, these best-practices can be utilized in other expressions of ISO 20022.

This is achieved through consultation, collaboration and agreement on common implementation templates for relevant ISO 20022 financial messages, leading to their subsequent publication and promotion in order to attain widespread recognition and adoption.

Whereas ISO 20022 provides the data-model, CGI provides a base-line framework for ISO 20022 messages as well as use-cases that establishes best-practices around which elements should be conveyed (required), which elements should not be expected in a message (removed), and which elements are optional (bilateral).

For example, let's take a look at the ISO 20022 camt.053.001.08 Balance <Bal> group and how CGI provides a Best-Practice for its implementation:

ISO 20022 camt.053.001.08		
	ISO	**CGI**
Closing Available (CLAV)	Optional	Optional
Closing Booked (CLBD)	Optional	Required
Forward Available (FWAV)	Optional	Optional
Information (INFO)	Optional	Removed
Interim Available (ITAV)	Optional	Removed
Interim Booked (ITBD)	Optional	Removed
Opening Available (OPAV)	Optional	Optional
Opening Booked (OPBD)	Optional	Required – Value must be Statement Date
Previously Closed Booked (PRCD)	Optional	Optional
Expected (XPCD)	Optional	Optional

CGI use-cases also provide Best-Practices for different scenarios and market practices. An example of a use-case (illustrated later in this document) is how to report a Virtual Account Posting in the parent/Physical Account:

In a Physical Account Report, when an Ntry has been posted to a Virtual Account

- [<DbtrAcct>/<CdtrAcct>]<Id> must be the Physical Account
- [<DbtrAcct>/<CdtrAcct>]<Prxy><Tp><Prtry> is to be populated with *VACC*
- The Virtual Account will be reported in [<DbtrAcct>/<CdtrAcct>]<Prxy><Id>

CGI also provides usage-rational:

Normally, CGI best-practice is to not repot the [<DbtrAcct>/<CdtrAcct>]<Id> if it is equal to the report account <Acct><Id>, but in order to convey the Virtual Account under the [DbtrAcct/CdtrAcct]<Prxy>, the report account <Acct><Id> must be present because it is a required group [1..1].

Beyond normalization, CGI Workgroup-2 has also striven towards standardizing what elements are presented and reducing complexity. For example, in cases where in some use-cases, a value may be expressed in two different levels of a message whereas in other use-cases, the value can only be expressed in one level, CGI will recommend that the value be consistently reported in a single location.

CGI Workgroups

Work Group 1: Credit Transfer/Payment Status
Focuses on defining the harmonized guides associated with the following ISO 20022 Payment Initiation messages

Work Group 2: Bank-to-Customer Reporting
Focused on defining the harmonized guides associated with the following ISO 20022 account/transaction reporting messages

Work Group 3: Direct Debit
Focuses on defining the harmonized guides associated with ISO 20022 Payment Initiation message pain.008.001.02 Customer Direct Debit Initiation V2

Work Group 4: Electronic Bank Account Management (eBAM)
Provides a forum for corporations, banks and vendors to collaborate on fostering adoption and enhancing the effectiveness of eBAM standards and processes around the world

Work Group 5: Bank Services Billing (BSB)
Focuses on defining the harmonized guides associated with ISO 20022 account/transaction reporting message, camt.086.001.01 Bank Services Billing Statement V01

For more information on CGI as well as information on joining a workgroup, please see
https://www.swift.com/standards/market-practice/common-global-implementation

CBPR+ SWIFT Cross-Border Payments and Reporting

In March 2023, the SWIFT coexistence period between legacy MT messages and ISO 20022 MX messages began. For correspondent banking (bank-to-bank communications), this enabled the exchange of ISO 20022 messages. In addition to SWIFT's deployment of ISO 20022, many local market practices have or will be adopting ISO.

For corporates, this provides greater transparency, simplification, and standardization across all their payment rails. Between Market Infrastructures which utilizes ISO 20022, the same data model and terminology will be applied. For Bank-to-Corporate camt. reporting, this means that settlement data can remain consistent from initiation to settlement and finally to reporting: A Debtor will be a Debtor will be a Debtor (pain.001 <Dbtr><Nm> to pacs.008 <Dbtr><Nm> to camt.053 <Dbtr><Nm>).

Document Convention

Unless specified, when a "report" is referenced (using a lower case "r"), the guideline will apply to camt.053 Statements, camt.052 Reports, and camt.054 Notifications.

Due to the verbosity of ISO 20022, if every element were to be present, each example would span multiple pages. In addition, the ISO 20022 order of elements can make it cumbersome compare values between different groups. Therefore for illustrative purposes,

- Elements may be presented in an order which differs from ISO. Actual production files must adhere to the order ISO prescribed by ISO
- Elements may be omitted in examples. Actual files must adhere to the structure and multiplicity prescribed by ISO
- Element tags may be combined into a single line
- End-tags may be omitted from examples. Actual files must include end-tags and adhere to the XML structure
- Dates may be represented as day values. This is done in order to ease the understanding of the date-relationship between various elements

<div align="center">Examples</div>

ISO 20022	Document convention

<pre><Bal>
    <Tp>
        <CdOrPrtry>
            <Cd>OPBD</Cd>
        </CdOrPrtry>
    </Tp>
    <Amt Ccy="USD">400.00</Amt>
    <CdtDbtInd>CRDT</CdtDbtInd>
    <Dt>
        <Dt>2022-10-31</Dt>
    </Dt>
</Bal>
<Bal>
    <Tp>
        <CdOrPrtry>
            <Cd>OPAV</Cd>
        </CdOrPrtry>
    </Tp>
    <Amt Ccy="USD">100.00</Amt>
    <CdtDbtInd>CRDT</CdtDbtInd>
    <Dt>
        <Dt>2022-10-31</Dt>
    </Dt>
</Bal></pre>
	<pre><Bal>
	    <Cd><Amt><Dt> OPBD 400 TUE
	    <Cd><Amt><Dt> OPAV 100 TUE
	
	              - or -
	
	<Bal>
	    <Cd> <Amt> <Dt>
	    OPBD 400 TUE
	    OPAV 100 TUE
	
	              - or -
	
	<Bal>
	    <Cd><Amt> OPBD 400
	    <DtTm> TUE 16:00
	<Bal>
	    <Cd><Amt> OPAV 100
	    <DtTm> TUE 16:00</pre>

Reference to a Statement Account

Unless specified, references to a "Statement Account" apply to

- camt.053 <Stmt><Id><Othr><Id>
- camt.052 <Rpt><Id><Othr><Id>
- camt.054 <Ntfcn><Id><Othr><Id>

CGI Best-Practices

General Rules

- Credit Debit Indicator <CdtDbtInd> is required [1..1] for all amounts
- Bank Transaction ISO Codes (Domain| Family | Sub-Family) are required [1..1]; Proprietary codes are bilateral. Both can be present
- Postal Address Type <PstlAdr><AdrTp> has been removed from all Postal Address nodes
- For Book Transfers (transfers where the Account Servicer, the Creditor Agent, and the Debtor Agent are the same) Best-Practice is to not report the Creditor and Debtor Agent Name and Postal Address
- Party Contact Name is an optional element used in cases where the Party is an Entity and an individual serves as the contact

Agent Name and Postal Address

Agent Name and Postal Address are optional and should only be reported if present in the original transaction. Agent Name and Postal Address should not be reported for Book Transfers

Amounts

Amounts must honor the fractional currency representation for the Statement Account using the ISO 4217:2015 standard. In cases where a fractional value does not exist, the currency decimal indicator must not be present

Blank or Empty Tags

When an element does not contain a value, blank or empty tags (e.g. <Dbtr/> or <Dbtr><Dbtr>) must not be reported

Booking Date and the Value Date

In all cases, both the Booking Date and the Value Date must always be reported, even when both values are the same. This is in alignment with both CGI camt. V02 guidelines as well as with the common market-practice in MT Reporting. In addition, for Account Owners, having the Account Servicer always report both values facilitates development of consuming applications.

> /Ntry/BookgDt [1..1]
> /Ntry/ValDt   [1..1]

Balance Codes

Balance Type	camt.053	camt.052
Closing Available (CLAV)	Bilateral For the Booking-Date	Bilateral For the Report Date. CLAV should only be sent on the last Report of the report-date.
Closing Booked (CLBD)	Required For the Booking-Date	Bilateral For the Report Date. CLBD should only be sent on the last Report of the report-date
Forward Available (FWAV)	Bilateral	Bilateral
Information (INFO)	Removed	Removed
Interim Available (ITAV)	Removed	Bilateral
Interim Booked (ITBD)	Removed	Bilateral
Opening Available (OPAV)	Bilateral For the Booking-Date	Bilateral For the Report Date. The OPAV can only be present in the first camt.052 of the report-date
Opening Booked (OPBD)	Required For the Booking-Date	Bilateral For the Report-Date. The OPBD can only be present in the first camt.052 of the report-date
Previously Closed Booked (PRCD)	Bilateral For the previous Booking-Date	Bilateral For the previous Booking-Date. PRCD should only be sent on the first Report of the report-date.
Expected (XPCD)	Bilateral	Bilateral

Boolean values

According to the industry XML Schema specification

> *3.2.2.1 Lexical representation*
> *An instance of a datatype that is defined as ·Boolean· can have the following legal literals {true, false, 1, 0}.*

> *3.2.2.2 Canonical representation*
> *The canonical representation for Boolean is the set of literals {true, false}*

Therefore all Boolean values should be presented in lower case

> Example: <RvslInd>true</RvslInd>

DateTime values

CGI has adopted the 8601-1 end-of-day DateTime representation (which was introduced in 2019) as 23:59:59, even though the ISO 20022 guidelines refer to ISO 8601 which represents the end-of-day as 24:00:00

Time is to be expressed as Local Time with the UTC offset format (YYYY-MM-DDThh:mm:ss.sss+/-hh:mm), otherwise UTC time format (YYYY-MM-DDThh:mm:ss.sssZ). Per ISO Definition, "Decimal fractions of seconds may be included. In this case, the involved parties shall agree on the maximum number of digits that are allowed"

Order of Balance Codes

The order of the Balance codes is bilateral. Consuming applications must be able to accommodate variances in the order of Balances across reporting institutions

Zero Amounts

If an Account Servicer receives a settlement instruction which contains an amount-element of zero value, CGI Best-Practice is for the Reporting Agent to report the zero-amount

- Zero amounts are to be reported as Credit
- Zero Amounts must honor the fractional currency representation for the Statement account
- When an amount is not present, CGI-Best practice is to not report the associated element

pacs.008	camt.053

`<CdTrfTxInf>`
`  <ChrgsInf>`
`   <Amt Ccy="USD">0.00</Amt>`
`   <CdtDbtInd>CRDT</CdtDbtInd>`
	`<NtryDtls>`
	`  <TxDtls>`
	`   <Chrgs>`
	`    <Rcr>`
	`      <Amt Ccy="USD">0.00</Amt>`
	`      <CdtDbtInd>CRDT</CdtDbtInd>`

CGI Element Rules

Additional CGI element rules can also be found in the MyStandards CGI Workgroup-2 community (www.mystandards.com)

Amount Details <AmtDtls>

Amount Details are only to be reported when an exchange has taken place. For Credit transactions, if the Interbank Settlement Amount is equal to the Entry Amount, then Amount Details should not be present.

When an exchange has taken place, CGI B0est-practice is to always report the Amount Details <AmtDtls> group at the Transaction Details <TxDtls> level and never at the Entry <Ntry> level for both single and batch bookings. This is due to the possibility of a mixed currency being present across two or more <TxDtls> with different currencies in the Amount Details <AmtDtls> group. For more information, referrer to "

Amount Details: <Ntry> level vs <TxDtls>"

Availability Reporting <Avlbty>

When 100% availability is provided on the Booking Date, Availability <Avlbty> should not be present

When availability is provided for a date other than the Booking Date and zero availability is provided on the Booking Date, the Booking date with a zero value should be present

Bank Transaction Codes <BkTxCd>

- ISO Bank Transaction Codes are mandatory
- When <TxDtls> is present, Best-practice is to report the Bank Transaction Codes at both the Entry <Ntry> level and also the Transaction Details <TxDtls> level, even if the codes are the same

Card Transaction Details <CardTx>

- Card Transaction <CardTx> Details is utilized only for debit transactions
- In most use-cases, the <CardTx> group is applicable for transactions where the Account Owner is the Card Owner
- Best-Practice is to report Card Transaction <CardTx> only at the Transaction Details <TxDtls> level

Charges <Chrgs>

If during the settlement lifecycle, multiple Agents across different currencies apply charges (such as when an Intermediary Agent deducts charges from the instructed currency and the creditor Agent settles in another currency and also applies fees), <Chrgs><TtlChrgsAndTaxAmt> are to be omitted at the Entry <Ntry> level,

- Rather than including the Account Servicer charges as part of each Booking (ChrgInclInd=true), common industry practice is to book an aggregate of the amount of charges at the end of the month. This practice is bilateral
- Dependent on the use-case, Charges <Chrgs> may appear at the <Ntry> level, the Transaction Details <TxDtls> level, or both
- The order of reporting of charges is bilateral
- For more information, refer to "Charges <Chrgs>"

Creditor Account <CdtrAcct>

- For inward payments where the Creditor Account is the same as the Statement Account, Best-Practice is to not report the Creditor Account
- For return transactions (i.e.: where a reversal is true), the Debtor Account and Creditor Account should be reported as presented in the original entry or as conveyed by a pasc.004 or pacs.007 message

Copy Duplicate Indicator <CpyDplctInd>

For Copy, Copy Duplicate, or Duplicate reports, the electronic sequence and legal sequence must be the same as the original statement

Debtor Account <DbtrAcct>

- For outward payments where the Debtor Account is the same as the Statement Account, Best-Practice is to not report the Debtor Account
- For return transactions (i.e.: where a reversal is true), the Debtor Account and Creditor Account should be reported as presented in the original entry or as conveyed by a pasc.004 or pacs.007 message

Electronic Sequence Number <ElctrncSeqNb>

The Electronic Sequence Number is specific for each Statement/Report/Notification Account. For example, for the very first camt.053 sent to the Account Owner for two accounts, both must begin with 1.

The Electronic Sequence Number between camt.053, camt.052, and camt.054 must be unique. Example: An Account Owner receives camt.053 Statements and the current Electronic Sequence Number for the account Statement is 543. The Account Owner then requests camt.052 reporting. The first camt.052 reported for the Account will begin with 1.

- For Copy, Copy Duplicate, or Duplicate reports, the electronic sequence and legal sequence must be the same as the original statement
- The Electronic Sequence Number must be increased by 1 for every statement, report, or notification sent
- The Electronic Sequence Number is to be rest to 1 at the start of the calendar year
- The Electronic Sequence Number for the first statement, report, or notification for an account sent to the Account Owner should begin with 1, even if it not at the start of the year
- When a single statement, report, or notification spans multiple pages, the Electronic Sequence Number must be the same across all pages
- When multiple camt.052 or intra-day camt.054s are sent throughout the booking-day, the Electronic Sequence Number should be incremented by 1 for every report or notification sent
- For camt.052 or intra-day camt.054, the Electronic Sequence Number must increment between reported days and not calendar days. For example if the last report for Thursday ends in 124, then the first report on Friday must start with 125

    - If the last camt.052 report for Booking-Day Friday ends in 200, the first camt.052 report for the next Booking Day (Monday) must start with 201.

    - If the last camt.052 report for Booking-Day Friday ends in 200 and a camt.052 is sent on a non-Booking day (e.g. Saturday), the Electronic Sequence Number for the first camt.052 for the non-business day (Saturday) must begin with 201. If the last camt.052 for the non-Booking day (Saturday) ends in 300, then first camt.052 for the next non-Booking (Sunday) or Booking day (Monday) must start with 301

- For camt.053 or an end-of-day camt.054, the Electronic Sequence Number must increment between reported days and not calendar days. For example if the Electronic Sequence Number for the camt.053 for Thursday is 300, then the Electronic Sequence Number for the camt.053 for Friday must be 301. If the Electronic Sequence Number for Friday is 301 and Monday is the next Booking Day, then the Electronic Sequence Number for Monday would be 302

From-To-Date <FrToDt>

From-to-Date <FrToDt> is mandatory [1..1]

Previously, the From-to-Date was optional requiring that an Account Owner either look the /Bal/Dt for the OPBD (similar to the MT940 practice) or the Report Creation Date-Time /Rpt/CreDtTm of a camt.052 (similar to MT942 :13D:). Rather than having to go through these machinations, From-To Date is now mandatory

Interest <Intrst>

Interest <Intrst> should be reported at the Transaction Details level <TxDtls> and never at the Ntry level

Pagination: <StmtPgntn> / <RptPgntn> / <NtfctnPgntn>

The presence of the pagination group is mandatory [1..1] and must be present in all use-cases

Reversal Indicator <RvslInd>

- Indicates if the entry is the result of a return or a reversal
- If the Credit Debit Indicator <CdtDbtInd> is CRDT and Reversal Indicator is true, the original operation was a debit entry
- If the Credit Debit Indicator <CdtDbtInd> is DBIT and Reversal Indicator is true, the original operation was a credit entry
- <RvslInd> should only be present when true

Entry level vs Transaction level

The ISO 20022 camt. structure allows a Corporate ease of bifurcation between Treasury / Balance Sheet / P&L reporting and reconcilement data. This is evident in how ISO multiplicity mandates the presence of Amount and Bank Transaction Codes at the Entry <Ntry> level, while the details of the transaction (parties, agents, and remittance) are reported in Transaction Details <TxDtls> level. The mandatory ISO 20022 schema elements provides enough information for updating a Balance Sheet, whereas the presence and quality of reconcilement data is per the schema, bilateral.

ISO 20022 has several elements which can be reported either at the Entry <Ntry> level or at the Transaction Details <TxDtls> level

<Ntry>		<TxDtls>*
`<Amt>` `[1..1]`		`<Amt>`
`<AcctSvcrRef>`		`<AcctSvcrRef>`
`<Avlbty>`		`<Avlbty>`
`<BkTxCd>` `[1..1]`		`<BkTxCd>`
`<AmtDtls>`		`<AmtDtls>`
`<Chrgs>`		`<Chrgs>`
`<Intrst>`		`<Intrst>`
`<CardTx>`		`<CardTx>`

* for alinement, elements are out-of-order

One of the goals of CGI is to provide consistency and reduce the number of conditional or bilateral occurrences of data. Having bilateralness where depending on the use-case, an element could be present at the <Ntry> level or the <TxDlts> level leads to requiring for Account Holders to build conditional consumption logic.

Similarly, requiring that elements be present at both levels causes data overpopulation, which dependent on the delivery channel may result in an Entry that exceeds the capacity of the delivery channel.

The SWIFT CBPR+ "ISO 20022 Programme UHB Q4 2021 Edition v1.pdf" provides the following guidelines are at the Entry <Ntry> level:

<AmtDtls>

Optional nested element which provides various elements to represent an aggregated (consolidated) original amount. Where individual transaction amounts can be represented, if required, within the Entry Detail set of elements.

<Intrst>

Optional nested element detailing any interest accrued as part of an aggregated (consolidated) entry amount.

Amount Details <AmtDtls> and Card Transaction <CardTx>

When an Entry <Ntry> contains multiple Transaction Details <TxDtls>, the Interbank Settlement Amount <IntrBnkStlmentAmt> for each posting may differ, but only a single occurrence of Transaction Amount <TxAmt> is permissible in the schema. This blocks the reporting of mixed currencies at the <Ntry> level.

EUR Settlement	`pacs.008` `   <IntrBkSttlmAmt Ccy="EUR"> 100`
GPB Settlement	`pacs.008` `   <IntrBkSttlmAmt Ccy="GBP"> 50`

Statement Report	`camt.053`
	`  <Ntry>`
	`   <Amt Ccy = USD>`

Aggregate Amount	`  <AmtDtls>`
	`   <TxAmt>`
	`    <CcyXchng>`
	`     <Amt Ccy ="???">     ???`

	`   <NtryDtls>`
	`    <Btch>`
	`     <NbOfTxs> 2`

EUR Settlement	`    <TxDtls>`
	`     <AmtDtls>`
	`      <TxAmt>`
	`       <Amt Ccy = "EUR">   100`

GBP Settlement	`    <TxDtls>`
	`     <AmtDtls>`
	`      <TxAmt>`
	`       <Amt Ccy = "GBP">    50`

Account servicers could build conditional rules:

- When mixed currencies are received, an element that allows for only a single currency is not expressed at the Entry <Ntry>
- When all postings have the same currency, then the element is expressed at the Entry <Ntry> level

But then the Account Owner would need to create complex consumption rules. The same issue applies for Card Transactions <CardTx>. That said, Account Servicers may provide a cam.053 without Transaction Details <TxDtls> for booking / cash positioning, while delivering a camt.054 with <TxDtls> for reconciliation

Therefore, to simplify the model, CGI is adopting the following best-practice:

> **Amount Details <AmtDtls> and Card Transaction <CardTx> are only reported in Transaction Details and never at the Entry <Ntry> level**

> **If an Account Owner requests a camt.053 without Transaction Details <TxDtls>, then bilaterally Amount Details <AmtDtls> could be reported at the <Ntry> level**

Consumers of camt.05x.001.08 reporting can therefore code to capture Amount Details <AmtDtls> and Card Transaction <CardTx> at the Transaction Details <TxDtls> level, regardless of Single or Batch bookings.

Charges <Chrgs> and Interest <Intrst> both support multiple Record <Rcrd> [0..*] entries, allowing for the reporting of multiple currencies.

Charges	Interest

```<Chrgs>```
 ``` <Rcrd>```
 ```   <Amt Ccy="EUR"> 10```
 ``` <Rcrd>```
 ```   <Amt Ccy="GBP"> 5```
	```<Intrst>```
	 ``` <TtlIntrstAndTaxAmt Ccy="USD"> 9```
	 ``` <Rcrd>```
	 ``` <Amt Ccy="EUR"> 8```
	 ``` <Rcrd>```
	 ``` <Amt Ccy="GBP"> 3```

Future releases of camt may update Amount Details <AmtDtls> and Card Transaction <CardTx> to include a "record" level element.

Charges <Chrgs>

The Charges <Chrgs> group represents a special use-case.

When multiple postings are aggregated into a Single Booking, an Account Servicer may apply a single charge to the net booking and not apply charges individually to each posting (this practice is bilateral). This results in a use-case where Charges <Chrgs> may apply be applicable to the Entry <Ntry> and not to the multiple occurrences of Transaction Details <TxDtls> in a batch.

Best-Practice for Element level vs Transaction level reporting

The below best-practices identifies when an element should be present if a value has been assigned to it. If an element does not have value, then the schema multiplicity takes precedence.

Element	Multiplicity		CGI Best-Practice
	Schema	Has value	
<Ntry>			
<Amt>	[0..1]	[1..1]	Always report
<AcctSvcrRef>	[0..1]	[1..1]	Report if a value is available
<AmtDtls>	[0..1]	[0..0]	Never report
<Avlbty>	[0..1]	[1..1]	Report if a value is available
<BkTxCd>	[1..1]	[1..1]	Always report
<Chrgs>	[0..1]	[0..1]	Bilateral
<Intrst>	[0..1]	[0..0]	Never report
<CardTx>	[0..1]	[0..0]	Never report
<NtryDtls>			
<TxDtls>			If Transaction Details <TxDtls> is available then
<AcctSvcrRef>	[0..1]	[1..1]	Report if a value is available
<Amt>	[0..1]	[1..1]	Always report
<AmtDtls>	[0..1]	[1..1]	Report if a value is available
<Avlbty>	[0..1]	[0..1]	Report if a value is available
<BkTxCd>	[0..1]	[1..1]	Always report
<Chrgs>	[0..1]	[1..1]	Bilateral
<CardTx>	[0..1]	[1..1]	Report if a value is available
<Intrst>	[0..1]	[1..1]	Report if a value is available

Transactions Summary <TxsSummry>

The values of <TxsSummry> represent the summary information for the number of occurrences of <Ntry> in the current message and not for the reporting date. In cases where an incremental camt.052 or camt.054 are provided, <TxsSummry> would only report the totals for the Entries in the report and not the net total of Entries for the reporting date.

Without a best-practice concerning the presence of Transaction Summary, the element would remain bilateral resulting in inconsistency and requiring that either Account Servicers deploy configuration options or for Account Owners to develop bespoke consumption models.

The CGI approach remains to both harmonize and also simplify the consumption of camt. reporting.   If <TxsSummry> were only be present when Entries are reported, then an Account Owner would not know if the lack of <TxsSummry> and Entries is due to an issue with the Account Servicer or if the Entries have intentionally been omitted. By always providing the <TxsSummry> group, an Account Servicer is explicitly conveying that either Entries are present in the report or Entries are not present in the report.

This provides consistency, thereby decreasing the need for conditional logic. Consumers will receive an unambiguous confirmation of the lack of Entries.

Name	Element	ISO	CGI
Transactions Summary	<TxsSummry>	[0..1]	[1..1]
Total Entries	<TtlNtries>	[0..1]	[1..1]
Number Of Entries	<NbOfNtries>	[0..1]	[1..1]
Sum	<Sum>	[0..1]	[1..1]
Total Net Entry	<TtlNetNtry>	[0..1]	[0..1]
Amount	<Amt>	[1..1]	[1..1]
Credit Debit Indicator	<CdtDbtInd>	[1..1]	[1..1]
Total Credit Entries	<TtlCdtNtries>	[0..1]	[1..1]
Number Of Entries	<NbOfNtries>	[0..1]	[1..1]
Sum	<Sum>	[0..1]	[1..1]
Total Debit Entries	<TtlDbtNtries>	[0..1]	[1..1]
Number Of Entries	<NbOfNtries>	[0..1]	[1..1]
Sum	<Sum>	[0..1]	[1..1]
Total Entries Per BTC	<TtlNtriesPerBkTxCd>	[0..*]	[0..*]

- When there are no Entries <Ntry> in the report (movement is not reflected in the report), Transaction Summary must still be present
- In the case where only Credits are available, Total Debit Entries <TtlDbtNtries> must be reported with the Number of Entries <NbOfNtries> and Sum <Sum> amounts of zero

```
<TtlDbtNtries>
  <NbOfNtries>0</NbOfNtries>
  <Sum>0.00</Sum>
</TtlDbtNtries>
```

- In the case where only Debits are available, Total Credit Entries <TtlCdtNtries> must be reported with the Number of Entries <NbOfNtries> and Sum <Sum> amounts of zero

```
<TtlCdtNtries>
  <NbOfNtries>0</NbOfNtries>
  <Sum>0.00</Sum>
<TtlCdtNtries>
```

camt.053 with no Entries	
`<TxsSummry>`	
`  <TtlNtries>`	
`    <NbOfNtries>`	`0`
`    <Sum>`	`0.00`
`  <TtlCdtNtries>`	
`    <NbOfNtries>`	`0`
`    <Sum>`	`0.00`
`  <TtlDbtNtries>`	
`    <NbOfNtries>`	`0`
`    <Sum>`	`0.00`

camt.053 with a single Credit Entry	
`<TxsSummry>`	
`  <TtlNtries>`	
`    <NbOfNtries>`	`1`
`    <Sum>`	`10.00`
`  <TtlCdtNtries>`	
`    <NbOfNtries>`	`1`
`    <Sum>`	`10.00`
`  <TtlDbtNtries>`	
`    <NbOfNtries>`	`0`
`    <Sum>`	`0.00`
`<Ntry>`	
`  <Amt>`	`10.00`
`  <CdtDbtInd>`	`CRDT`

Transaction Details Single Booking and Batch Booking			
Single Booking		**Batch Booking**	
`<Stmt>`		`<Stmt>`	
`  <Acct>`		`  <Acct>`	
`  <Bal>`		`  <Bal>`	
`  <TxsSummry>`		`  <TxsSummry>`	
`    <TtlNtries>`		`    <TtlNtries>`	
`      <NbOfNtries>`	`1`	`      <NbOfNtries>`	`1`
`      <Sum>`	`10.00`	`      <Sum>`	`20.00`
`    <TtlCdtNtries>`		`    <TtlCdtNtries>`	
`      <NbOfNtries>`	`1`	`      <NbOfNtries>`	`1`
`      <Sum>`	`10.00`	`      <Sum>`	`20.00`
`    <TtlDbtNtries>`		`    <TtlDbtNtries>`	
`      <NbOfNtries>`	`0`	`      <NbOfNtries>`	`0`
`      <Sum>`	`0.00`	`      <Sum>`	`0.00`
`  <Ntry>`		`  <Ntry>`	
`    <Amt>`	`10.00`	`    <Amt>`	`20.00`
`    <CdtDbtInd>`	`CRDT`	`    <CdtDbtInd>`	`CRDT`
		`    <NtryDtls>`	
		`      <Btch>`	
		`        <NbOfTxs>`	`3`
		`      <TxDtls>`	
		`        <Amt>`	`5.00`
		`      <TxDtls>`	
		`        <Amt>`	`5.00`
		`      <TxDtls>`	
		`        <Amt>`	`10.00`

Example multi-level element reporting

Single occurrence of <TxDtls>	Multiple occurrences of <TxDtls>

```
<Stmt>
  <Bal>
    <Cd>              OPBD
    <Dt>              JUNE 04

  <Ntry>
   <Amt>              EUR 100
   <AcctSvcrRef>      43212345
   <Avlbty>
    <ActlDt>          JUNE 05
   <BkTxCd>
    <Domn>            PMNT

   <NtryDtls>


    <TxDtls>
      <Refs>
       <AcctSvcrRef>  43212345
       <EndToEndId>   INV 1234
      <Amt>           EUR 100
      <AmtDtls>
       <TxAmt>        USD 105
      <Avlbty>
       <ActlDt>       JUNE 05
      <BkTxCd>
       <Domn>         PMNT
```

```
<Stmt>
  <Bal>
    <Cd>              OPBD
    <Dt>              JUNE 04

  <Ntry>
   <Amt>              EUR 300
   <AcctSvcrRef>      43212345
   <Avlbty>
    <ActlDt>          JUNE 05
   <BkTxCd>
    <Domn>            PMNT

   <NtryDtls>
     <Btch>
       <NbOfTxs>      2

     <TxDtls>
       <Refs>
         <AcctSvcrRef> 9777777
         <EndToEndId>  INV 876
       <Amt>          EUR 120
       <AmtDtls>
         <TxAmt>      GBP 118
       <Avlbty>
         <ActlDt>     JUNE 05
       <BkTxCd>
         <Domn>       PMNT

     <TxDtls>
       <Refs>
         <AcctSvcrRef> 6333333
         <EndToEndId>  INV 879
       <Amt>          EUR 180
       <AmtDtls>
         <TxAmt>      USD 195
       <BkTxCd>
         <Domn>       PMNT
```

Multi-level element reporting without <TxDtls> / 054 with <TxDtls>

camt.053	camt.054

<pre><Ntry>
  <Amt>   EUR 100
  <AcctSvcrRef>   43212345
  <Avlbty>
    <ActlDt>   JUNE 05
  <BkTxCd>
    <Domn>   PMNT
 	
  <NtryDtls>
    <Btch>
      <NbOfTxs>   2</pre>
	<pre><Ntfcn>
	  <Amt> EUR 300
	  <AcctSvcrRef> 43212345
	  <Avlbty>
	    <ActlDt> JUNE 05
	  <BkTxCd>
	    <Domn> PMNT
	
	  <NtryDtls>
	    <Btch>
	      <NbOfTxs> 2
	
	    <TxDtls>
	      <Refs>
	        <AcctSvcrRef> 977787777
	      <Amt> EUR 120
	      <AmtDtls>
	        <TxAmt> GBP 118
	      <Avlbty>
	        <ActlDt> JUNE 05
	      <BkTxCd>
	        <Domn> PMNT
	
	    <TxDtls>
	      <AcctSvcrRef> 633333333
	      <Amt> EUR 180
	      <AmtDtls>
	        <TxAmt> USD 195
	      <BkTxCd>
	        <Domn> PMNT</pre>

Multi-level element reporting with Amount Details <AmtDtls>

camt.053

<pre><Ntry>
  <Amt>   EUR 100
  <AcctSvcrRef>   43212345
  <Avlbty>
    <ActlDt>   JUNE 05
  <BkTxCd>
    <Domn>   PMNT
  <NtryDtls>
    <TxDtls>
      <AmtDtls>
        <TxAmt>   USD 195</pre>

Pagination

Pagination is optional. Pagination allows for the splitting of a report over either physical messages/files or logical groups within a file. Pagination is often deployed when a report exceeds the maximum file size allowed by a communication channel. For example, as of Year 2023 InterAct can only support messages up to 10,000 characters. Therefore in order to convey a report over InterAct which exceeds 10,000 characters, pagination is deployed.

Pagination Best-Practices

There are three sections to a paginated report

First Page	<StmtPgntn>**1**</StmtPgntn>
Interim Pages	<StmtPgntn>*</StmtPgntn> / <LastPgInd>**false**</LastPgInd>
Last Page	<StmtPgntn>*</StmtPgntn> / <LastPgInd>**true**</LastPgInd>

- The First Page for every report must begin with page number 1
- A two-page camt. report will only contain the First Page and the Last Page
- Page numbering must be sequential within a report but not across reports
- Every page must include the Last Page Indicator <LastPgInd>
- The Transaction Summary group <TxsSummry> will only be reported on the First Page - this is in alignment with CBPR+
- The Transaction Summary group <TxsSummry> will summarize all the Entries <Ntry> for the entire report

A sequence of paginated camt reports are restricted to a single account. If the Account Servicer wishes to convey more than one report or account, a new sequence of pages must be used. For example:

```
<GrpHdr>
 <Stmt>
  <Id>              Account 111
   <ElctrncSeqNb>   7950
  <StmtPgntn>
   <PgNb>           1
   <LastPgInd>      false

 <Stmt>
  <Id>              Account 111
   <ElctrncSeqNb>   7950
  <StmtPgntn>
   <PgNb>           2
   <LastPgInd>      true

 <Stmt>
  <Id>              Account 222    A new account is present, therefore a new sequence of pages
   <ElctrncSeqNb>   5432
   <StmtPgntn>
    <PgNb>          1
    <LastPgInd>     true
```

Paginating a single Entry across two pages

There is no recommended solution proposed for handling an Entry that is larger than the file size constraints of the communications channel being used. A single Entry cannot be split across two pages.

Pagination within a Single File (CGI Recommended Practice)

A single file is sent to the Account Owner.   This model is identical to the common industry practice for delivering a SWIFT MT formatted report via a single file.

Single File

```
<GrpHdr>
<Stmt>
  <Acct>                  111-111
  <ElctrncSeqNb>          7938
  <StmtPgntn>
    <PgNb>                1
    <LastPgInd>          false

<Stmt>                                    Account 111-111
  <Acct>                  111-111         2 pages
  <ElctrncSeqNb>          7938
  <StmtPgntn>
    <PgNb>                2
    <LastPgInd>          true

<Stmt>
  <Acct>                  462-462
  <ElctrncSeqNb>          212             Account 462-462
  <StmtPgntn>                             1 page
    <PgNb>                1
    <LastPgInd>          true

<Stmt>
  <Acct>                  373-373
  <ElctrncSeqNb>          9456
  <StmtPgntn>
    <PgNb>                1
    <LastPgInd>          false

<Stmt>                                    Account 373-373
  <Acct>                  373-373          2 pages
  <ElctrncSeqNb>          9456
  <StmtPgntn>
    <PgNb>                2
    <LastPgInd>          true

<Stmt>
  <Acct>                  555-555
  <ElctrncSeqNb>          5596            Account 555-555
  <StmtPgntn>                             1 page
    <PgNb>                1
    <LastPgInd>          true
```

Individual Files by Account or Page

Each file can only contain a single page. Single-Page reports are also delivered as individual files per account.

Each file must have a Group Header. Each file can contain one only a single page. Non-Paginated Statements must also be delivered in a separate file.

```
                    File 1
   <GrpHdr>
   <Stmt>
      <Acct>             111-111
      <ElctrncSeqNb>     7938
      <StmtPgntn>
         <PgNb>          1
         <LastPgInd>     false
```

```
                    File 2
<GrpHdr>
   <Stmt>
      <Acct>             111-111
      <ElctrncSeqNb>     7938
      <StmtPgntn>
         <PgNb>          2
         <LastPgInd>     true
```

Account 111-111
Paginated across two pages
Two files

```
                    File 3
<GrpHdr>
   <Stmt>
      <Acct>             462-462
      <ElctrncSeqNb>     212
      <StmtPgntn>
         <PgNb>          1
         <LastPgInd>     true
```

Account 462-462
Not paginated
One file

```
                    File 4
   <GrpHdr>
   <Stmt>
      <Acct>             373-373
     <ElctrncSeqNb>      9456
      <StmtPgntn>
         <PgNb>          1
         <LastPgInd>     false
```

```
                    File 5
   <GrpHdr>
   <Stmt>
      <Acct>             373-373
      <ElctrncSeqNb>     9456
      <StmtPgntn>
         <PgNb>          2
         <LastPgInd>     true
```

Account 373-373
Paginated across two pages
Two files

```
                    File 6
   <GrpHdr>
   <Stmt>
      <Acct>             555-555
      <ElctrncSeqNb>     5596
      <StmtPgntn>
         <PgNb>          1
         <LastPgInd>     true
```

Account 555-555
Not paginated
One file

File-Break on Pagination

A new file is generated when LastPgInd=false

This allows for an optimal reporting of files when the communications channel limits the number of characters that can be sent per file while reducing the number of files that will be generated. Each file must have a Group Header

In the example below, the communications channel is limited to 10,000 characters

- The statement for Account 111-111 is 12,000 characters in length
- The statement for Account 462-462 is 5,000 characters in length
- The statement for Account 373-373 is 10,000 characters in length
- The statement for Account 555-555 is 2,000 characters in length

File 1	
<GrpHdr>	
<Stmt>	
<Acct><Id>	111-111
<ElctrncSeqNb>	7938
<StmtPgntn>	
<PgNb>	1
<LastPgInd>	false

Account 111-111 is divided between two files.
The first 10,000 characters of Account 111-111 appear in File 1 (Page 1)

File 2	
<GrpHdr>	
<Stmt>	
<Acct><Id>	111-111
<ElctrncSeqNb>	7938
<StmtPgntn>	
<PgNb>	2
<LastPgInd>	true
<Stmt>	
<Acct><Id>	462-462
<ElctrncSeqNb>	212
<StmtPgntn>	
<PgNb>	1
<LastPgInd>	true
<Stmt>	
<Acct><Id>	373-373
<ElctrncSeqNb>	9456
<StmtPgntn>	
<PgNb>	1
<LastPgInd>	false

The next 2,000 characters of Account 111-111 (Page 2) are reported in File-2, leaving a remainder of 8,000 characters available for reporting.

The entire contents of Account 462-462 can be reported in File-2.   This now leaves 3,000 characters available for reporting.

The first 3,000 characters from the statement for Account 373-373 (Page 1) can be reported in File-2

File 3	
<GrpHdr>	
<Stmt>	
<Acct><Id>	373-373
<ElctrncSeqNb>	9456
<StmtPgntn>	
<PgNb>	2
<LastPgInd>	true
<Stmt>	
<Acct><Id>	555-555
<ElctrncSeqNb>	5596
<StmtPgntn>	
<PgNb>	1
<LastPgInd>	true

The remaining 7,000 characters of the statement for Account 373-373 (Page 2) will be reported in File-3

The statement for Account 555-555 is 2,000 characters in length and since File-3 has 3,000 characters remaining for use, the entire statement for Account 555-555 can be reported.

camt.053 pagination Balance and Transaction Summary Codes

camt.053 First Page Balance and Transaction Summary

Mandatory		
OPBD	Opening Booked	CLBD of the previous Statement
CLBD-INTM	Closing Booked Interim	OPBD plus the sum of all booked items on the first page
<TxsSummry>	Transaction Summary	Summary values for the entire Statement

Bilateral		
PRCD	Previous Closed Booked	Previous Booked Balance
OPAV	Opening Available	CLAV of the previous Statement
PTRY	Proprietary	

Restricted		
FWAV	Forward Available Balance	Can only be present on the Final-Page
CLBD	Closing Booked Balance	Can only be present on the Final-Page

camt.053 Interim-Page(s) Balance and Transaction Summary

Mandatory		
OPBD-INTM	Opening Booked	Equals the CLBD-INTM of the previous page
CLBD-INTM	Closing Booked Interim	Equals the OPBD-INTM of the current page plus all the booked items on the current page

Bilateral		
OPAV-INTM	Opening Available Interim	Equals the CLAV-INTM of the previous page
CLAV-INTM	Closing Available Interim	Equals the OPAV-INTM of the current page plus all booked items on the current page

Restricted		
All Balance Codes other than the above Mandatory and Bilateral values are restricted		
<TxsSummry>	Transaction Summary	Can Only be present on the First-Page

camt.053 Final-Page Balance and Transaction Summary

Mandatory		
OPBD-INTM	Opening Booked	Equals the CLBD-INTM of the previous page
CLBD	Closing Booked Balance	For the entire Statement

Bilateral		
CLAV	Closing Available Balance	For the entire Statement
FWAV	Closing Available Interim	Equals the OPAV-INTM of the current page plus all booked items on the current page

Restricted		
All Balance Codes other than the above Mandatory and Bilateral values are restricted		
<TxsSummry>	Transaction Summary	Can Only be present on the First-Page

camt.053 Pagination Use-Case 01: A two-page Statement

Scenario:

- The camt.053 statement has been bilaterally limited to a maximum of 4 entries per page
- There are 7 entries in the statement
- There are 4 entries in the First-Page
- There are 3 entries on the second (Last-Page) of the statement

Page 1

```
<GrpHdr>
<Stmt>
  <ElctrncSeqNb>         1964
  <StmtPgntn>
    <PgNb>               1                          <-- First page of the statement
    <LastPgInd>          false

  <Bal>
    <Cd><Amt><Dt>        OPBD  100 TUE              <-- Bilateral - For the Booking Date
    <Cd><Amt><Dt>        OPAV   90 TUE              <-- Bilateral - For the Booking Date
    <Cd><Amt><Dt><SubTp> CLBD  110 TUE  INTM        <-- OPBD + Ntry Amts on current page
    <Cd><Amt><Dt><SubTp> CLAV  100 TUE  INTM        <-- Bilateral - OPAV + Available on current page

  <TxsSummry>
    <NbOfNtries>         7                          <-- Summary for the Statement
    <TtlNetNtryAmt>      38.00
    <TtlCdtNtries>       38.00

  <Ntry><Amt>           1.00
  <Ntry><Amt>           2.00
  <Ntry><Amt>           3.00
  <Ntry><Amt>           4.00
```

Page 2

```
<Stmt>
  <ElctrncSeqNb>         1964      <-- Same Sequence Number as in the first page
  <StmtPgntn>
    <PgNb>               2                          <-- Second and Last-Page for the statement
    <LastPgInd>          true

  <Bal>
    <Cd><Amt><Dt><SubTp> OPBD 110 TUE  INTM         <-- Equal to previous page CLBD-INTM
    <Cd><Amt><Dt><SubTp> OPAV 100 TUE  INTM         <-- Equal to previous page CLAV-INTM

    <Cd><Amt><Dt>        CLBD 138 TUE               <-- For the Booking Date
    <Cd><Amt><Dt>        CLAV 128 TUE               <--Bilateral – for the Booking Date
    <Cd><Amt><Dt>        FWAV 128 WED               <-- Bilateral

  <Ntry><Amt>           7.00
  <Ntry><Amt>           10.00
  <Ntry> <Amt>          11.00
```

camt.053 Pagination Use-Case 02: A three-page Statement

Scenario:

- Camt.053 has been bilaterally limited to a maximum of 6 entries per page
- There are 17 entries in the statement
- There are 6 entries in the First-Page
- The third (Last-Page) of the statement has 6 entries

```
<Stmt>
  <ElctrncSeqNb>         1971
  <StmtPgntn>
    <PgNb>               1
    <LastPgInd>          false

  <Bal>
    <Cd><Amt><Dt>        OPBD 100 TUE
    <Cd><Amt><Dt>        OPAV 100 TUE
    <Cd><Amt><Dt><SubTp> CLBD 106 TUE INTM
    <Cd><Amt><Dt><SubTp> CLAV 106 TUE INTM

  <TxsSummry>
    <NbOfNtries>         18
    <TtlNetNtryAmt>      29.00
    <TtlCdtNtries>       29.00

  <Ntry><Amt>            1.00
  <Ntry><Amt>            1.00
  <Ntry><Amt>            1.00
  <Ntry><Amt>            1.00
  <Ntry><Amt>            1.00
  <Ntry><Amt>            1.00

-----


OPBD         For the Booking Date
OPAV         For the Booking Date

CLBD INTM    equals the OPBD plus total of Entry amounts on
             the current page

CLAV INTM    equals the OPBD plus total of Available amounts
             on the current
             page


Transaction Summary only appears on the First-Page and is for
the entire Statement
```

```
<Stmt>
  <ElctrncSeqNb>         1971
  <StmtPgntn>
    <PgNb>               2
    <LastPgInd>          false

  <Bal>
    <Cd><Amt><Dt><SubTp> OPBD 106 TUE INTM
    <Cd><Amt><Dt><SubTp> OPAV 106 TUE INTM
    <Cd><Amt><Dt><SubTp> CLBD 121 TUE INTM
    <Cd><Amt><Dt><SubTp> CLAV 121 TUE INTM




  <Ntry><Amt>            4.00
  <Ntry><Amt>            4.00
  <Ntry><Amt>            3.00
  <Ntry><Amt>            2.00
  <Ntry><Amt>            1.00
  <Ntry><Amt>            1.00

-----


OPBD INTM    equals the CLBD-INTM from prior page

OPAV INTM    equals the CLAV-INTM from prior page

CLBD INTM    equals OPBD-INTM (106) + the total Booked
             Amounts (15) on the current page
```

```
<Stmt>
  <ElctrncSeqNb>         1971
  <StmtPgntn>
    <PgNb>               3
    <LastPgInd>          true

  <Bal>
    <Cd><Amt><Dt><SubTp> OPBD 121 TUE INTM
    <Cd><Amt><Dt><SubTp> OPAV 121 TUE INTM
    <Cd><Amt><Dt>        CLBD 129 TUE
    <Cd><Amt><Dt>        CLAV 129 TUE
    <Cd><Amt><Dt>        FWAV 129 WED



  <Ntry><Amt>            1.00
  <Ntry><Amt>            1.00
  <Ntry><Amt>            1.00
  <Ntry><Amt>            1.00
  <Ntry><Amt>            1.00
  <Ntry><Amt>            1.00

-----


OPBD INTM    equals the CLBD-INTM from prior page

OPAV INTM    equals the CLAV-INTM from prior page

CLBD         For the Booking Date

CLAV         Bilateral
FWAV         Bilateral
```

camt.052.001.08 Intraday Report pagination

camt.052 pagination definitions

INITIAL camt.052

The initial (the very first) camt.052 for the Report-Date

Interim camt.052

Any camt.052 other than the Initial or Final sent on the Report-Date.

Final camt.052

The last camt.052 sent on the Report-Date. It is identical to an Interim camt.052 and does not contain closing balances

End-of-Day camt.052 (Bilateral)

When the last camt.052 for the Report-Date includes a Closing-Booked balance, it is known as an " End-of-Day camt.052"

camt.052 Pagination CGI Best-Practice

All balance values are Bilateral. When balance values are reported, CGI is recommending the following camt.052 Best-Practice:

- ITITIAL-camt.052, First-Page: Bilaterally, OPAV and OPBD may be reported
- Interim-Pages of a camt.052:   Balance codes are not reported
- Last-Page of a camt.052:   Bilaterally, ITBD and ITAV may be reported
- Transaction Summary must be reported on the First-Page
- Transaction Summary must provide the totals for the entire Report
- Transaction Summary must not be present in any page other than the First-Page

For reconciliation and assurance of the completeness of a paginated camt.052 report, the following methodology can be utilized:

- The Electronic Sequence Number <ElctrncSeqNb> insures continuity between reports
- Report Pagination <RptPgntn> insures the sequential order of the pages
- Last Page Indicator <LastPgInd> insures the identification of the final page of the report
- The amounts and number of transactions reported in the Transaction Summary <TxsSummry> group is used to insure the conveying of all Entries

CGI camt.052 Pagination Balance Reporting Best-Practice

- A camt.052 can be sent without balance codes
- Transaction Summary can only be reported on the first page

If Interim Balances are provided, the following are the CGI Best-Practices:

- Do not report Balance Codes on interim pages
- Do not report Interim Booked (ITBD) and Interim Available (ITAV) Balance Codes on the first-page
- ITAV and ITBD must only be reported on the last-page.
- For an INITIAL camt.052.001.08 for a report date, Opening Available (OPAV) and Opening Booked (OPBD) can (bilaterally) be reported on the first page
    - The ITBD of the First-camt.052 for the Report-date must match the CLBD of the previous Statement-date

- The ITAV of the First-camt.052 for the Report date must match (if present) the FWAV of the previous statement-date
- If an Account Servicer bilaterally agrees to provide interim balances, the Interim Booked (ITBD) and Interim Available (ITAV) must always be present in every camt.052 Report even when there is no activity. By always providing a camt.052 Interim Booked (ITBD) and Interim Available (ITAV) Balance, Account Owners can develop a single process to load camt.052 balances
- For an End-of-Day camt.052.001.08, only on the last page can Closing Balances bilaterally be reported

camt.052.001.08 Interim balances between pages

The model of providing paginated balances was developed for MT940 where statement summary information was not present in the message. This granted an Account Owner the ability to insure values were accurately conveyed.

- The Transaction Summary amounts (<NbOfTxs> and <TtlAmt>) can be used to insure that all Entries have been conveyed in an ISO 20022 camt.052. This equates to an MT942 "Number and Sum of Entries" (:90D: and :90C:). Further note that camt.054 does not support Balance records and yet the message supports pagination.
- The Electronic Sequence Number <ElctrncSeqNb> and the Page Number <PgNb> along with the Last Page Indicator <LastPgInd> also allow an Account Owner to validate the completeness of a message.

Therefore the CGI Best-Practice is not to include an Interim Balance value between pages. For further information on why interim camt.052 paginated balances have been restricted, see "camt.052 – Why CGI does not use Subtype INTM balance codes"

camt.052 Pagination Balance Codes and Transaction Summary

INITIAL-camt.052 First-Page

Mandatory	*<TxsSummry>*	Transaction Summary	Summary values for the entire Report
Bilateral	**OPBD**	Opening Booked	The OPBD Amount equals CLBD of the previous Statement. The OPBD date equals the Report-Date
	OPAV	Opening Available	The OPAV Amount is equal to the FWAV of the previous Statemen. The OPAV date equals the Report-Date
Restricted	**All Other Balance Codes**		

INTERIM-camt.052 First-Page

Mandatory	*<TxsSummry>*	Transaction Summary	Summary values for the entire Report
Restricted	**All Balance Codes**		

camt.052 Interim-Page(s)

Restricted	**All Balance Codes**

Last-Page of all camt.052 Reports

	ITBD	Interim Booked	Date-Time must be reported. For the INITIAL-Page, the ITBD Amount equals the OPBD of the Report plus all the Entries on the current Report For the Interim-Reports or a Final-camt.052 Report, the ITBD Amount equals the ITBD of the previous Interim-Report plus all the Entries on the current Report. It is the Interim Booked Balance as of the time of the generation of the report
Bilateral	ITAV	Interim Available	Date-Time must be reported. The ITAV Amount equals the ITAV of the previous Report plus all the Entries on the current Report. It is the Interim Available Balance as of the time of the generation of the report
	CLBD	Closing Booked	
	CLAV	Closing Available	
	FWAV	Forward Available	
Restricted	**All Other Balance Codes**		

End-of-Day camt.052

An Account Servicer may **bilaterally** agree to provide Opening and Closing Balances in a camt.052. A final camt.052 for the report day which contains closing balances is known as an "End-of-Day camt.052"

- The Closing Booked Balance and Closing Available Balance can only be present in the Final-End-of-Day camt.052of the Report-date
- A Final-End-of-Day camt.052 must contain a Closing Booked Balance (CLBD) and/or a Closing Available Balance (CLAV) for the Report-date. At least one of these balance values must be present
- The presence of CLBD and/or CLAV indicates a Final-End-of-Day camt.052 report for the Report-date
- Bilaterally, a Final-End-of-Day camt.052 can contain other balance values
- If the Final-End-of-Day camt.052 contains a Closing Booked Balance (CLBD), then the first camt.052 sent after the Final-End-of-Day camt.052 must contain an Opening Booked Balance (OPBD)
- If the Final-End-of-Day camt.052 contains a Closing Available Balance (CLAV), then the first camt.052 sent after the Final-End-of-Day camt.052 must contain an Opening Available Balance (OPAV)
- The following bilateral Balance Codes can only be reported in the Final-End-of-Day camt.052: CLBD, CLAV, FWAV, PRCD
- Date (Dt) is used for the Balance Codes OPAV, OPBD, CLAV, CLBD, FWAV, PRCD

Examples of camt.052 pagination definitions:

Five camt.052 Reports are sent throughout the Report-Date.

- The first (INITIAL) camt.052 is sent at 04:00
- Thee Interim-camt.052 Reports are sent throughout the day
- A Final-End-of-Day camt.052 for the Report Date is sent at 23:59. This Report is a "Final-End-of-Day camt.052" as it includes a Closing Booked Balance for the Report-Date

As noted, if the Final-End-of-Day camt.052 does not report Closing Balances for the Report-Date, then it is considered a Final-Interim-Report. If it would have contained Closing-Balances, it would be considered a Final-End-of-Day camt.052

| 04:00 INITIAL camt.052 | First-Page | ```
<GrpHdr>
<Rpt>
  <ElctrncSeqNb>        1982
  <StmtPgntn>
    <PgNb>              1
    <LastPgInd>         false
  <Bal><Cd>             OPBD
  <Bal><Cd>             OPAV
  <TxsSummry>
  <Ntry>
  <Ntry>
``` |
|---|---|---|
| | Interim-Page | ```
<Rpt>
  <ElctrncSeqNb>        1982
  <StmtPgntn>
    <PgNb>              2
    <LastPgInd>         false
  <Ntry>
  <Ntry>
``` |
| | Last-Page | ```
<Rpt>
  <ElctrncSeqNb>        1982
  <StmtPgntn>
    <PgNb>              3
    <LastPgInd>         true
  <Bal><Cd>             ITBD
  <Ntry>
  <Ntry>
``` |

| 08:00 Interim camt.052 | First-Page | ```
<GrpHdr>
<Rpt>
  <ElctrncSeqNb>        1983
  <StmtPgntn>
    <PgNb>              1
    <LastPgInd>         false
  <TxsSummry>
  <Ntry>
  <Ntry>
``` |
|---|---|---|
| | Last-Page | ```
<Rpt>
  <ElctrncSeqNb>        1983
  <StmtPgntn>
    <PgNb>              2
    <LastPgInd>         true
  <Bal><Cd>             ITBD
  <Bal><Cd>             ITAV
  <Ntry>
  <Ntry>
``` |

14:00 **Interim camt.052**	First-Page	```<GrpHdr>
<Rpt>
<ElctrncSeqNb>   1984
<StmtPgntn>
<PgNb>   1
<LastPgInd>   false
<TxsSummry>
<Ntry>
<Ntry>```
	Interim-Page	```<Rpt>
<ElctrncSeqNb>   1984
<StmtPgntn>
<PgNb>   2
<LastPgInd>   false
<Ntry>
<Ntry>```
	Last-Page	```<Rpt>
<ElctrncSeqNb>   1984
<StmtPgntn>
<PgNb>   3
<LastPgInd>   true
<Bal><Cd>   ITBD
<Bal><Cd>   ITAV
<Ntry>
<Ntry>```

16:00 **Interim camt.052**	Single page	```<GrpHdr>
<Rpt>
<ElctrncSeqNb>   1985
<StmtPgntn>
<PgNb>   1
<LastPgInd>   true
<Bal><Cd>   ITBD
<Bal><Cd>   ITAV
<TxsSummry>
<Ntry>```

23:59 **End-of-Day camt.052** Bilaterally, the last camt052 for the report-date can be either a Final cam.052 or an End-of-Day camt.052		`<GrpHdr>`

	First-Page	`<Rpt>`
		`  <ElctrncSeqNb>  1986`
		`  <StmtPgntn>`
		`    <PgNb>        1`
		`    <LastPgInd>   false`
		`  <TxsSummry>`
		`  <Ntry>`
		`  <Ntry>`

	Interim-Page	`<Rpt>`
		`  <ElctrncSeqNb>  1986`
		`  <StmtPgntn>`
		`    <PgNb>        2`
		`    <LastPgInd>   false`
		`  <Ntry>`
		`  <Ntry>`

	Last-Page	`<Rpt>`
		`  <ElctrncSeqNb>  1986`
		`  <StmtPgntn>`
		`    <PgNb>        3`
		`    <LastPgInd>   true`
		`  <Bal><Cd>       ITBD`
		`  <Bal><Cd>       ITAV`
		`  <Bal><Cd>       CLBD`
		`  <Bal><Cd>       CLAV`
		`  <Ntry>`
		`  <Ntry>`

camt.052 Pagination Use-Case 01: A two-page INITIAL Report
Scenario:

- 11 Entries <Ntry> totaling <Amt> 20
- Page 1 contains 6 Entry <Ntry> postings, totaling <Amt> 5
- Page 2 contains 5 Entry <Ntry> postings, totaling <Amt> 15

Previous Business-Date camt.053

```
<camt.053>
  <Stmt>
    <Bal>
      <Cd><Amt><Dt>   CLBD 110 MON
      <Cd><Amt><Dt>   CLAV 185 MON
      <Cd><Amt><Dt>   FWAV  99 TUE
```

camt.052 for the Report-Date

```
<GrpHdr>
  <CreDtTm>          TUE 08:00
<Rpt>
  <ElctrncSeqNb>     1987
  <RptPgntn>
    <PgNb>           1
    <LastPgInd>      false

  <Bal>
    <Cd><Amt><Dt>    OPBD 110 TUE
    <Cd><Amt><Dt>    OPAV  99 TUE

  <TxsSummry>
    <NbOfNtries>     11
    <TtlNetNtryAmt>  20.00

<Ntry> <Amt>         1.00
<Ntry> <Amt>         1.00
<Ntry> <Amt>         1.00
<Ntry> <Amt>         1.00
<Ntry> <Amt>         1.00

----

 OPBD = CLBD of the previous Statement
 OPAV = Forward Available of the previous
          Statement
```

```
<Rpt>
  <ElctrncSeqNb>     1987
  <RptPgntn>
    <PgNb>           2
    <LastPgInd>      true

  <Bal>
    <Cd><Amt><DtTm>    ITBD 130 TUE 08:00
    <Cd><Amt><Dotty>   ITAV 119 TUE 08:00



<Ntry> <Amt>         4.00
<Ntry> <Amt>         4.00
<Ntry> <Amt>         3.00
<Ntry> <Amt>         2.00
<Ntry> <Amt>         1.00
<Ntry> <Amt>         1.00

----

 ITBD = OPBD + All Entries in the Report
 ITAV = OPAV + All Entries in the Report
```

camt.052 Pagination Use-Case 02: A three-page Interim-Report
Scenario:

- There are 18 <Ntry> in this Report, totaling <Amt> 50
- The Interim Booked <Amt> equals 50
- The Interim Available <Amt> equals 45 due to one <Ntry> with same-day availability of <Amt> 0 and <Amt> 5 for next-day availability

camt.052		
Page 1	**Page 2**	**Page 3**

```
<GrpHdr>
 <CreDtTm>          TUE 15:00
<Rpt>                          <Rpt>                     <Rpt>
 <ElctrncSeqNb>     2001        <ElctrncSeqNb> 2001       <ElctrncSeqNb> 2001
 <RptPgntn>                     <RptPgntn>                <RptPgntn>
  <PgNb>            1            <PgNb>        2           <PgNb>        3
  <LastPgInd>      false        <LastPgInd>   false       <LastPgInd>   true

 <TxsSummry>                                             <Bal>
  <NbOfNtries>     18                                     <Cd><Amt>     ITBD 170.00
  <TtlNetNtryAmt>  50.00                                   <DtTm>       TUE  15:00
                                                          <Cd><Amt>     ITAV 164.00
                                                           <DtTm>       TUE  15:00

 <Ntry><Amt>       1.00         <Ntry> <Amt>   1.00       <Ntry> <Amt>   1.00
 <Ntry><Amt>       1.00         <Ntry> <Amt>   1.00       <Ntry> <Amt>   1.00
 <Ntry><Amt>       1.00         <Ntry> <Amt>   1.00       <Ntry> <Amt>   3.00
 <Ntry><Amt>       1.00         <Ntry> <Amt>   1.00       <Ntry> <Amt>   5.00
 <Ntry><Amt>       1.00         <Ntry> <Amt>   3.00        <Avail>       TUE 0.00
 <Ntry><Amt>       1.00         <Ntry> <Amt>   5.00        <Avail>       WED 5.00
                                                          <Ntry> <Amt>   11.00
                                                          <Ntry> <Amt>   11.00
```

camt.052 scenario: Financial Institution generates a camt.053 End-of-Day Statement

The following use-case will be illustrated

- Financial Institution sends camt.052 on a scheduled basis regardless of movement in the account
- Financial Institution closes at the end of the business-date

Throughout the Tuesday Business-Day, 6 camt files are sent to the Account Holder:

TIME	Message	Contents
06:00	camt.053	No Activity was booked on Monday
09:00	camt.052	No activity
10:00	camt.052	1 Entry
11:00	camt.052	No activity
12:00	camt.052	10 Entries over two pages
		Page 1 6 Entries
		Page 2 5 Entries
23:59	camt.052	Final camt.052 for the Report-date. No activity

camt.053 06:00 Monday Bookings

```
<GrpHdr>
  <CreDtTm>        TUE 06:00

<Rpt>
  <ElctrncSeqNb>   17
  <Bal>
      <Cd>         PRCD *
      <Amt>        80.00
      <Dt>         FRI
  <Bal>
      <Cd>         OPBD
      <Amt>        80.00
      <Dt>         MON
  <Bal>
      <Cd>         CLBD
      <Amt>        150.00
      <Dt>         MON
  <Bal>
      <Cd>         CLAV *
      <Amt>        140.00
      <Dt>         MON
  <Bal>
      <Cd>         FWAV *
      <Amt>        100.00
      <Dt>         TUE
```

* Bilateral

camt.052 Tuesday 09:00 First camt.052

```
<GrpHdr>
  <CreDtTm>        TUE 09:00

<Rpt>
  <ElctrncSeqNb>   101
  <Bal>
      <Cd>         OPBD
      <Amt>        150.00
      <Dt>         TUE
  <Bal>
      <Cd>         OPAV
      <Amt>        100.00
      <Dt>         TUE
  <Bal>
      <Cd>         ITBD
      <Amt>        150.00
      <DtTm>       TUE 09:00
  <Bal>
      <Cd>         ITAV
      <Amt>        100.00
      <DtTm>       TUE 09:00
```

camt.052 10:00

```
<GrpHdr>
  <CreDtTm>        TUE 10:00

<Rpt>
  <ElctrncSeqNb>   102

  <Bal>
      <Cd>         ITBD
      <Amt>        160.00
      <DtTm>       TUE 10:00

  <Bal>
      <Cd>         ITAV
      <Amt>        110.00
      <DtTm>       TUE 10:00

  <TxsSummry>
    <NbOfNtries>   11
    <TtlNetNtryAmt> 20.00

  <Ntry>
    <Amt>          10.00
```

camt.052 11:00

```
<GrpHdr>
  <CreDtTm>        TUE 11:00

<Rpt>
  <ElctrncSeqNb>   103

  <Bal>
      <Cd>         ITBD
      <Amt>        160.00
      <DtTm>       TUE 11:00

  <Bal>
      <Cd>         ITAV
      <Amt>        110.00
      <DtTm>       TUE 11:00
```

```
                              camt.052
                               12:00
          Page 1                                      Page 2
<GrpHdr>                              <Rpt>
 <CreDtTm>        2023-01-10T12:00     <ElctrncSeqNb>     104
<Rpt>                                 <RptPgntn>
 <ElctrncSeqNb>   104                    <PgNb>           2
 <RptPgntn>                             <LastPgInd>       true
   <PgNb>         1
   <LastPgInd>    false               <Bal>
                                        <Cd>             ITBD
 <TxsSummry>                            <Amt>            180.00
  <NbOfNtries>    11                     <DtTm>          TUE 12:00
  <TtlNetNtryAmt> 20.00               <Bal>
                                        <Cd>             ITAV
 <Ntry><Amt>      1.00                  <Amt>            130.00
 <Ntry><Amt>      1.00                  <DtTm>           TUE 12:00
 <Ntry><Amt>      1.00
 <Ntry><Amt>      1.00               <Ntry><Amt>         4.00
 <Ntry><Amt>      1.00               <Ntry><Amt>         4.00
 <Ntry><Amt>      1.00               <Ntry><Amt>         3.00
                                     <Ntry><Amt>         2.00
                                     <Ntry><Amt>         1.00
```

```
                camt.052                               camt.052
                 15:00                                  23:59
<GrpHdr>                              <GrpHdr>
 <CreDtTm>        TUE 15:00            <CreDtTm>        TUE 23:59
<Rpt>                                 <Rpt>
 <ElctrncSeqNb>   105                   <ElctrncSeqNb>  105
 <Bal>                                  <Bal>
   <Cd>           ITBD                    <Cd>          ITBD
   <Amt>          188.00                  <Amt>         188.00
   <DtTm>         TUE 15:00               <DtTm>        TUE 23:59

 <Bal>                                 <Bal>
   <Cd>           ITAV                    <Cd>          ITAV
   <Amt>          138.00                  <Amt>         138.00
   <DtTm>         TUE 15:00               <DtTm>        TUE 23:59

 <TxsSummry>
  <NbOfNtries>    1
  <TtlNetNtryAmt> 8.00

 <Ntry><Amt>      8.00
```

camt.052 scenario: FI does not generate a camt.053 End-of-Day Statement

The following conditions will apply to this use-case

- Bilaterally, the Account Servicer does not provide an end-of-day camt.053 Statement
- Bilaterally, the Account Owner has agreed to receive a Final-End-of-Day camt.052 Intraday statements with closing balances
- The Account Servicer sends camt.052 on a scheduled basis, regardless of movement in the account

Scenario Date-Times

- This scenario spans two Business Days: Monday through Tuesday

Eight files are illustrated

Creation DateTime	Contents
MON 23:59	• Final-End-of-Day camt.052 for Business-Date Monday
TUE 00:00	• First camt.052 for the Business-Date Tuesday • No activity
TUE 01:00	• For Business-Date Tuesday • No activity
TUE 02:00	• For Business-Date Tuesday • 1 Entry
TUE 08:00	• For Business-Date Tuesday • No activity
TUE 15:00	• For Business-Date Tuesday • 6 Entries • Three Pages
TUE 23:59	• Final-End-of-Day camt.052 for Business-Date Tuesday • No Activity
WED 00:00	• First camt.052 for the Business-Date Wednesday • 1 Entry

Monday 23:59 Final-End-of-Day camt.052	Tuesday 00:00 First camt.052	Tuesday 01:00 Interim camt.052
``` <GrpHdr> <CreDtTm> MON 23:59 <Rpt> <ElctrncSeqNb> 608 <Bal> <Cd> ITBD <Amt> 150.00 <DtTm> MON 23:59 <Bal> <Cd> ITAV <Amt> 90.00 <DtTm> MON 23:59 <Bal> <Cd> CLBD <Amt> 150.00 <Dt> MON <Bal> <Cd> CLAV <Amt> 90.00 <Dt> MON <Bal> <Cd> FWAV <Amt> 100.00 <Dt> TUE ```	``` <GrpHdr> <CreDtTm> TUE 00:00 <Rpt> <ElctrncSeqNb> 609 <Bal> <Cd> OPBD <Amt> 150.00 <Dt> TUE <Bal> <Cd> OPAV <Amt> 100.00 <Dt> TUE <Bal> <Cd> ITBD <Amt> 150.00 <DtTm> TUE 00:00 <Bal> <Cd> ITAV <Amt> 100.00 <DtTm> TUE 00:00 ```	``` <GrpHdr> <CreDtTm> TUE 01:00 <Rpt> <ElctrncSeqNb> 610 <Bal> <Cd> ITBD <Amt> 150.00 <Bal> <Cd> ITAV <Amt> 100.00 ```

Tuesday 02:00 Interim camt.052	Tuesday 08:00 Interim camt.052	Tuesday 15:00 Interim camt.052

```
<Rpt>
  <ElctrncSeqNb>  611
  <Bal>
    <Cd>         ITBD
    <Amt>        160
    <DtTm>       TUE 15:00
  <Bal>
    <Cd>         ITAV
    <Amt>        110
    <DtTm>       TUE 15:00

  <TxsSummry>
    <NbOfNtries>   1
    <TtlNetNtryAmt> 10.00

  <Ntry><Amt>        10.00
```

```
<Rpt>
  <ElctrncSeqNb>  612
  <Bal>
    <Cd>         ITBD
    <Amt>        160
    <DtTm>       TUE 15:00
  <Bal>
    <Cd>         ITAV
    <Amt>        110
    <DtTm>       TUE 15:00
```

```
<Rpt>
  <ElctrncSeqNb>  613
  <RptPgntn>
    <PgNb>        1
    <LastPgInd>  false

  <NbOfNtries>    6
  <TtlNetNtryAmt> 60.00

  <Ntry><Amt>      10.00
  <Ntry><Amt>      10.00

    --------------------

<Rpt>
   <ElctrncSeqNb>  613
   <RptPgntn>
     <PgNb>        2
     <LastPgInd>  false

   <Ntry><Amt>   10.00
   <Ntry><Amt>   10.00

     ----------------------

<Rpt>
   <ElctrncSeqNb>  613
   <RptPgntn>
     <PgNb>        3
     <LastPgInd>  true

   <Bal>
     <Cd>         ITBD
     <Amt>        220.00
     <DtTm>       TUE 15:00
    <Bal>
      <Cd>         ITAV
      <Amt>        170.00
       <DtTm>      TUE 15:00
```

Tuesday 23:00 Final-End-of-Day camt.052	Wednesday 00:00 First camt.052

<pre><Rpt>
  <ElctrncSeqNb> 614
 	
  <Bal>
    <Cd>   **ITBD**
    <Amt>   220.00
    <DtTm>   TUE 23:59
  <Bal>
    <Cd>   **ITAV**
    <Amt>   170.00
    <DtTm>   TUE 23:59
  <Bal>
    <Cd>   **CLBD**
    <Amt>   220.00
    <Dt>   TUE
  <Bal>
    <Cd>   **CLAV**
    <Amt>   170.00
    <Dt>   TUE
  <Bal>
    <Cd>   **FWAV**
    <Amt>   170.00
    <Dt>   WED</pre>
	<pre><Rpt>
	  <ElctrncSeqNb> 615
	
	  <Bal>
	    <Cd> **OPBD**
	    <Amt> 220.00
	    <Dt> WED
	  <Bal>
	    <Cd> **OPAV**
	    <Amt> 170.00
	    <Dt> WED
	  <Bal>
	    <Cd> **ITBD**
	    <Amt> 230.00
	    <DtTm> WED 00:00
	  <Bal>
	    <Cd> **ITAV**
	    <Amt> 180.00
	    <DtTm> WED 00:00
	
	  <NbOfNtries> 1
	  <TtlNetNtryAmt> 10.00
	
	  <Ntry><Amt> 10.00</pre>

camt.054 Pagination

Value	Description	Best-Practice
Balance Codes		Not applicable
<TxsSummry>	Transaction Summary	TxsSummry for the entire Notification must be reported on the first page TxsSummry must not be reported on subsequent pages

Amount Details (Exchange Reporting)

General information

Individual Market and Institutional practices may not convey all elements presented in the use-cases; Attributes such as currencies, exchange rates, or fees may not be present

Amount Details – As defined by other guidelines

CBPR Handbook definition of Amount Details

> *Optional nested element which provides various elements to represent an aggregated (consolidated) original amount. Where individual transaction amounts can be represented, if required, within the Entry Detail set of elements.*
>
> *This element is useful to capture original amount details where they are different to the Entry, Amount, for example the Instructed Amount of the payment can be included, together with a potential Currency Exchange rate, where necessary.*

CBPR pacs.008 IntrBkSttlmAmt / InstdAmt / Charge Bearer rule

> *If Instructed amount and Interbank Settlement amount are expressed in the same currency:*
>   - *If Charge Bearer/DEBT is used*
>   - *Charge information is only mandatory in case of prepaid charges*
>   - *Otherwise Charge information is optional (both Agent and currency always need to be provided).*

Amount Details <AmtDtls> CGI Best practices

Amount Details should only be reported in the case of currency exchanges

Instructed Amount <InstdAmt>

- the pain.001 or pacs.008 <InstdAmt>
- Amount before charges, in currency ordered by the initiating party
- When the exchange is performed against the <InstdAmt>, the Currency Exchange Details <CcyXchg> are to be reported under the Instructed Amount <InstdAmt>

ISO Definition

Identifies the amount of money to be moved between the debtor and creditor, before deduction of charges, expressed in the currency as ordered by the initiating party and provides currency exchange information in case the instructed amount and/or currency is/are different from the entry amount and/or currency.

Transaction Amount <TxAmt>

CGI Guideline:

- The amount from the pacs.008 Interbank Settlement Amount <IntrBkSttlmAmt>
- When the exchange is performed against the <IntrBkSttlmAmt>, the Currency Exchange Details <CcyXchg> are to be reported under the Transaction Amount <TxAmt>

ISO Definition:

Amount of the underlying transaction.

Proprietary Amount<PrtryAmt>

This value can be used by the bank for additional amount reporting on community or bank-specific purposes

CGI Guideline:

Values:

- AOS = Additional counter-value information for some banking communities
- Other values are bilateral

Amount Details: Reporting of a pain.001 Equivalent Amount

When the Account Owner indicates in their settlement instruction an Equivalent Amount (pain.001 <EqvtAmt>) and a Currency of transfer (pain.001 <CcyOfTrf>), the following will allow the Account Owner to identify this type of settlement

- The Instructed Amount <TxDtls><AmtDtls><InstdAmt> will equal the <EqvtAmt>
- The Booking Amount <Ntry><Amt> will equal the <TxDtls><AmtDtls><InstdAmt>
- The presence of <TxDtls><AmtDtls><InstdAmt><CcyXchng> will indicate in the camt. message that an Equivalent Amount settlement was instructed

Amount Details: <Ntry> level vs <TxDtls> level

For all bookings the Amount Details <AmtDtls> group must always be reported at the Transaction Details <TxDtls> level and never at the Entry <Ntry> level, even in the case of a batch booking.

Rational

Because of the permissible presentation of an Entry <Ntry> containing two or more <TxDtls> with mixed currencies <TxDtls><AmtDtls>, due to the multiplicity of <Ntry><AmtDtls> and <Ntry><AmtDtls><TxAmt> being [0..1], an Account Servicer cannot convey an aggregate total in the <Ntry><AmtDtls> group. This use-case can occur with Virtual Account Reporting.

For example, a batch settlement is being reported for a EUR account with two settlements, one with an interbank settlement amount in USD and another settlement with an interbank settlement amount in GBP

```
<Ntry>
  <AmtDtls>
     <AmtDtls>
        <TxDtls>
           <Amt>        ???

  <NtryDtls>
     <Btch>
        <NbOfTxs>      2

     <TxDtls>
        <Amt>          USD

     <TxDtls>
        <Amt>          GBP
```

Therefore for consistency, **CGI Best-Practice is to never to report the <AmtDtls> at the <Ntry> level.**

Amount Details Use-Cases

Use-Case 01: Instructing Agent performs the exchange; Charges are not applied

CGI Guideline:

- When the exchange is performed against the Instructed Amount, the Currency Exchange values are to be reported under <InstdAmt>
- The Interbank Settlement Amount is reported as the <TxAmt>

Debtor Currency EUR	Debtor Booking	Interbank Instruction	Creditor Currency USD

`pain.001`
`<InstdAmt>     USD 150`
`<DbtrAcct Ccy> EUR`
	`Debtor Agent Booking`
	`Debtor Currency    EUR`
	`Instructed Amount USD 150`
	`Exchange          1.5`
	`Interbank Amount   150 USD`
	`Debtor Booking    EUR 100`
	
	`Debtor camt.053`
	`<Ntry>`
	` <Amt>            EUR 100`
	` <NtryDtls>`
	`  <TxDtls>`
	`   <AmtDtls>`
	
	`     <InstdAmt>`
	`        <Amt>       150`
	`     <CcyXchg>`
	`        <SrcCcy>   EUR`
	`        <TrgtCcy>  USD`
	`        <UnitCcy>  EUR`
	`        <XchgRate> 1.5`
	
	`     <TxAmt>`
	`        <Amt>    USD 150`
		`pacs.008`
		`<CdtTrfTxInf>`
		`<IntrBkSttlmAmt> USD 150`
			`Creditor camt.053`
			`<Ntry>`
			` <Amt>         USD 150`
			
			Exchange was not performed by the Creditor Agent, therefore <AmtDtls> is not present

Use-Case 02: Instructed Amount Exchanged; Charges not applied

CGI Guideline:

- The Interbank Settlement Amount is reported as the <TxAmt>
- When the exchange is performed against the Interbank Settlement Amount, the Currency Exchange values are to be reported in <TxAmt>

Debtor Currency EUR	Debtor Booking	Interbank Instruction	Creditor Currency USD

pain.001
`<InstdAmt> EUR 100`
	Debtor Agent Booking
	`Instructed Amount  EUR 100`
	`Debtor Currency    EUR`
	`Debtor Booking     EUR 100`
	`Interbank Amount   EUR 100`
		pacs.008
		`<CdtTrfTxInf>`
		`<IntrBkSttlmAmt> EUR 100`
			Creditor Agent Booking
			`Interbank Amount   EUR 100`
			`Source Amount      EUR 100`
			`Target Currency    USD`
			`Exchange           1.6`
			`Creditor Booking   USD 62.50`

	Debtor camt.053
	`<Ntry>`
	`  <Amt>            EUR 100`
	`  <CdtDbtInd>      DBIT`
	
	Exchange was not performed by the Debtor Agent, therefore <AmtDtls> is not present
			Creditor camt.053
			`<Ntry>`
			`  <Amt>            USD 62.50`
			`  <CdtDbtInd>      CRDT`
			`  <NtryDtls>`
			`   <TxDtls>`
			`    <AmtDtls>`
			`     <TxAmt>`
			`      <Amt>         EUR 100`
			`     <CcyXchg>`
			`       <SrcCcy>     EUR`
			`       <TrgtCcy>    USD`
			`       <UnitCcy>    EUR`
			`       <XchgRate>   1.6`

Use-Case 03: Instructed Amount Exchanged; Debtor Charges / Debtor Booking includes Charges

- The scenario below reflects when Charges are applied at time of settlement.
- Debtor Charges are normally aggregated and expressed at the end of the month

Debtor Currency EUR	Debtor Booking	Interbank Instruction	Creditor Currency USD

pain.001
`<DbtrAcct Ccy> EUR`
`<InstdAmt>      USD 150`
`<ChrgBr>      DEBT`
	`Instructed Amount USD 150`
	`Source Currency     EUR`
	`Target Currency     USD`
	`Exchange            1.6`
	`Charge Bearer       Debtor`
	`Debtor Charges      EUR 10`
	`Debtor Booking      EUR 110`
	`Interbank Amount  USD 150`
		pacs.008
		`<CdtTrfTxInf>`
		`<IntrBkSttlmAmt> USD 150`
			Creditor camt.053
			`<Ntry>`
			`<Amt>                USD 150`
			
			Exchange was not performed by the Creditor Agent, therefore <AmtDtls> is not present

```
Debtor camt.053
<Ntry>
 <Amt>           EUR 100
 <CdtDbtInd>     DBIT
 <NtryDtls>
  <TxDtls>
   <AmtDtls>
    <InstdAmt>
     <Amt>          USD 150       <Chrgs>
      <CcyXchg>                    <TtlChrgsAndTaxAmt> EUR 10
       <SrcCcy>   EUR              <Rcd>
       <TrgtCcy>  USD               <Amt>              EUR 10
       <UnitCcy>  EUR               <CdtDbtInd>        DBIT
       <XchgRate> 1.6               <ChrgInclInd>      true
                                    <Br>               DEBT
    <TxAmt>                         <Agt>
     <Amt>          USD 150          <FinInstnId>
                                      <BIFCI>    DbtrAgt-BIC*
```

* Bilateral presence when the <Chrgs> are applied by the Account Servicing Agent. If <Agt> is not present, then the charges were applied by the Account Servicing Agent.

Use-Case 04: Interbank Amount Exchanged; Creditor Agent Charges

- The scenario below reflects when Charges are applied at time of settlement.
- Creditor Charges are normally aggregated and expressed at the end of the month

Debtor Currency EUR	Debtor Booking	Interbank Instruction	Creditor Currency USD
pain.001 `<DbtrAcct Ccy> EUR` `<InstdAmt>        EUR 100` `<ChrgBr>         CRED`	`Instructed Amount EUR 100` `Interbank Amount  EUR 100` `Charge Bearer     CRED` `Debtor Booking    EUR 100` **Debtor camt.053** `<Ntry>` `    <Amt>           EUR 100` `    <CdtDbtInd>      DBIT`	`pacs.008` `<CdtTrfTxInf>` `  <IntrBkSttlmAmt> EUR 100` `  <ChrgBr>          CRED`	`Interbank Amount    EUR 100` `Source Currency     EUR` `Target Currency     USD` `Exchange            1.06` `Target Amount       USD 106` `Charge Bearer       CRED` `Creditor Charges    EUR 10` `Charges Included    true` `Creditor Booking    USD 96` **Creditor camt.053** `<Ntry>` `   <Amt>                    EUR 96` `   <CdtDbtInd>              CRED` `   <NtryDtls>` `      <TxDtls>` `         <AmtDtls>` `            <TxAmt>` `               <Amt>         EUR 100` `            <CcyXchg>` `               <SrcCcy>      EUR` `               <TrgtCcy>     USD` `               <UnitCcy>     EUR` `               <XchgRate>    1.6` `      <Chrgs>` `         <TtlChrgsAndTaxAmt> EUR 10` `         <Rcd>` `            <Amt>            EUR 10` `            <CdtDbtInd>      DBIT` `            <ChrgInclInd>    true` `                          CRED`

Use-Case 05: pain.001 Equivalent Amount

- Debtor instructs an Equivalent Amount
- When the Booking Amount and the Instructed Amount are the same, he presence of <InstdAmt> <CcyXchng> indicate that an equivalent amount settlement was instructed

Debtor Currency EUR	Debtor Booking	Interbank Instruction	Creditor Currency USD

`pain.001`
`<DbtrAcct Ccy> EUR`
`<EqvtAmt>        EUR 150`
`<CcyOfTrf>       USD`
	`Equivalent Amount EUR 150`
	`Source Currency    EUR`
	`Target Currency    USD`
	`Exchange           1.06`
	`Interbank Amount   USD 159`
	`Debtor Booking     EUR 150`
	
	`Debtor camt.053`
	`<Ntry>`
	`  <Amt>              EUR 150`
	`  <CdtDbtInd>        DBIT`
	`  <NtryDtls>`
	`    <TxDtls>`
	`      <AmtDtls>`
	`        <InstdAmt>`
	`          <Amt>        EUR 150`
	`          <CcyXchg>`
	`            <SrcCcy>   EUR`
	`            <TrgtCcy>  USD`
	`            <UnitCcy>  EUR`
	`            <XchgRate> 1.6`
	
	`        <TxAmt>`
	`          <Amt>        USD 159`
		`pacs.008`
		`<CdtTrfTxInf>`
		`  <IntrBkSttlmAmt> USD 159`
			`Creditor camt.053`
			`<Ntry>`
			`  <Amt>            USD 159`
			
			Exchange was not performed by the Creditor Agent, therefore <AmtDtls> is not present

Lockbox Reporting

"Bank To Customer Debit Credit Notification V02 camt.054.001.02 Release 1.4", updated on March 15th, 2013 has been used as the baseline for camt. V08 reporting.

In order to insure interoperability and ease the transition from camt. V02 to camt.V08, changes were not introduced to the reporting of Lockbox.

Variances from Version 2

<ChqNb>

CGI has added <ChqNb> as a bilateral element to the Lockbox Reporting guideline. Although camt. V02 does have the check number element, the original guideline did not specify where to report a check number - presumably because it is evident in the schema.

<TxDtls><Amt> and **<TxDtls><AmtDtls><TxAmt><Amt>**

camt. V02 Lockbox reporting has Transaction Details Amount Details Transaction Amount <TxDtls><AmtDtls><TxAmt><Amt> as a mandatory element.

Transaction Details Amount <TxDtls><Amt>, a mandatory element in camt. V08, does not existing in camt. V02.

Therefor in order to insure compatibility between camt. V02 and camt. V08 while adhering to CGI camt. V08 requirements, both elements are mandatory for camt. V08 Lockbox reporting, even though in most use-cases the values will be the same.

Lockbox Mapping Guideline

xPath	Mult.	CGI Guideline
/GrpHdr/AddtlInf	[0..1]	Only for camt.054: **/LBOX/** Example: <AddtlInf>**/LBOX/</**AddtlInf>
/Ntry/Amt	[1..1]	Total Booked to Account for the Lockbox Deposit
/NtryDtls/Btch/MsgId	[0..1]	Batch Number
/NtryDtls/Btch/PmtInfId	[0..1]	Lockbox Number
/NtryDtls/Btch/NbOfTxs	[1..1]	Allows for zero activity notification
/NtryDtls/Btch/CdtDbtInd	[1..1]	Default to CRDT
/NtryDtls/TxDtls/Amt	[1..1]	Mandatory per CGI
/NtryDtls/TxDtls/Refs/AcctSvcrRef	[0..1]	Item Number assigned to identify each payment within a given batch
/NtryDtls/TxDtls/Refs/InstrId	[0..1]	A unique number to each and every transaction
/NtryDtls/TxDtls/Refs/ChqNb	[0..1]	Deposit Check Number
/NtryDtls/TxDtls/AmtDtls/TxAmt/Amt	[1..1]	Amount of Check being paid/processed
/NtryDtls/TxDtls/RltdPties /NtryDtls/TxDtls/RltdAgts	[0..1]	Included if Remittance Information is provided on cheque or as defined by creditor for lockbox capture
/NtryDtls/TxDtls/RmtInf/Strd/Invcr	[0..1]	Identification of invoicer when there are multiple invoicers need to be captured based on a specific invoice
/NtryDtls/TxDtls/RmtInf/Strd/Invcee	[0..1]	Identification of invoicee when there are multiple invoices need to be captured based on a specific invoice

Scenario: Batch Entry of 1000 USD was booked to two lockboxes

```
          Lockbox 555                              Lockbox 888

      Total    600 USD                         Total    400 USD
          Check 222                                 Check 677
 Amount:        500 USD                   Amount:       400
 Debtor:        FIRST USER                Debtor:       THIRD USER
 Account:       123-456789               Account:       999-999999
 Debtor Agent:  POLARIS BANK             Debtor Agent: TRUSTY BANK
 Invoice:       21212


          Check 201
 Amount:        100
 Debtor:        SECOND USER
 Account:       987-654321
 Debtor Agent:  ANOTHER BANK
```

100 USD Entry / Two Lockboxes

```
<Ntry>
 <Amt>1000                    Entry Amount        <NtryDtls>
 <NtryDtls>                                        <Btch>
  <Btch>                                             <MsgId>        2
   <MsgId>       1            Batch Number #1         <PmtInfId>     888         Batch Number #2
   <PmtInfId>    555          Lockbox Number 555      <NbOfTxs>      1           Lockbox Number 888
   <NbOfTxs>     2            Number of Tractions     <TtlAmt>       400         Number of Transactions
   <TtlAmt>      600          Total Deposit Amount    <CdtDbtInd>    CRDT        Total Deposit Amount
   <CdtDbtInd>   CRDT

  <TxDtls>                                           <TxDtls>
   <Refs>                                             <Refs>
    <InstrId>    00021        Lockbox Item             <InstrId>     00021       Lockbox Item
    <ChqNb>      222          Check Number 222         <ChqNb>       677         Check Number 677
   <AmtDtls>                                          <AmtDtls>
    <TxAmt>                                            <TxAmt>
     <Amt>       500          Check Amount              <Amt>        400         Check Amount
   <Dbtr>                                             <RltdPties>
    <Pty>                                              <Dbtr>
     <Nm>        FIRST USER   Debtor Name               <Pty>
   <DbtrAcct>    123-456789   Debtor Account            <Nm>         THIRD USER  Debtor Name
   <DbtrAgt>     POLARIS BANK Debtor Agent           <DbtrAcct>     123-456789  Debtor Account
  <TxDtls>                                           <DbtrAgt>      TRUSTY BANK Debtor Agent
   <Refs>
    <InstrId>    00023        Lockbox Item
    <ChqNb>      201          Check Number 201
   <AmtDtls>
    <TxAmt>
     <Amt>       100          Check Amount
   <Dbtr>
    <Pty>
     <Nm>        SECOND USER  Debtor Name
   <DbtrAcct>    987-654321   Debtor Account
   <DbtrAgt>     ANOTHER BANK Debtor Agent
```

Virtual Account Reporting

Physical Account report

In a Physical Account report, the Physical Account is the Statement/Report/Notification Account

camt.053.001.08	camt.052.001.08	camt.054.001.08

`<Stmt>`
 `<Acct>`
  `<Id>` *PHYSICAL-Acct*
	`<Rpt>`
	 `<Acct>`
	  `<Id>` *PHYSICAL-Acct*
		`<Ntfctn>`
		 `<Acct>`
		  `<Id>` *PHYSICAL-Acct*

In a Physical Account Report, when an Ntry has been posted to a Virtual Account

- o   [<DbtrAcct>/<CdtrAcct>]<Id> must be the Physical Account
- o   [<DbtrAcct>/<CdtrAcct>]<Prxy><Tp><Prtry> is to be populated with *VACC*
- o   The Virtual Account will be reported in [<DbtrAcct>/<CdtrAcct>]<Prxy><Id>

Normally, when the [<DbtrAcct>/<CdtrAcct>]<Id> is equal to the report account <Acct><Id>, CGI Best-Practice is to not report it, but in order to convey the Virtual Account under the [DbtrAcct/CdtrAcct]<Prxy>, the report account <Acct><Id> must be also present because it is a required in the group [1..1]

```
<Stmt>
  <Acct>
    <Id>            PHYSICAL-Acct

  <Ntry>
     <CdtrAcct>
      <Id>
       <Othr>
        <Id>        PHYSICAL-Acct
       <Prxy>
        <Tp>
         <Ptry>  VACC
        <Id>        VIRTUAL-Acct
```

Virtual Account report

In Virtual Account report, the Virtual Account is the report Account

- The Physical account is reported as the Related Account <RltdAcct>

Scenario: Virtual Account Credit

Instruction crediting Virtual Account	Physical-Account Statement	Virtual-Account Statement*
| ```
<pacs.008>
 <CdtTrfTxInf>
  <IntrBkSttlmAmt> 100.00
   <CdtrAcct> Account [Virt]
``` | ```
<Stmt>
 <Acct>
  <Id> PHYSICAL-Acct

 <Ntry>
  <Amt> 100.00
   <NtryDtls>
    <TxDtls>
     <CdtrAcct>
      <Id>
       <Othr>
        <Id> PHYSICAL-Acct
        <Proxy>
         <Tp>
          <Ptry> VACC
         <Id>   VIRTUAL-Acct
``` | ```
<Stmt>
 <Acct>
  <Id> VIRTUAL-Acct

  <RltdAcct>
   <Id> PHYSICAL-Acct

 <Ntry>
  <Amt> 100.00
``` |

* CGI Guideline: For inbound payments where the Creditor Account is the same as the Statement Account,   best-practice is to not report the Creditor Account

Scenario: Virtual Account Credit to an Ultimate Party

Settlement instruction crediting a Virtual Account pacs,008	Physical-Account Statement camt.053	Virtual-Account Statement* camt.053
| ```
<CdtTrfTxInf>
 <IntrBkSttlmAmt> 100
  <CdtrAcct>Acct [Virt]
``` | ```
<Stmt>
 <Acct>
  <Id> PHYSICAL-Acct


 <Ntry>
  <Amt> 100

  <TxDtls>
   <CdtrAcct>
    <Id>
     <Othr>
      <Id> PHYSICAL-Acct
       <Proxy>
        <Tp>
         <Ntry> VACC
          <Id>VIRTUAL-Acct
``` | ```
<Stmt>
 <Acct>
  <Id> VIRTUAL-Acct
  <RltdAcct>
   <Id> PHYSICAL-Acct

 <Ntry>
  <Amt> 100

   <TxDtls>
``` |
| ```
<UltmtCdtr>
 <Nm>Ultimate-Name
  <Id>
   <OrgId>
    <Othr>
     <Id>Ultimate-Acct
``` | ```
<UltmtCdtr>
 <Nm>Ultimate-Name
  <Id>
   <OrgId>
    <Othr>
     <Id>Ultimate-Acct
``` | ```
<UltmtCdtr>
 <Nm>Ultimate-Name
  <Id>
   <OrgId>
    <Othr>
     <Id>Ultimate-Acct
``` |

* CGI Guideline: For inbound payments where the Creditor Account is the same as the Statement Account, best-practice is to not report the Creditor Account

Virtual Account variances between CGI Version 8 and CGI Version 2

CGI recommend the use of Proxy for the reporting of a Virtual transaction under a Physical Account report

Rational:

A change was requested for camt.05x.001.08 in order to accommodate instances when a pacs.008 message identifies both a Virtual Account as the <CdtrAcct> and the pacs.008 instruction also contains an Ultimate Party

For a camt.05x..02 Physical Account report, the Virtual Account is reported within the Ultimate Party elements, therefore an Account Servicer cannot report both a Virtual Account and any Ultimate Party identified in the pacs. message

Therefore for a physical account report it was agreed by CGI membership to report the Virtual Account as a Proxy Account

pacs.008 message crediting a Virtual Account	camt.053.001.02 (Version 2)	camt.053.001.08 (Version 8)

<CdtrAcct> *Acct [Virt]*
 	
<UltmtCdtr>
 <Nm> **Ultimate Party**
	`<Stmt>`
	 `<Id>` **Physical-Acct**
	 `<Ntry>`
	 `<UltmtCdtr>`
	 `<Id>` **Virtual-Acct**
	
	Cannot convey Ultimate Party
		`<Stmt>`
		 `<Id>` **Physical Acct**
		 `<Ntry>`
		 `<CdtrAcct>`
		 `<Id>`
		 `<Othr>`
		 `<Id>` **Physical Acct**
		 `<Proxy>`
		 `<Tp>`
		 `<Ptry>` VACC
		 `<Id>` **Virtual-Acct**
		 `<UltmtCdtr>`
		 `<Nm>` **Ultimate Party**

The reporting the Virtual Account as a Creditor or Debtor Account was reviewed but was rejected by consent of CGI membership. The Creditor or Debtor Account designates the actual counter-booking account and not a virtual account

- Using Proxy as a dedicated element solely for Virtual Accounts will facilitate the adoption of a future element specifically created for Virtual Accounts

CGI WG-2 explored respecting the data integrity of the underlying payment by having the Virtual Account be included in either the Account Id BkToCstmrStmt/Stmt/Acct/Prxy or as the related account id BkToCstmrStmt/Stmt/RltdAcct/. This proposal would have only allowed for a 1-to-1 relationship between a Virtual Account and a Physical Account and therefore was rejected

Prior to 2023, the use of "NOTPROVIDED" as the Creditor/Debtor Account had been adopted in order to remain in alignment with CGI WG-1. Members agreed that this causes ambiguity as (1) NOTPROVIDED would not be present in the interbank settlement instruction and (2) using NOTPROVIDED results in a deviation from the definition of the element

As of 2023, in a physical account report, /Tp/Prtry is used to identify the virtual account type as VACC. A recommendation to adopt VACC as a standard /Tp/Cd will be introduced to ISO

Entry Availability reporting on Non-Booking Dates

When an Account Holding institution provides availability for an Entry received on a non-Booking Day, the Balance Availability <Bal><Avail> group can be used

CGI recommends that when Availability <Avail> is present in a Balance group, the reported Balance Date (/Bal/Dt) is the physical reporting time and not when the funds were posted to the account

Balance is reported on Saturday at 13:00 but the Balance is booked on Monday	Balance is reported and booked on Monday at 15:00

<pre><Bal>
  <Cd>   ITBD
  <Amt>   133
  <Dt>
    <DtTm>   SAT 13:00
  <Avail>
    <Amt>   133
    <Dt>   MON</pre>
	<pre><Bal>
	  <Cd> ITBD
	  <Amt> 133
	  <Dt>
	    <DtTm> MON 15:00</pre>

Account Reporting institutions and Account Holders should be aware of the relationship between Balance reporting values when a camt.052 is sent on a non-Booking day. Unless a closing balance is reported for the non-Booking day, the Opening Balance for the next Booking day will equal the availability value shown in the final Interim Booked Balance reported on the non-Booking day

Although CGI is illustrating a choreography of Balance values between reports, Balance values are determined by Market Practices and Account Servicing institutions and not by CGI

In the next page we will illustrate the following use-case:

Scenario:

- Friday is a Booking Day (Previous Booking Day)
- Saturday is a Non-Booking Day
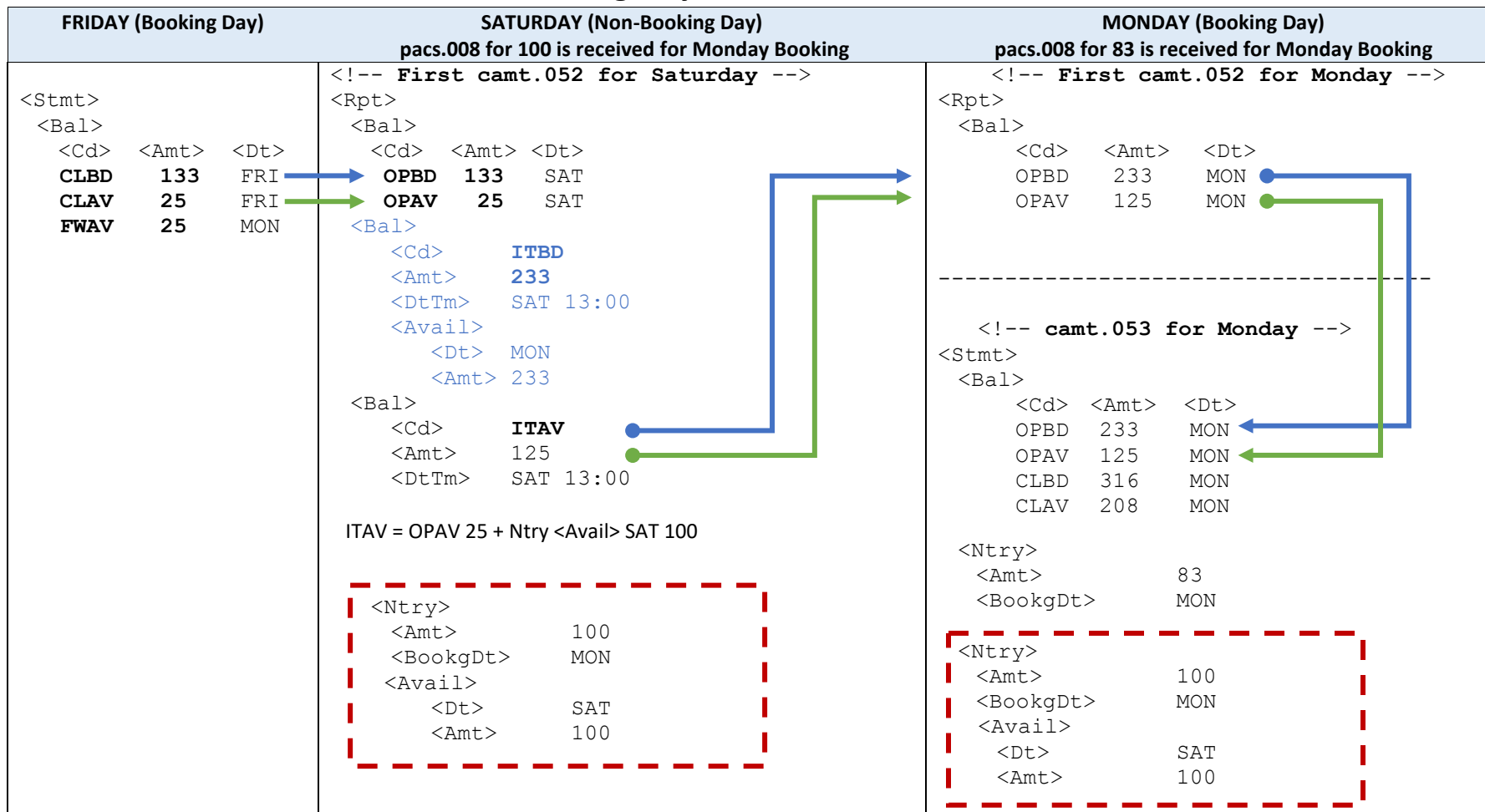- Monday a Booking Day (Next Booking Day)

A pacs. message is received on Saturday (Non-Booking Day)

- The Account Servicing institution provides availability on Saturday (Non-Booking Day)
- The Account Servicing institution sends a camt.052 on Saturday (Non-Booking Day)
- The Account Servicing institution does not send a camt.053 on Saturday (Non-Booking Day)

The following model is exemplarity and used to illustrate how availability could be reported. **This model is not an illustration of a best-practice. All balance values are bilateral and driven by the local market practice and the Account Servicing Institution**

camt.052.001.08 is sent on Non-Booking Day

FRIDAY (Booking Day)	SATURDAY (Non-Booking Day) pacs.008 for 100 is received for Monday Booking	MONDAY (Booking Day) pacs.008 for 83 is received for Monday Booking

```
<Stmt>
 <Bal>
  <Cd>  <Amt> <Dt>
  CLBD  133   FRI
  CLAV  25    FRI
  FWAV  25    MON
```

```
<!-- First camt.052 for Saturday -->
<Rpt>
 <Bal>
  <Cd>  <Amt> <Dt>
  OPBD  133   SAT
  OPAV  25    SAT
 <Bal>
  <Cd>     ITBD
  <Amt>    233
  <DtTm>   SAT 13:00
  <Avail>
     <Dt>  MON
     <Amt> 233
 <Bal>
  <Cd>     ITAV
  <Amt>    125
  <DtTm>   SAT 13:00

ITAV = OPAV 25 + Ntry <Avail> SAT 100

  <Ntry>
   <Amt>        100
   <BookgDt>    MON
   <Avail>
      <Dt>      SAT
      <Amt>     100
```

```
<!-- First camt.052 for Monday -->
<Rpt>
 <Bal>
  <Cd>  <Amt> <Dt>
  OPBD  233   MON
  OPAV  125   MON

-----------------------------------

  <!-- camt.053 for Monday -->
<Stmt>
 <Bal>
  <Cd>  <Amt> <Dt>
  OPBD  233   MON
  OPAV  125   MON
  CLBD  316   MON
  CLAV  208   MON

 <Ntry>
  <Amt>         83
  <BookgDt>     MON

 <Ntry>
  <Amt>         100
  <BookgDt>     MON
  <Avail>
   <Dt>         SAT
   <Amt>        100
```

camt.052.001.08 and camt.053.001.08 are sent on Non-Booking Day

FRIDAY Booking Day	SATURDAY Non-Booking Day A pacs.008 for <Amt> 100 is received on Saturday for Monday Booking.	MONDAY Booking Day A pacs.008 for <Amt>83 is received on Monday for Monday Booking.

```
<Stmt>
  <Bal>
    <Cd> <Amt> <Dt>
    CLBD  133   FRI
    CLAV   25   FRI
    FWAV   25   MON
```

```
            <!-- First camt.052 for Saturday -->
<Rpt>
  <Bal>
    <Cd><Amt><Dt>        OPBD  133  SAT
    <Cd><Amt><Dt>        OPAV   25  SAT

    <Cd><Amt><DtTm>      ITBD  233  SAT 13:00
      <Avail><Amt><Dt>         233  MON
    <Cd><Amt><DtTm>      ITAV  125  SAT 13:00

    <Ntry>
            <Amt>        100
            <BookgDt>    MON
            <Avail>
                <Amt>    100
                <Dt>     SAT

          --------------------------------
            <!-- camt.053 for Saturday -->
<Stmt>
  <Bal>
    <Cd><Amt><Dt>        OPBD  133  SAT
    <Cd><Amt><Dt>        OPAV   25  SAT

    <Cd><Amt><Dt>        CLBD  233  SAT
      <Avail><Amt><Dt>         233  MON
    <Cd><Amt><Dt>        CLAV  125  SAT

    <Ntry>
        <Amt>            100
        <BookgDt>        MON
        <Avail>
            <Amt>        100
            <Dt>         SAT
```

```
            <!-- First camt.052 for Monday -->
<Rpt>
  <Bal>
    <Cd>   <Amt>  <Dt>
    OPBD    233    MON
    OPAV    125    MON


    OPAV = SAT ITAV <Avail> for Monday

    --------------------------------

            <!-- camt.053 for Monday -->
<Stmt>
  <Bal>
    <Cd>    <Amt>  <Dt>
    OPBD    133    MON
    OPAV    125    MON
    CLBD    316    MON
    CLAV    208    MON

    <Ntry>
      <Amt>             83
      <BookgDt>        MON
```

Returns and Reversals Reporting

RETURN

The transaction is booked by the counter-account or Receiving Agent and a return is initiated by the counter-party or Receiving Agent

REVERSAL

The transaction may be one of the following:

- Is a cancelation
- Is a Direct Debit reversal
- Is recalled by the Sending Institution
- Fails to be delivered to a Receiving Agent
- Is rejected by the Receiving Agent prior to booking
- Fails to book to the counter-account at the account servicing institution

Mandatory camt. Return and Reversal reporting elements

Per ISO and CBPR+ (Year 2023), the following pacs.004 elements are mandatory and per CGI the best-practice is to map these elements to a camt. message as follows:

pacs.004	camt.
/TxInf/OrgnlEndToEndId	/TxDtls/Refs/EndToEndId
/TxInf/OrgnlUETR	/TxDtls/Refs/UETR
/TxInf/InstgAgt	/TxDtls/RltdAgts/InstgAgt
/TxInf/InstdAgt	/TxDtls/RltdAgts/InstdAgt
/RtrRsnInf/Rsn	/TxDtls/RtrInf/Rsn

Bilateral camt. Return and Reversal reporting elements

The following pacs.004 are Bilateral. If present in the pacs.004, CGI recommends that they are reported

pacs.004	camt.
/TxInf/OrgnlTxRef/Dbtr	/TxDtls/RltdPties/Dbtr
/TxInf/OrgnlTxRef/UltmtDbtr	/TxDtls/RltdPties/UltmtDbtr
/TxInf/OrgnlTxRef/Cdtr	/TxDtls/RltdPties/Cdtr
/TxInf/OrgnlTxRef/UltmtCdtr	/TxDtls/RltdPties/UltmtCdtr
/TxInf/RtrRsnInf/Orgtr	/TxDtls/RtrInf/Orgtr
/TxInf/RtrRsnInf/AddtlInf	/TxDtls/RtrInf/AddtlInf

The following elements are mandatory in pacs.004 but are bilateral in CGI camt. reporting

pacs.004	camt.
/TxInf/OrgnlGrpInf/OrgnlMsgId	Not Mapped to camt.
/TxInf/OrgnlGrpInf/OrgnlMsgNm	Not Mapped to camt.
/TxInf/IntrBkSttlmDt	<AddtlTxInf>/RtndIntrBkSttlmDt/value/</AddtlTxInf>
/TxInf/RtrdIntrBkSttlmAmt	<AddtlTxInf>/RtrdIntrBk**Sttlm**Amt/value/</AddtlTxInf>
/TxInf/ChrgBr	<AddtlTxInf>/RtrdChrgBr/value/</AddtlTxInf>
/TxInf/RtrChain	<AddtlTxInf>/RtrChain/value/</AddtlTxInf>
/TxInf/RtrRsnInf	<AddtlTxInf>/RtrRsnInf/value/</AddtlTxInf

Return and Reversal Reporting Best-Practice

- If the booking is the result of a Return or a Reversal, /Ntry/RvslInd must be true
- If the booking is not the result of a Return or a Reversal, /Ntry/RvslInd must not be present
- References, Parties, and Agents must remain aligned with the original Credit Transfer or Direct Debit (e.g. pacs.004 /Document/PmtRtr/TxInf/RtrChain)

camt. Original Booking	camt. Return Booking
<Dbtr><Nm> ABC	<Dbtr><Nm> ABC
<Cdtr><Nm> XYZ	<Cdtr><Nm> XYZ
<DbtrAgnt> FI-1234	<DbtrAgnt> FI-1234
<CdtrAgnt> FI-9876	<CdtrAgnt> FI-9876

Initiating Agent	Receiving Agent	Initiating Agent
Susan Demo sends 100 to William Sample	Receiving Party rejects the settlement Returns funds	Parties remain aligned with original pain

pain.001
```
<InstdAmt>        100
<EndToEndId>      123-321-123

<Cdtr><Nm>        WILLIAM SAMPLE
<CdtrAcct>        9876543210
<CdtrAgnt>        POLAUS33


<Dbtr><Nm>        SUSAN DEMO
<DbtrAcct>        34567890-1234
```
----

pacs.008
```
<CdtTrfTxInf>
  <IntrBkSttlmAmt> 100

  <EndToEndId>    123-321-123
  <UETR>          eb6305c9-1f7f…


  <Cdtr><Nm>      WILLIAM SAMPLE
  <CdtrAcct>      9876543210
  <CdtrAgnt>      POLAUS33


  <Dbtr><Nm>      SUSAN DEMO
  <DbtrAcct>      34567890-1234
```

----

camt.052
```
<Ntry>
  <Amt>           100
  <CdtDbtInd>     DEBIT
  <TxDtls>
   <Refs>
     <EndToEndId> 123-321-123
     <UETR>       eb6305c9-1f7f…

  <Cdtr><Nm>      WILLIAM SAMPLE
  <CdtrAcct>      9876543210
  <CdtrAgnt>      POLAUS33
```

pacs.004
```
<PmtRtr>
  <RtrRsnInf>
   <Orgtr><Nm>      WILLIAM SAMPLE
   <Orgtr><Id>      9876543210
   <Rsn>
     <Cd>           AM09
     <AddtlInf>     Wrong Amount




  <OrgnlTxRef>
   <Amt>            100

   <EndToEndId>     123-321-123
   <OrgnlUETR>      eb6305c9-1f7f…

   <Cdtr><Nm>       WILLIAM SAMPLE
   <CdtrAcct>       9876543210
   <CdtrAgnt>       POLAUS33

   <Dbtr><Nm>       SUSAN DEMO
   <DbtrAcct>       34567890-1234
```

camt.052
```
<Ntry>
  <Amt>            100
  <CdtDbtInd>      CREDIT
  <RvslInd>        true




  <TxDtls>
   <Refs>


     <EndToEndId>  123-321-123
     <UETR>        eb6305c9-1f7f…

   <Cdtr><Nm>      WILLIAM SAMPLE
   <CdtrAcct>      9876543210
   <CdtrAgnt>      POLAUS33

   <Dbtr><Nm>      SUSAN DEMO
   <DbtrAcct>      34567890-1234

  <RtrInf>
   <Orgtr><Nm>     WILLIAM SAMPLE
   <Orgtr<>Id>     9876543210
   <Rsn>
     <Cd>          AM09
     <AddtlInf>    Wrong Amount
```

NOTE: For illustrative purposes, elements are shown out-of-order

Appendix

ISO camt. Balance Definitions

<CLAV> Closing Available

Closing balance of amount of money that is at the disposal of the account owner on the date specified

<CLBD> Closing Booked

Balance of the account at the end of the pre-agreed account reporting period. It is the sum of the opening booked balance at the beginning of the period and all entries booked to the account during the pre-agreed account reporting period

<FWAV> Forward Available

Forward available balance of money that is at the disposal of the account owner on the date specified

<ITAV> Interim Available

Available balance calculated in the course of the account servicer's business day, at the time specified, and subject to further changes during the business day. The interim balance is calculated on the basis of booked credit and debit items during the calculation time/period specified

<ITBD> Interim Booked

Balance calculated in the course of the account servicer's business day, at the time specified, and subject to further changes during the business day. The interim balance is calculated on the basis of booked credit and debit items during the calculation time/period specified

<OPAV> Opening Available

Opening balance of amount of money that is at the disposal of the account owner on the date specified. </OPAV>

<OPBD> Opening Booked

Book balance of the account at the beginning of the account reporting period. It always equals the closing book balance amount from the previous report

<PRCD> Previously Closed Booked

Balance of the account at the previously closed account reporting period. The opening booked balance for the new period has to be equal to this balance.
Usage: the previously booked closing balance should equal (inclusive date) the booked closing balance of the date it references and equal the actual booked opening balance of the current date

camt.052 – Why CGI does not use Subtype INTM balance codes

camt.052 Interim Balances (ITBD and ITAV) do not have an equivalent opening and closing page codes

Unlike a camt.053 where there exists an Interim Opening Balance (OPBD-INTM)and an Interim Closing Balance (CLBD-INTM)

camt.053		
First Page	**Second Page**	**Last Page**
`<Stmnt>`	`<Stmnt>`	`<Stmnt>`
`<StmtPgntn>`	`<StmtPgntn>`	`<StmtPgntn>`
`<PgNb>` **1**	`<PgNb>` **2**	`<PgNb>` **3**
`<LastPgInd>` **false**	`<LastPgInd>` **false**	`<LastPgInd>` **true**
OPBD-INTM	`<Bal><Cd><SubTp>` OPDB-INTM →	→**OPBD-INTM**
`<Bal><Cd>` **OPDB**	**OPBD-INTM**	`<Bal><Cd><SubTp>` OP DB-INTM
OPBD	`<Bal><Cd><SubTp>` CLBD-INTM	**OPBD-INTM**
`<Bal><Cd><SubTp>` CL BD-INTM		`<Bal><Cd>` **CLBD**

camt.053 Statement

camt.052 Interim Booked and Interim Available Balances (ITBD and ITAV) do not have an equivalent opening and closing codes. Using the interim balance Interim subtype code result in a camt.052 as follows:

camt.052 11:00 AM		
First Page	**Second Page**	**Last Page**
`<Rpt>`	`<Rpt>`	`<Rpt>`
`<ElctrncSeqNb>` 2	`<ElctrncSeqNb>` 2	`<ElctrncSeqNb>` 2
`<PgNb>` **1**	`<PgNb>` **2**	`<PgNb>` **2**
`<LastPgInd>` **false**	`<LastPgInd>` **true**	`<LastPgInd>` **true**
`<Bal><Cd><SubTp>` **ITBD-INTM**	`<Bal><Cd><SubTp>` **ITBD-INTM**	`<Bal><Cd><SubTp>` **ITBD-INTM**
`<Amt>` 125	`<Amt>` 155	`<Amt>` 155
`<Ntry><Amt>` 30	`<Ntry>`	`<Bal><Cd>` **ITBD**
	`<Amt>` 30	`<Amt>` 175
		`<Ntry>`
		`<Amt>` 20

Does ITBD-INTR equal opening balance of the current page or would ITBD-INTR represent the closing balance of the current page?

On Page-2, if ITBD-INTM equals the ITBD-INTM of the Page-1, then what would ITBD-INTM on Page-3 equal? It cannot equal the value of Page-2, ITBD-INTM of 125.

The equivalent of "OPBD-INTM" does not exist for interim balances codes

- Would the ITBD on Page-1 equals the ITBD of the previous Report?
- Would the ITBD on Page-1 equals the ITBD of the current Report?
- If ITBD on Page-1 equals the ITBD of the previous report and the ITBD on the last page for the entire Report, then for a single-page report, would the ITBD be equal to the ITBD of the previous report or the ITBD of the Current Report?

When ITBD-INTR equals the total of the Previous page

An alternative would be to have the ITBD-INTR equal the total of the Previous page or previous report's balance plus the total of the entries on the current page

camt.052 TUE 08:00

```
<Rpt>
  <ElctrncSeqNb> 128
  <Bal>
     <Cd>           ITBD


ITBD
     <Amt>          125

  <TxsSummry>
     <NbOfTxs>      1
     <TtlAmt>       25

  <Ntry>
     <Amt>          25
```

camt.052 TUE 11:00

```
-------- First page -------
<Rpt>
  <ElctrncSeqNb>    129
  <PgNb>            1
  <LastPgInd>       false
  <Bal>
     <Cd>           ITBD
        <SubTp>     INTM
     <Amt>          155
```
ITBD-INTM =
previous report 125 + 30 on current page

```
  <TxsSummry>
     <NbOfTxs>      3
     <TtlAmt>       65
  <Ntry>
     <Amt>          30
-------- Second page -------
<Rpt>
  <ElctrncSeqNb>    129
   <PgNb>           2
   <LastPgInd>      false
  <Bal>
     <Cd>           ITBD
        <SubTp>     INTM
     <Amt>          170
  <Ntry>
     <Amt>          15
```
ITBD-INTM =
previous page 155 + 15 on current page
```
-------- Third page -------
<Rpt>
  <ElctrncSeqNb>    129
   129
  <PgNb>            3
  <LastPgInd>       true
  <Bal>
     <Cd>>          ITBD
        <SubTp>     INTM
     <Amt>          190
  <Bal>
     <Cd>           ITBD
     <Amt>          190
  <Ntry>
     <Amt>          20
```
ITBD-INTM =
previous page 170 + 20 on current page

camt.052 TUE 19:00

```
<Rpt>
  <ElctrncSeqNb> 130
  <Bal>
     <Cd>           ITBD
     <Amt>          195

  <TxsSummry>
     <NbOfTxs>      1
     <TtlAmt>       5

  <Ntry>
     <Amt>          5
```

Although this is logically correct, it does not add value. Interim-Balance Interim-Amount is a redundant checksum value and only be leveraged during the loading of the report and not be used for Treasury where Account Owners leverage the Interim balance amount or for reconciliation

The Electronic Sequence Number, the Page Number and total number of Entries and Total Amounts are consistent

values across camt.053, camt.052, and camt.054, allowing an Account Owner to establish a single process across all three message-types

Summation: camt.052 and ITBD/ITAV-INTR

The examples above require complex coding rules to leverage an Interim Balance Interim-Amount when in fact little is gained by providing the code. The model of providing paginated balances was developed for MT940 where statement summary information is not present in the message. The Electronic Sequence Number and the Page Number allow an Account Owner to validate the completeness of a message and the Transaction Summary (<NbOfTxs> and <TtlAmt>) amounts are used to insure that all Entries are conveyed. This equates to an MT942 "Number and Sum of Entries" (:90D: and :90C:). Further note that camt.054 does not support Balance records and yet the message supports pagination."

CGI <AmtDtls> camt.05x.001.02 versus camt.05x.001.08

	camt.05x.001.02	camt.05x.001.08
<AmtDtls>		Only reported in the case of a currency conversion
<InstdAmt>	Used for original amount in original currency and is the gross value (i.e. prior to application of charges) in same currency situations	Source: pain <InstdAmt> When the exchange is performed against the Instructed Amount, CcyXchg is to be reported in the camt <InstdAmt>.
<TxAmt>	It is the net amount of the underlying transaction including charges expressed in the currency of the posting account. This amount indicates the value that has been debited from or credited to reported bank account (booked or posted amount). Note: this information may be duplicate with Entry/Amount if the single booking is in the same currency as reported account currency	Source: pacs <IntrBkSttlmAmt> When the exchange is performed against the Interbank Settlement Amount, the <IntrBkSttlmAmt> is to be reported in the <TxAmt> and the <CcyXchg> is to be reported under the <TxAmt>
<CntrValAmt>	Counter Value is used for currency conversion reporting. It is used and available only in currency exchange cases. In Debit entries the Counter Value Amount <CntrValAmt> reports the result amount converted from the Instructed-Amount with FX information at Transaction Amount <TxAmt> In Credit entries the Counter Value Amount <CntrValAmt> reports the result amount converted from the Inter-bank Settlement Amount with FX information at Transaction Amount <TxAmt>	Bilateral

Example <AmtDtls> camt.05x.001.02 versus camt.05x.001.08

- Debtor requests the transfer of the Equivalent of 100 EUR to USD
- The Debtor Agent determines that the USD equivalent of 100 EUR is 105 USD
- The Debtor Agent sends a pacs.008 with the Interbank Settlement Amount of 105 USD

Debtor pain.001	Debtor CGI camt.05x.001.02	Debtor CGI camt.05x.001.08	Debtor Agent pacs.008
`<DbtrAcct>` `<Ccy>` EUR`  `<EqvtAmt>`  EUR 100 `<CcyOfTrf>` USD `<ChrgBr>` Dbtr	`<Ntry>` `<Amt>` EUR 100 `<AmtDtls>` `<InstdAmt>` EUR 100 `<TxAmt>` `<Amt>` USD 105 EUR 105 `<CcyXchg>` `<Srcccy>` EUR `<TrgtCcy>` USD `<UnitCcy>` EUR `<XchgRate>` 1.05 `<CntrValAmt>` `<Amt>` USD 105	`<Ntry>` `<Amt>` EUR 100 `<NtryDtls>` `<TxDtls>` `<AmtDtls>` `<InstdAmt>` `<Amt>` EUR 100 `<CcyXchg>` `<Srcccy>` EUR `<TrgtCcy>` USD `<UnitCcy>` EUR `<XchgRate>` 1.05 `<TxAmt>` USD 105	`<IntrBkSttlmAmt>` USD 105

- Debtor requests the transfer of the 100 EUR
- Creditor has a USD
- The Creditor Agent converts the Interbank Settlement Amount of EUR to USD

Debtor pain.001	Debtor Agent pacs.008	Creditor CGI camt.05x.001.02	Creditor CGI camt.05x.001.08

`<InstdAmt>` EUR 100	`<IntrBkSttlmAmt>` EUR 100	`<Ntry>`
		 `<Amt>` USD 105
		 `<AmtDtls>`
		  `<TxAmt>`
		   `<Amt>` EUR 100
		   `<CcyXchg>`
		    `<Srcccy>` EUR
		    `<TrgtCcy>` USD
		    `<UnitCcy>` EUR
		    `<XchgRate>` 1.05
		 `<CntrValAmt>`
		   `<Amt>` USD 105
			`<Ntry>`
			 `<Amt>` USD 105
			 `<NtryDtls>`
			  `<TxDtls>`
			   `<AmtDtls>`
			    `<TxAmt>`
			     `<Amt>` EUR 100
			     `<CcyXchg>`
			      `<Srcccy>` EUR
			      `<TrgtCcy>` USD
			      `<UnitCcy>` EUR
			      `<XchgRate>` 1.05

Element Level Rules

ISO .053...08 Path	CGI .053/052/054 .08 RULES
/GrpHdr/MsgRcpt	Utilized by in B2C Statements, Reports, and Notifications to identify a client profile assigned by the Reporting Agent
/GrpHdr/MsgRcpt/Nm	Name of the institution receiving the message
/GrpHdr/MsgRcpt/PstlAdr	Bilateral. Reporting Institutions do not need to identify the Message Recipient's address, therefore CGI best-practice is to not report this group: Future versions of CGI may restrict the reporting of this group
/GrpHdr/MsgRcpt/Id	Utilized by in B2C Statements, Reports, and Notifications to identify a client profile assigned by the Reporting Agent
/GrpHdr/MsgRcpt/Id/OrgId/Othr	Utilized by in B2C Statements, Reports, or Notifications to identify a client profile assigned by the Reporting Agent
/GrpHdr/MsgRcpt/CtctDtls/Nm	Contact responsible for the administration of the file. The Contact may be a technical contact or the primary consumer of the data
/GrpHdr/OrgnlBizQry	Utilized in response to a camt.060. The original Message identification (i.e. The message identification of the camt.060 message) is required. The Original Message Name identification and Original Creation Date Time may also be provided

/GrpHdr/AddtlInf	When a camt053 is used for end of cycle statement reporting, the following code-words may be used to indicate cycle type. The recommended codes are:
	  /EODY/ for End of Day - Daily Statement
	  /EOWK/ for End of Week - Weekly Statement
	  /EOMH/ for End of Month - Monthly Statement
	  /EOYR/ for End of Year - Yearly Statement
	When these code-words are used, all statements within the message are of the same type
	Other information may be present as bilaterally determined.

/[Stmt] [Rpt] [Ntfcn]/Id	Unique per camt.05x and account
/[Stmt] [Rpt] [Ntfcn]/LglSeqNb	Increased incrementally by 1 for each sent statement, report, or notification For Copy, Copy Duplicate, or Duplicate reports, the electronic sequence and legal sequence must be the same as the original statement
/[Stmt] [Rpt] [Ntfcn]/FrToDt/FrDtTm	If an Account Servicer cannot provide a FrDtTm value, the FrDtTm value should equal the ToDtTm value
/[Stmt] [Rpt] [Ntfcn]/CpyDplctInd	For Copy, Copy Duplicate, or Duplicate reports, the electronic sequence and legal sequence must be the same as the original statement

ISO .053...08 Path	CGI .053/052/054 .08 RULES
/[Stmt] [Rpt] [Ntfcn]/RptgSrc	Where the source of the statement is functionally required by the consumer of the statement i.e. the Account Owner or authorized Third Party, the codes used should be bilaterally agreed For the latest list, see: https://www.iso20022.org/catalogue-messages/additional-content-messages/external-code-sets CBPR+ Usage Guideline *Allows the Account Servicer to define the source of the intraday account entry and or account balance report, typically associated with an application. [Populate with] the external Reporting Source code list. For example ACCT represents a statement or report based on accounting data, whereas DEPT represents a cash or deposit system.* *ACCT Accounting* *ARPF AccountReconciliationSystemFull* *ARP AccountReconciliationSystemPartial* *CTDB ControlledDisbursementSystem* *CUST Custody* *DEPT DepositSystem* *DPCS DepositConcentrationSystem* *LKBX Lockbox* *RCPT Receipts* *For the latest list, see: https://www.iso20022.org/catalogue-messages/additional-content-messages/external-code-sets*
/[Stmt] [Rpt] [Ntfcn]/Acct/Prxy	Alias identification for the /Acct/Id. This group is not utilized for accounting/sub-ledger accounts (virtual accounts) identification.
/[Stmt] [Rpt] [Ntfcn]/Acct/Ownr/Id/OrgId/AnyBIC	Identifies the BIC of the account owner (if applicable and bilaterally agreed to report)
/[Stmt] [Rpt] [Ntfcn]/Acct/Ownr/Id/OrgId/LEI	Identifies the LEI of the account owner if it different from the /Stmt/Acct/Id, otherwise this element should not be reported
/[Stmt] [Rpt] [Ntfcn]/Acct/Ownr/Id/OrgId/Othr	ID for the Account Owner as assigned by the Reporting Agent
/[Stmt] [Rpt] [Ntfcn]/Acct/Svcr/FinInstnId	In order of preference: a BIC, Clearing System Member Id or Other Id must be present
/Bal/Tp/SubTp	May be utilized to report Reserve Balances or other proprietary balance amounts
/Bal/Tp/SubTp/Prtry	INTM - Intermediate Balance - representing an intermediate amount such as the opening or closing balance incrementally carried forward from one page to the next in a multi-page statement or report
/Bal/Avlbty/Dt	Market practice dependent: General practice in US is to use number of days. Actual Date is preferred for bank to provide. Note BAI only uses number of days. Recommendation is to use Actual Date
/TxsSummry	Total Credit and/or Total Debit should (at a minimum) be provided. When pagination is used Transactions Summary need only be noted in first page
/TxsSummry/TtlCdtNtries	Either Number of Entries or Sum or both of them should be reported
/TxsSummry/TtlDbtNtries	Either Number of Entries or Sum or both of them should be reported
/TxsSummry/TtlNtriesPerBkTxCd/Avlbty/Dt	Market practice dependent: General practice in US is to use number of days Recommendation is to use Actual Date
/Ntry	Can be absent if there is no account movement
/Ntry/Amt	Amount in the currency of the account reported. This amount can be zero
/Ntry/CdtDbtInd	Zero amount to be reported as a CREDIT

ISO .053...08 Path	CGI .053/052/054 .08 RULES
/Ntry/RvslInd	Should only be present when the value is **true** (the transaction is a reversal) The ReversalIndicator should be used in the reporting of Credit Transfer or Direct Debit Type-R transactions, and when used the creditor and debtor parties in a reported transaction should not be reversed, i.e. remain aligned with the original CT or DD.

/Ntry/Sts/Cd	camt.053: BOOK is required - Booked for End of Cycle statement.
	   Not used in camt.053:
	  INFO = Information
	  PDNG = Pending
	camt.052L Account report entry booking status.
	  BOOK = Booked
	  PDNG = Pending
	  INFO = Information

/Ntry/AcctSvcrRef	When the same booked entry is reported in camt.052 or camt.054, the Account Service reference should be the same as reported in camt.053.
/Ntry/Avlbty/Dt	Market practice dependent. Actual Date is preferred for bank to provide. Note BAI only uses number of days. Recommendation is to use Actual Date. General practice in US is to use number of days.
/Ntry/BkTxCd/Prtry	For Account Server or community specific transaction coding
/Ntry/BkTxCd/Prtry/Cd	Code format is depending on the issuer. It may be a composite code.

/Ntry/BkTxCd/Prtry/Issr	To avoid ambiguity, the <Issr> must be present when /BkTxCd/Prtry/Cd is present.
	Value samples (not exhausted):
	      BAI = BAI/BTRS Code
	      SWIFT = Swift Code
	      BBA = Belgian Code
	      CFONB = French Code
	      FFFS = Finnish Code
	      DK = German Code
	      GVC = Geschäftsvorfallcodes
	      AEB = Spanish Code
	      DBA = Danish Code
	Also other values are applicable such as the Account Server name or proprietary designation as bilaterally agreed between the Account Servicer and the Message Recipient.

/Ntry/AddtlInfInd	May be used in case to cross-reference a separate notification or account report message
/Ntry/Chrgs/Rcrd/ChrgInclInd	Not present = false

/Ntry/TechInptChanl/Cd	As published in the following code list: https://w ww.iso20022.org/catalogue-messages/additional-content-messages/external-code-sets
	
	As of 2021-Feb:
	  FAXI = Fax
	  PAPR = Paper
	  TAPE = Tape
	  WEBI = Internet

/NtryDtls	May be omitted for settlements where Entry Details are not to be conveyed in the report. For example, for payroll settlements where confidential information is not to be conveyed.
/NtryDtls/Btch/CdtDbtInd	[1..1] if Total Amount is provided
/TxDtls/Refs/AcctSvcrRef	When an entry is reported in an interim camt.052 or camt.054, the Account Service reference in camt.053 should be the same.

ISO .053…08 Path	CGI .053/052/054 .08 RULES
/TxDtls/Refs/EndToEndId	For SEPA the EndToEndId can be 'NOTPROVIDED'
/TxDtls/Refs/MndtId	For reporting Direct Debits, as appropriate
/TxDtls/Refs/ChqNb	Only used for Cheque
/TxDtls/Avlbty/Dt	Market practice dependent: General practice in US is to use number of days. Recommendation is to use Actual Date
/TxDtls/BkTxCd/Prtry	For bank or community specific transaction coding
/TxDtls/BkTxCd/Prtry/Cd	Code format is depending on the issuer. It may be a composite code

/TxDtls/BkTxCd/Prtry/Issr	To avoid ambiguity, the <Issr> must be present when /BkTxCd/Prtry/Cd is present.
	Value samples (not exhausted):
	    BAI = BAI/BTRS Code
	    SWIFT = Swift Code
	    BBA = Belgian Code
	    CFONB = French Code
	    FFFS = Finnish Code
	    DK = German Code
	    GVC = Geschäftsvorfallcodes
	    AEB = Spanish Code
	    DBA = Danish Code
	Also other values are applicable such as the Account Server name or proprietary designation as bilaterally agreed between the Account Servicer and the Message Recipient

/TxDtls/Chrgs/Rcrd/ChrgInclInd	Indicates whether the charge should be included in the amount or is added as pre-advice
/TxDtls/Chrgs/Rcrd/Agt	If not provided, the charge is taken by account holder's bank. When UETR Agent information is available, the Agent and the Agent's corresponding charges as denoted in gpi should be reported in /Chrgs/Rcrd/Agt
/TxDtls/Intrst	Provides details of the interest amount included in the entry amount
/TxDtls/Intrst/Rcrd/Amt	Amount of interest included in the entry amount
/TxDtls/Intrst/Rcrd/CdtDbtInd	A zero amount is considered to be a credit
InitgPty	In the payment context, this can either be the debtor (in a credit transfer), the creditor (in a direct debit), or a party that initiates the payment on behalf of the debtor or creditor In the context of treasury, the party that instructs the trading party to execute a treasury deal on its behalf
InitgPty/Agt/FinInstnId/PstlAdr	For Agents, Name and/or Postal Address should only be reported if present in the original transaction
Dbtr	For outward payments, report if different from account owner In instances where the Reversal Indicator <RvslInd> is TRUE, the Creditor and Debtor must be the same as the Creditor and Debtor of the original entry
Dbtr/Pty/CtctDtls/Nm	Used in cases where the Party is an Entity and individual serves as the contact
Dbtr/Pty/CtctDtls/PhneNb	Used in cases where a text message cannot be sent to the Number
DbtrAcct	For outward payments where the Debtor Account is the same as the Statement Account, there is no need to report the Debtor Account. For return transactions (i.e.: where a reversal is true), the Debtor Account and Creditor Account should be reported as presented in the original entry
DbtrAcct/Prxy	If /DbtrAcct/Prxy is present and neither and IBAN or /DbtrAcct/Id/Othr/Id is available, populate /DbtrAcct/Id/Othr/Id with "PROXYREF"

ISO .053...08 Path	CGI .053/052/054 .08 RULES
UltmtDbtr	In instances where the Reversal Indicator <RvslInd> is TRUE, the Ultimate Creditor and Ultimate Debtor must be the same as the Ultimate Creditor and Ultimate Debtor of the original entry.
UltmtDbtr/Pty/CtctDtls/Nm	Used in cases where the Party is an Entity and individual serves as the contact
UltmtDbtr/Pty/CtctDtls/PhneNb	Used in cases where a text message cannot be sent to the Number
Cdtr	For inbound payments where the Creditor is the same as the Statement Account owner, Best-Practice is to not report the Creditor

In instances where the Reversal Indicator <RvslInd> is true, the Creditor and Debtor must be the same as the Creditor and Debtor of the original entry

For return transactions (i.e.: where a reversal is true), the original Debtor and Creditor should be reported, otherwise if the Creditor is the same as /[Stmt] [Rpt] [Ntfcn]/Acct/Svcr, there is no need to report the Creditor; only the counterparty should be reported |
| Cdtr/Pty/CtctDtls/Nm | Used in cases where the Party is an Entity and individual serves as the contact |
| Cdtr/Pty/CtctDtls/PhneNb | Used in cases where a text message cannot be sent to the Number |
| CdtrAcct | For inbound payments where the Creditor Account is the same as the Statement Account, there is no need to report the Creditor Account

For return transactions (i.e.: where a reversal is true), the Debtor Account and Creditor Account should be reported as presented in the original entry |
CdtrAcct/Prxy	If /CdtrAcct/Prxy is present and neither and IBAN or /CdtrAcct/Id/Othr/Id is available, populate /CdtrAcct/Id/Othr/Id with "PROXYREF"
UltmtCdtr	In instances where the Reversal Indicator <RvslInd> is true, the Ultimate Creditor and Ultimate Debtor must be the same as the Ultimate Creditor and Ultimate Debtor of the original entry
UltmtCdtr/Pty/CtctDtls/Nm	Used in cases where the Party is an Entity and individual serves as the contact
UltmtCdtr/Pty/CtctDtls/PhneNb	Used in cases where a text message cannot be sent to the Number
TradgPty	A trading party is a trade instructor, an investment decision-maker, a post trade administrator, or a trader. In the context of treasury, it is the party that negotiates and executes the treasury transaction
/DbtrAgt	For outward payments, if the Debtor Agent is the same as /Stmt/Acct/Svcr, the Debtor Agent does not need to be reported. This condition is bilaterally determined

For Return Transactions (i.e.: when /Ntry/RvslInd is true), the original Debtor Agent and Creditor Agent are to be reported, even if the Debtor Agent is the same as /Stmt/Acct/Svcr |
| /CdtrAgt | For inward payments, if the Creditor Agent is the same as /Stmt/Acct/Svcr, the Creditor Agent does not need to be populated

For return transactions (i.e.: where a reversal is true), the original Debtor Agent and Creditor Agent should be reported, even if the Creditor Agent is the same as /Stmt/Acct/Svcr |
/IntrmyAgt1/FinInstnId/ClrSysMmbId/ClrSysId/Cd	As identified by the ISO 20022 External Code List: Clearing System Identification
/RcvgAgt	Optional presence in order to accommodate the cash component of securities settlements
/DlvrgAgt	Optional presence in order to accommodate the cash component of securities settlements
/IssgAgt	Optional presence in order to accommodate the cash component of securities settlements

ISO .053...08 Path	CGI .053/052/054 .08 RULES
/SttlmPlc	Optional presence in order to accommodate the cash component of securities settlements
/TxDtls/RmtInf/Strd/CdtrRefInf	For remittance creditor reference information, in instances where the Creditor Reference Type Code is SCOR (Structured Communication Reference) and the Creditor Reference is structured in accordance with ISO 11649, the issuer should be specified with the text 'ISO'
/TxDtls/RltdDts/StartDt	May be used for cheque issuance date
/TxDtls/RltdDts/EndDt	May be used for cheque expiry date
/TxDtls/RtrInf/OrgnlBkTxCd/Prtry/Issr	If Not Available, populate with "NOTAVAILABLE"
/TxDtls/RtrInf/Rsn	Specifies Reason for Return
/TxDtls/RtrInf/AddtlInf	Additional information to describe the return transaction
/TxDtls/CardTx	Utilized only for debit transactions and only for transactions where the Corporate is the Card Owner

Terminology

Account Owner: The entity which owns the account. Although an authorized third-party may be receiving a report on behalf of the Account Owner, for illustrative purposes within this document, the Account Owner is always identified as the party which is either receiving a report or generating a settlement instruction

Account Servicer: The Financial institution which hosts the account

Bilateral: Optional presence, use, or content as determined by the services the Reporting Institution offers or the needs of the Account Owner. Variance may be present across Reporting Institutions. Optional presence, single instance [0..1], unlimited multiple instances [0..*] or a specific number of instances [0..X] where X is the number of allowed instances. Example: [0..7] Optional presence with up to 7 or fewer occurrences

Batch Booking   An Entry which conveys an Entry Details <NtryDtls> Batch <Btch> group. A Batch Booking may convey no underlying Transaction Details <TxDtls> or have one or more <TxDtls>

Concentrator Agent: An agent which receives reports from other agents and combines them into a single presentation for the Account Owner.   This is often referred to as Multibank Reporting or Reporting Relay Services

Mandatory: An element or group which either a single [1..1] or multiple [*..1] presence is required by the ISO schema or is mandatory per CGI guidelines

Removed: An element which has been removed per CGI guidelines. [0..0] Zero presence / Zero instances

Reporting Institution: The Financial Institution or vendor which generates the camt. message. Typically this is the Account Servicing institution but it may be a vendor who aggregates statements and generates a camt. file or a Concentrator Agent

Single Booking   An Entry that does not convey an Entry Details <NtryDtls> Batch <Btch> group. The <NtryDtls> may have zero (0) or one (1) Transaction Details <TxDtls>

Settlement Instruction: A message to execute a payment. In ISO 20022, Corporates send pain.001 settlement instruction, while Financial Instructions pass pacs.008 settlement instructions.

Additional Notes

Contact Details <PhneNb>, <MobNb> and <EmailAdr>

As of camt.05x.001.08, Contact Details Phone Number <PhneNb>, Mobile Number <MobNb>, and Email address <EmailAdr> are optional. Phone and Mobile Numbers are both available as Phone Numbers may not be able to receive text messages/notifications