



Delta Reports in T2S

January 2017

T2S Programme Office
European Central Bank

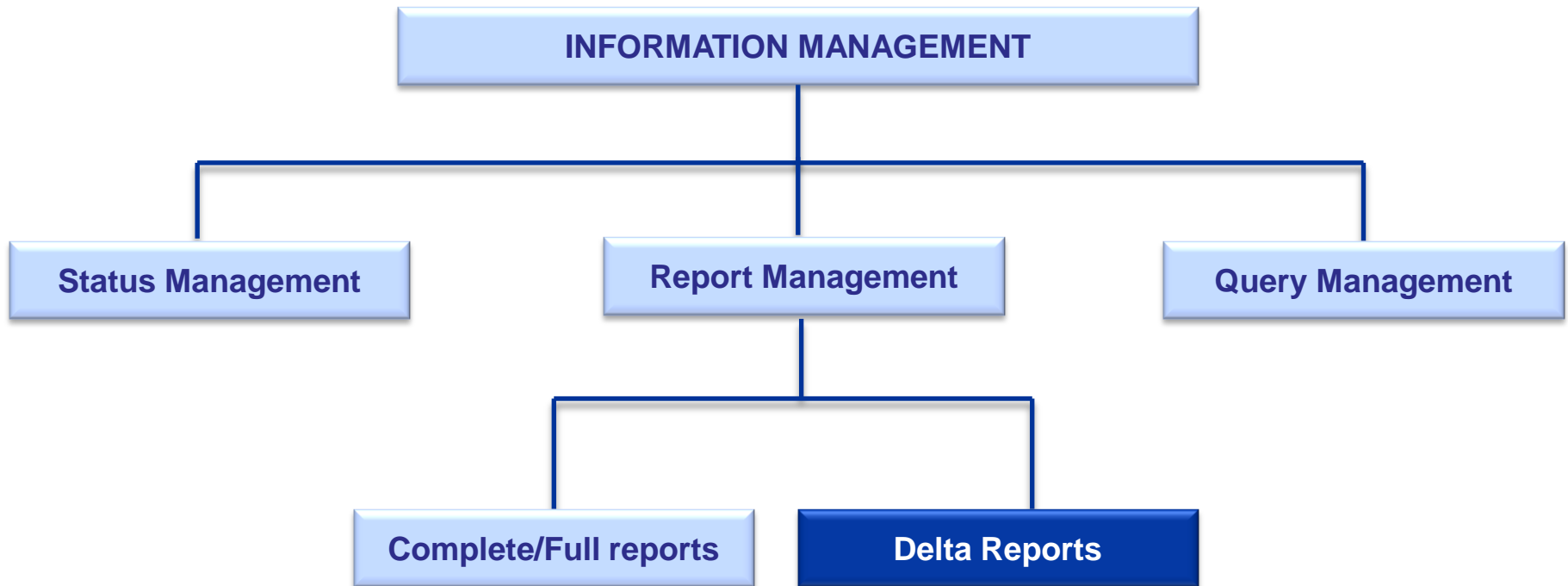


1 Background

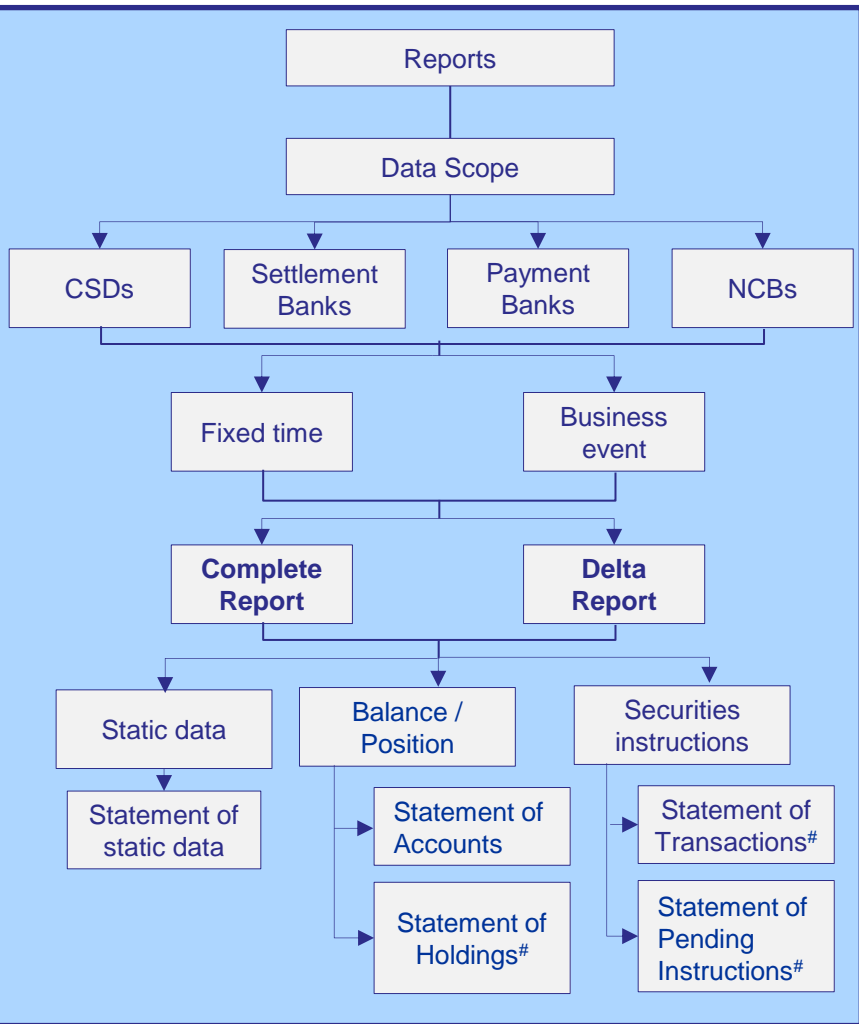
2 Delta vs complete reports

3 Detailed description of delta versions

T2S transmits information to T2S Actors (CSDs, NCBs or DCPs) via different information management services: Status Management, **Report Management** and Query Management application processes.



Following are different criteria which characterise reports. These criteria influence the generation of the report.



CRITERIA	POSSIBLE VALUES	DETAILS
Data Scope	Concerned Party	Depending on the Report Type the created report contains business information related to the T2S DCAs, SACs, positions, instructions, etc. of a specified party
System Entity Wide	Community / Party based	The report covers either all the information referred to a system entity or a party
Report triggering	fixed time / business event	Creation time of a report
Covered Period	From / To	Date and time from / to the data are covered
Report Format	ISO XML messages / Flat Files	Flat files have a more compressed format, are available only for few reports and are available at the end of day and the end of night-time settlement
Report classification	Complete report, delta report	Delta reports allow to identify intraday new, modified and deleted information since the creation of the previous report
Report type	Cash forecast, Statement of holdings, Statement of static data, etc.	Depending on what reports inform (settlement instructions, securities positions/cash balances, static data)
Communication channel	A2A/U2A	Possibility of A2A/U2A (screen-based for T2S Users) modes.*

Complete and delta versions are available

* Flat Files not available for download – U2A generation

1 Background

2 Delta vs complete reports

3 Detailed description of delta versions

Delta vs complete reports

Report classification

- ❑ T2S offers “complete” and “delta” versions of reports generated upon reaching pre-configured time or business events.
- ❑ **Complete** and **delta reports** cover the current business day in different ways (please see below graphs).
- ❑ Both report types are based on the most recent information available in T2S.
- ❑ In general, delta reports complement complete reports for settlement reconciliation purposes.
- ❑ Delta report contain any data (e.g. new pending instructions) whose status/content changed since the previous reporting (if it occurred on the same day) or since the Start of Day.

Differences between complete and delta versions are in the report scope, which...

...includes a full snapshot of data at the time of the creation of the report

Complete Reports

...includes information on items which changed values since the previous report was created*, or since the Start of Day

Delta Reports



Delta vs complete reports

Report types in delta and complete version (1/2)

T2S offers the following reports in both delta and complete versions

REPORT TYPES	Format	REPORT NAME
Statement of Holdings	ISO- semt.002.001.05 and Flat file	SecuritiesBalanceCustodyReport
Statement of Transactions	ISO- semt.017.001.03 and Flat file	SecuritiesTransactionPostingReport
Statement of Pending Instructions	ISO- semt.018.001.03 and Flat file	SecuritiesTransactionPendingReport
Statement of Settlement Allegements	ISO- semt.019.001.03	SecuritiesSettlementTransactionAllegementReport
Statement of executed Amendment Instructions for Intra-Balance Movements	ISO- camt.081.001.01	IntraBalanceMovementModificationReport
Statement of executed Amendment Instructions for Intra-Position Movements and Settlement Instructions	ISO- semt.031.001.01	SecuritiesSettlementConditionsModificationRequestReport
Statement of executed Cancellation Instructions for Intra-Balance Movements	ISO- camt.083.001.01	IntraBalanceMovementCancellationReport
Statement of executed Cancellation Instructions for Intra-Position Movements and Settlement Instructions	ISO- semt.033.001.01	SecuritiesTransactionCancellationRequestReport

Delta vs complete reports

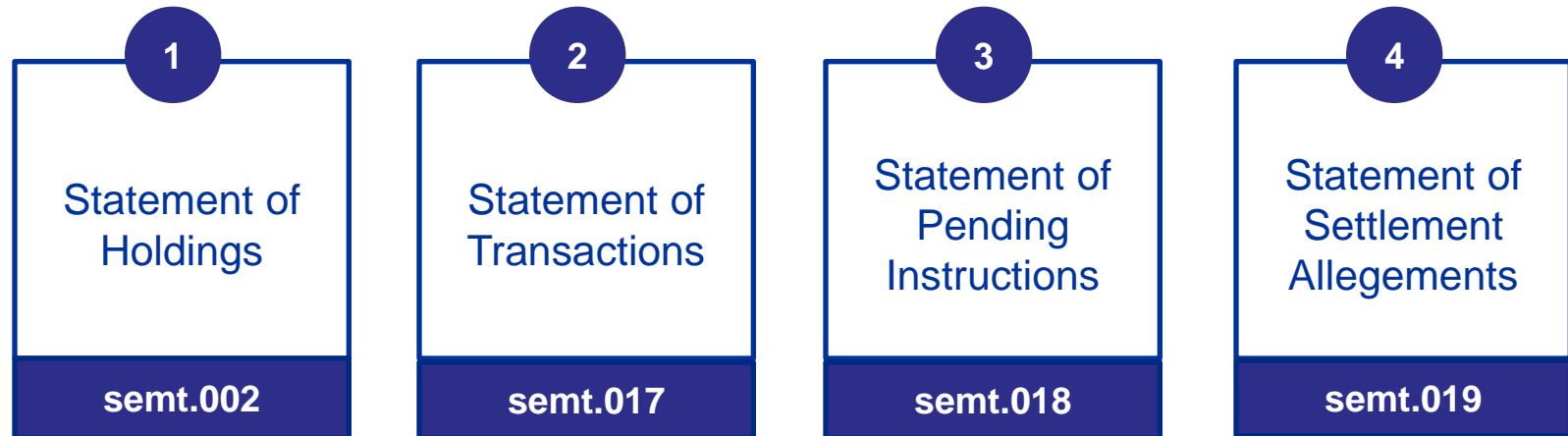
Report types in delta and complete version (2/2)

REPORT TYPES	ISO MESSAGE	REPORT NAME
Statement of pending Amendment Instructions for Intra-Balance Movements	ISO- camt.081.001.01	IntraBalanceMovementModificationReport
Statement of pending Amendment Instructions for Intra-Position Movements and Settlement Instructions	ISO- semt.031.001.01	SecuritiesSettlementConditionsModificationRequestReport
Statement of pending Cancellation Instructions for Intra-Balance Movements	ISO- camt.083.001.01	IntraBalanceMovementCancellationReport
Statement of pending Cancellation Instructions for Intra-Position Movements and Settlement Instructions	ISO- semt.033.001.01	SecuritiesTransactionCancellationRequestReport
Statement of pending Intra-Balance Movements	ISO- camt.085.001.01	IntraBalanceMovementPendingReport
Statement of pending Intra-Position Movements	ISO- semt.034.001.01 and Flat file	IntraPositionMovementPendingReport
Statement of settled Intra-Balance Movements	ISO- camt.084.001.01	IntraBalanceMovementPostingReport
Statement of settled Intra-Position Movements	ISO- semt.016.001.03 and Flat file	IntraPositionMovementPostingReport

Delta vs complete reports

Samples

The following slides contain information on four report types which are offered by T2S and clarify differences between the complete and delta versions.



Delta vs complete reports

Statement of holdings – semt.002

1

Statement of Holdings

semt.002

The Statement of holdings (semt.002) provides information about the different securities positions of a T2S Actor's securities account in T2S. The report can contain all holding information (**Complete**) or only changes since the previously sent report or start of the day (**Delta**).

COMPLETE

- Informs the T2S Actor about the securities positions per Securities Account at the moment of the report's creation.
- Includes securities positions with a quantity different from zero as well as securities positions with a quantity of zero that have been subject to settlement on the current business day.
- Includes aggregate positions for available as well as not available positions (including breaking down of sub positions).

DELTA

- Includes the security positions per ISIN which were either newly created, changed or turned to zero in the reporting period (no report on positions of securities that did not get impacted within the reporting period).
- Also includes the aggregated positions and position breakdowns
- The reporting period starts at the creation of the previous Statement of Holdings in the current settlement day, or by default at the start of day if no such report was created since the start of the current settlement day.

Note: For Delta reports

- Securities positions with zero quantity that have not changed will never be reported
- ISINs that have not changed would not be reported ("Balance for account" tag would not exist)

Delta vs complete reports

Statement of transactions – semt.017

2

Statement of
Transactions

semt.017

The Statement of transactions (semt.017) is available in both versions: complete and delta. This statement provides information about the settlement instructions of the respective CSD or DCP that settled completely or partially in T2S for a given settlement day.

COMPLETE

- Includes all partially settled and fully settled instructions during the period indicated in the reporting period
- Informs T2S Actor about settlement instructions which reached "settled" status or "partially settled" status* since the Start of Day (SoD) of the current settlement day.

DELTA

- Includes all newly partially settled and fully settled instructions during the reporting period
- Informs T2S Actor about
 - Settlement instructions which reached "settled" status or "partially settled" status* since the generation of the previous report for the current business day, OR
 - (if no previous instance exists) since Start of Day (SoD) of the current settlement day, OR
 - instructions which were already partially settled at the beginning of the reporting period and had another successful partial or final settlement within the reporting period

* Meaning that the settled quantity and settled amount are returned and shown in the report

Delta vs complete reports

Statement of Pending Instructions – semt.018

3

Statement of Pending Instructions

semt.018

The Statement of Pending Instructions (semt.018) is available in both versions: complete and delta. This report is generated and sent based on the report configuration by the CSDs and DCPs.

COMPLETE

- Includes pending Settlement Instructions that expect settlement at the current settlement day (including also recycled Settlement Instructions).*
- Informs T2S Actor about the latest status and current attribute values of the reported Settlement Instructions (the report usually includes information that has been reported in the previous report as the status of some transaction may not have changed).

DELTA

- Includes new pending Settlement Instructions or pending Settlement Instructions which were modified or have changed their status as well as the Settlement Instructions which were formerly pending but are now cancelled
- Informs T2S Actor about all instructions whose status has changed since the creation of the previous Statement of Pending Instructions of the current business day, or by default since the start of day if such report was not already created since the start of the current settlement day.

* They must not have a final status (e.g. "partially settled" status; here the unsettled amount and unsettled quantity are returned) at the time of the report generation.

Delta vs complete reports

Statement of Settlement Allegements – semt.019

4

Statement of
Settlement
Allegements

semt.019

The Statement of Settlement Allegement (semt.019) is sent by T2S to a CSD or DCP. The report is used to provide information about the list of all Settlement Instructions as received from other T2S actors which are missing their corresponding Settlement Instruction from the CSD or DCP the report is addressed to.

COMPLETE

- Includes all SI as received from other T2S Actors which are currently missing a corresponding SI from the receiver of the report. A Settlement Instruction which was reported in the last Statement of Settlement Allegements and is now no longer reported indicates that this Settlement Instruction is no longer alleged, i.e. it has been matched or cancelled.

DELTA

- Includes newly alleged Settlement Instructions, alleged Settlement Instructions which were modified (e.g. linkage information of the original settlement instruction) along with cancelled and/or removed allegements.
- Informs T2S Actors about the before mentioned changes since the creation of the previous report of the current business day, or by default since the start of day if such report was not already created since the start of the current settlement day.

Note: The complete report does not report those Settlement Instructions which were formerly alleged but which are no longer outstanding whereas the delta report also shows those newly cancelled or newly removed.

1 Background

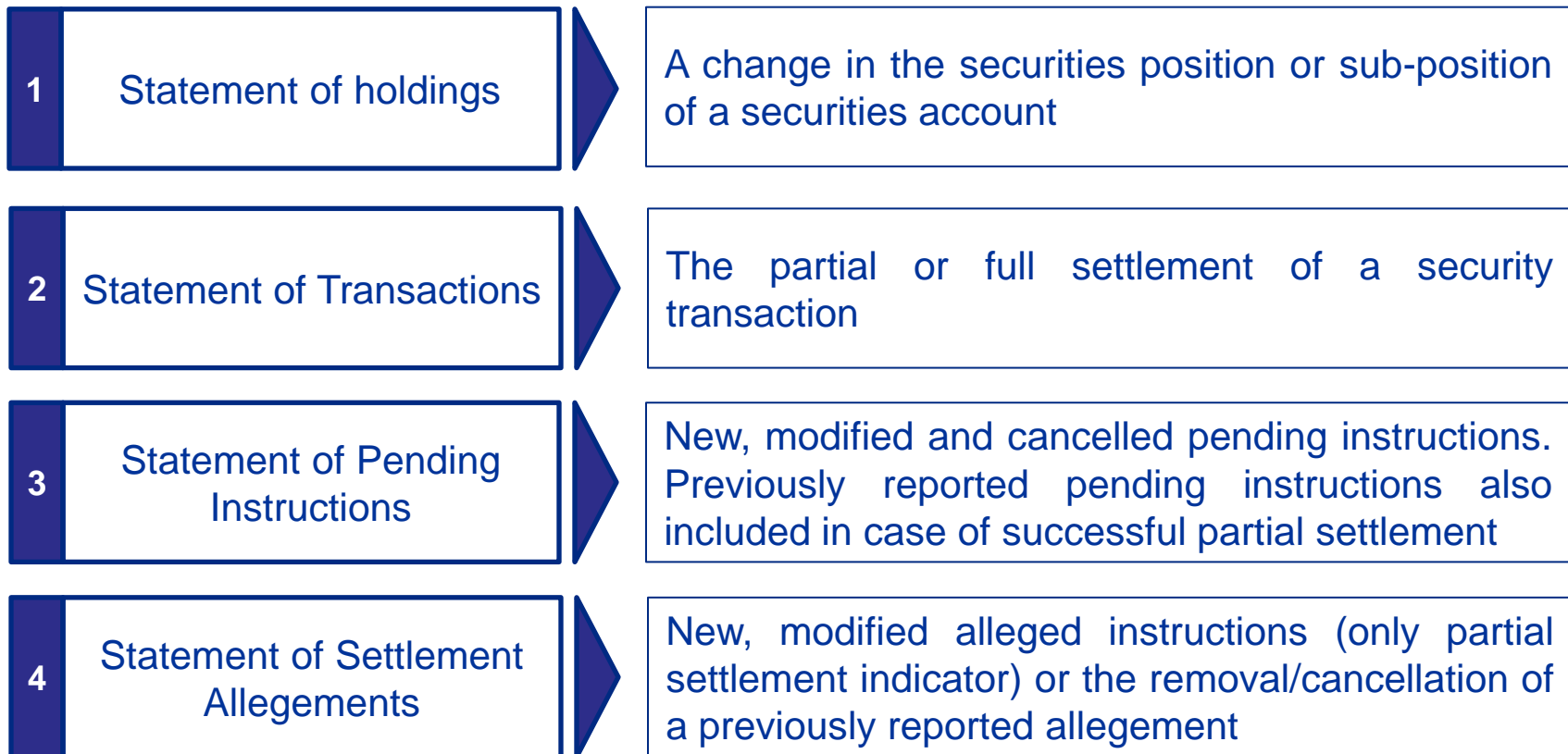
2 Delta vs complete reports

3 Detailed description of delta versions

Detailed description of delta versions

Introduction

Delta reports contain changes from the previous report or from the Start of Day (SOD). The change will depend on the type of report:



Note: Any change affecting an instruction other than those listed above (e.g. change in static data) is not considered a parameter for the inclusion in the above mentioned delta report. If, however, a change in static data impacts the status of a instruction or a balance it would then be reported.

Detailed description of delta versions

Statement of holdings – semt.002

- ❑ **Availability and timing:** The Statement of Holdings report is available in Complete and Delta versions and can be scheduled multiple times intraday. The first Delta and Complete version reports of the day will always differ. The delta version will not contain positions which did not change since SoD or since the generation of the previous report.*
- ❑ **Report content:** The delta version of the Statement of Holdings includes all the security positions which were either newly created, changed or turned to zero in the reporting period. The securities position for a specific securities account can be segregated as follows:
 - **Aggregate:** total quantity per financial instrument in the account (delta only includes the sum of the changed sub positions).
 - **Available:** total quantity per financial instrument in the account that is available, i.e. with no restriction of use (delta only reports the field if there has been a change).
 - **Not Available:** total quantity per financial instrument of the account that is not available, i.e. restricted for use (delta only reports the field if there has been a change).

* Please note that for further reference address to ECB presentation on [“Availability of T2S Generated Reports”](#)

□ Report content (cont.)

- Balance Breakdown: For each position (AWAS*, EARM, BLCK, COLL etc.), the sum of the sub-positions (i.e. “additional balance breakdown”) for which there is a change
- Additional Balance Breakdown: For each restriction type (BLCK1, BLCK2, RSV1 etc.) that has changed, the sum of all the restriction references
- Quantity breakdown: All restriction references (RestrRef11, RestrRef12 etc.) for the changed restriction types
- Short/Long Indicator: reports if the aggregate position sum is positive or negative**

* For AWAS, there are no sub-positions so total quantity is reported if changed

** Please note that pending CR T2S-0519-SYS will introduce Short/Long Indicator for all aggregated positions and sub-positions reported

Detailed description of delta versions

Statement of holdings – semt.002

- ❑ **No positions to report:** If there are no securities positions (new, changed, turned to zero) to report, the Statement of holdings is provided containing only the header and general information. In case there is an account for which there are no positions to be reflected during the reporting period, T2S creates for this account a semt.002 with “ActivityIndicator” set to false.

The Statement of Holdings (semt.002) is used by T2S actors mainly for purposes of End of Day reporting and reconciliation.

Each time a position is modified since the previous report (SoD when applicable), it includes the updated position*

* Please see Example of semt.002 for clarification

Detailed description of delta versions

Statement of holdings – semt.002 – Example

After a booking of +200 in RestrRef1 positions, the following securities positions are stored:

Securities Account 123 ISIN ABC	Restriction Processing Type	Restriction Type	Restriction Reference
1000	AWAS		
400	EARM	EEUR	
150 + 200 = 350	BLCK	BLK1	RestrRef11
50	BLCK	BLK1	RestrRef12
15	BLCK	BLK5	Restr5

Delta statement of holdings:

SAC 123 - ISIN ABC	Quantity
Aggregate	400
Available	0
Not Available	400
BLCK	400*
BLK1	400
RestrRef11	350
RestrRef12	50

- On aggregated position level delta report does only provide sum of positions affected by the changes.
- On Restriction Type and Restriction Reference level the report provides all sub-positions and correct aggregated positions (if at least one sub-position of the Restriction Type changed).
- The three aggregated balances (Aggregated, available, not available) are always contained
- All sub-positions that have not changed will not be reported (i.e. EARM and BLK5 positions are not reported)

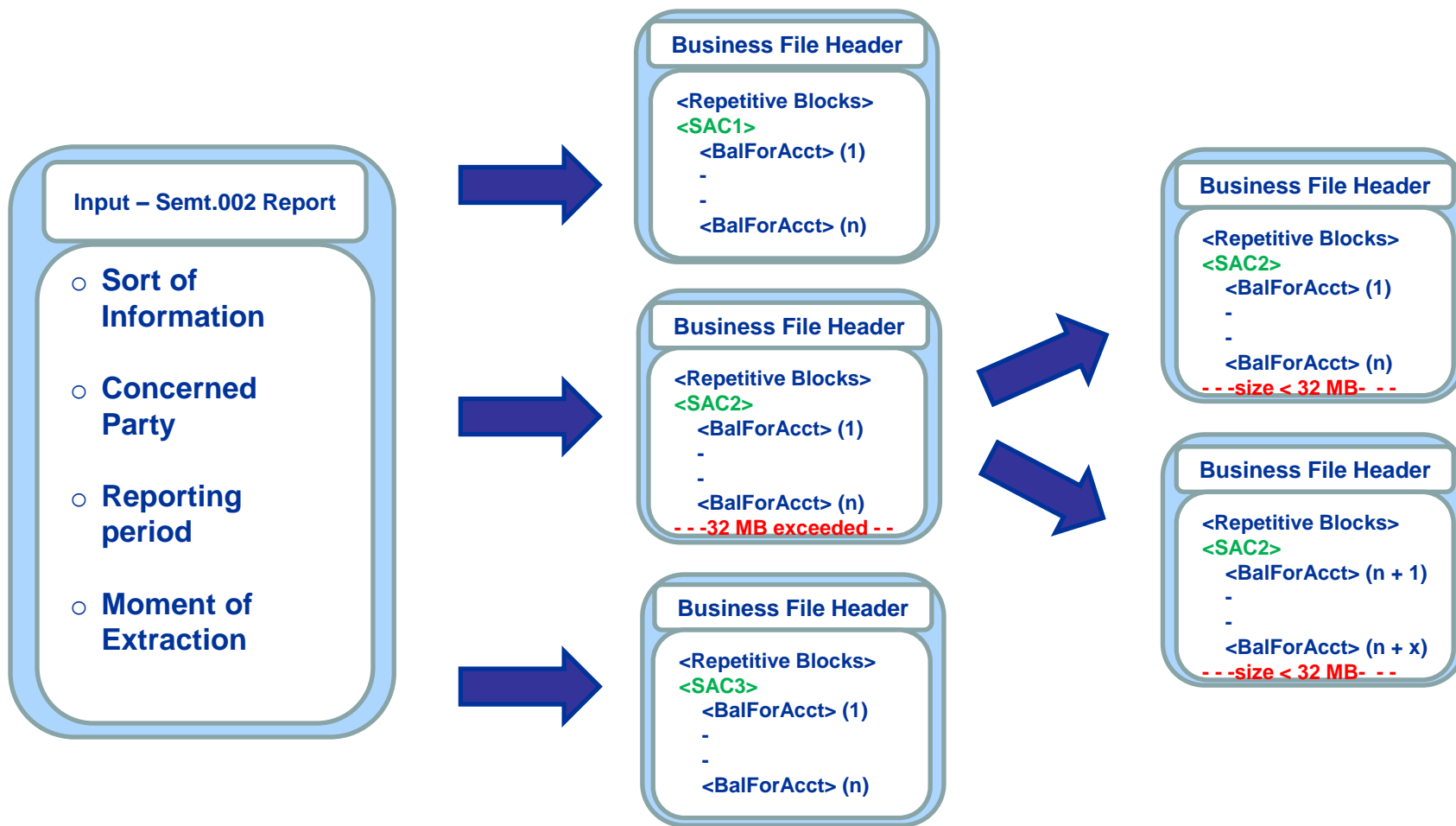
* Note:

When reporting a “sub balance” for e.g. BLCK, it would report the sum of all changed sub positions under “additional balance breakdown”. So BLCK = 350+50=400. BLK5 (15) is not included as there is no change for restriction type BLK5

Detailed description of delta versions

Statement of holdings – semt.002

- 1) Safekeeping account is the first level of aggregation as it is the main mandatory field. The report will be generated per each SAC.
- 2) There should be as many "Balance For Account" tags displayed as many securities held.
- 3) Whenever the file size is exceeded (32 MB), a new one is created upon splitting. The new message aggregation will start at SAC level.



Detailed description of delta versions

Statement of transactions – semt.017

- ❑ **Availability and timing:** The Statement of Transactions report is available in Complete and Delta version and can be scheduled multiple times intraday. The first report of the day would be the same for both Delta or Complete forms.*

- ❑ **Report content:** The delta version of the Statement of Transactions contains instructions that have been settled or partially settled since the last report due to different business reasons. Securities account shall be complement with these relevant fields:
 - Instructions: information regarding instructions applicable to this report (settled or partially settled instructions for the Party and account involved).
 - Posting Quantity: quantity of the underlying financial instrument settled
 - Posting Amount: amount of money that posted to the account (when payment is applicable).

When Partial settlement applies, the report will only inform the cumulative quantity/amount settled during the reporting period (Complete report informs about cumulative quantity/amount settled in the current business day).

* Please note that for further reference address to ECB presentation on [“Availability of T2S Generated Reports”](#)

Detailed description of delta versions

Statement of transactions – semt.017

- ❑ **No instructions to report:** If there are no newly settled instructions to report, the Statement of Transactions report is provided containing only the header and general information. In case there is an account for which no settlement instructions settled during the reporting period, T2S creates for this account a semt.017 with “ActivityIndicator” set to false.

The Statement of Transactions (semt.017) is used by T2S actors mainly for purposes of **End of Day reporting** and reconciliation.

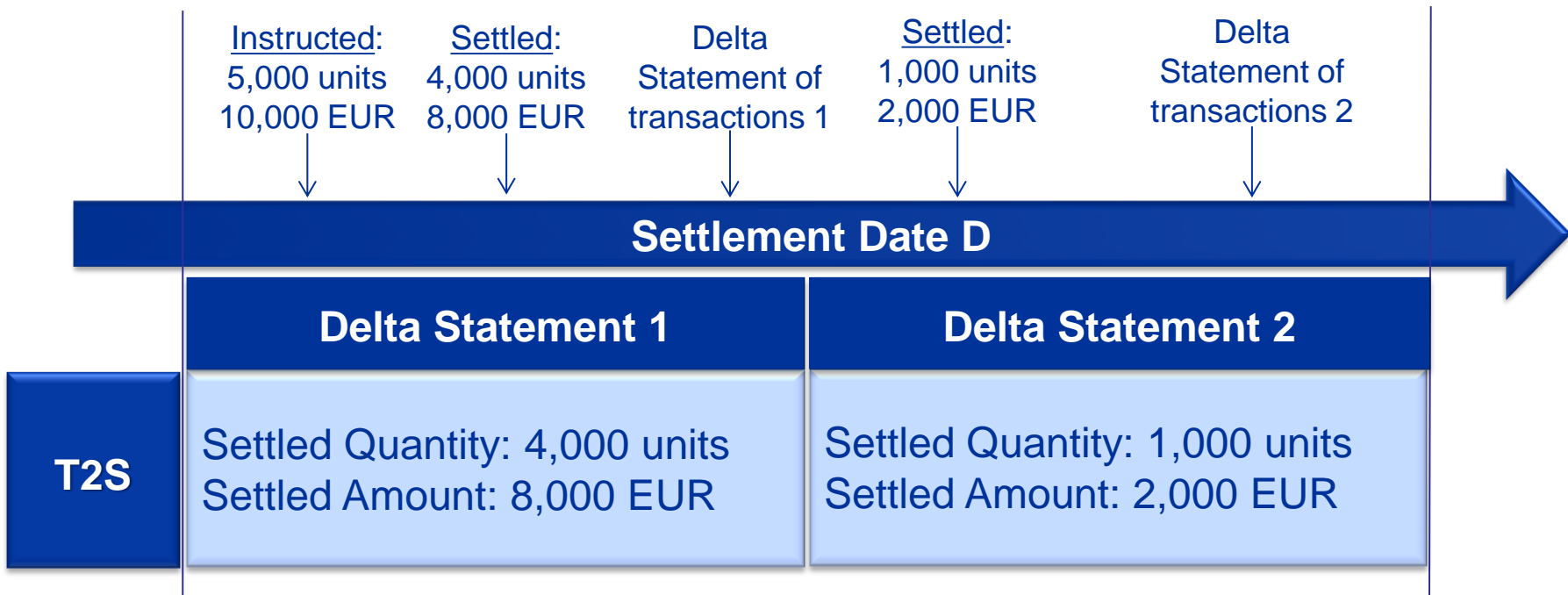
Each time a transaction is reported, it includes the **updated amount/quantity***

* Please see Example of semt.017 for clarification

Detailed description of delta versions

Statement of transactions – semt.017 – Example

Example with partial settlement that occurred since last report with cumulative amount / quantity since last delta report for the same business date (if any exist) or since Start of Day (if not)

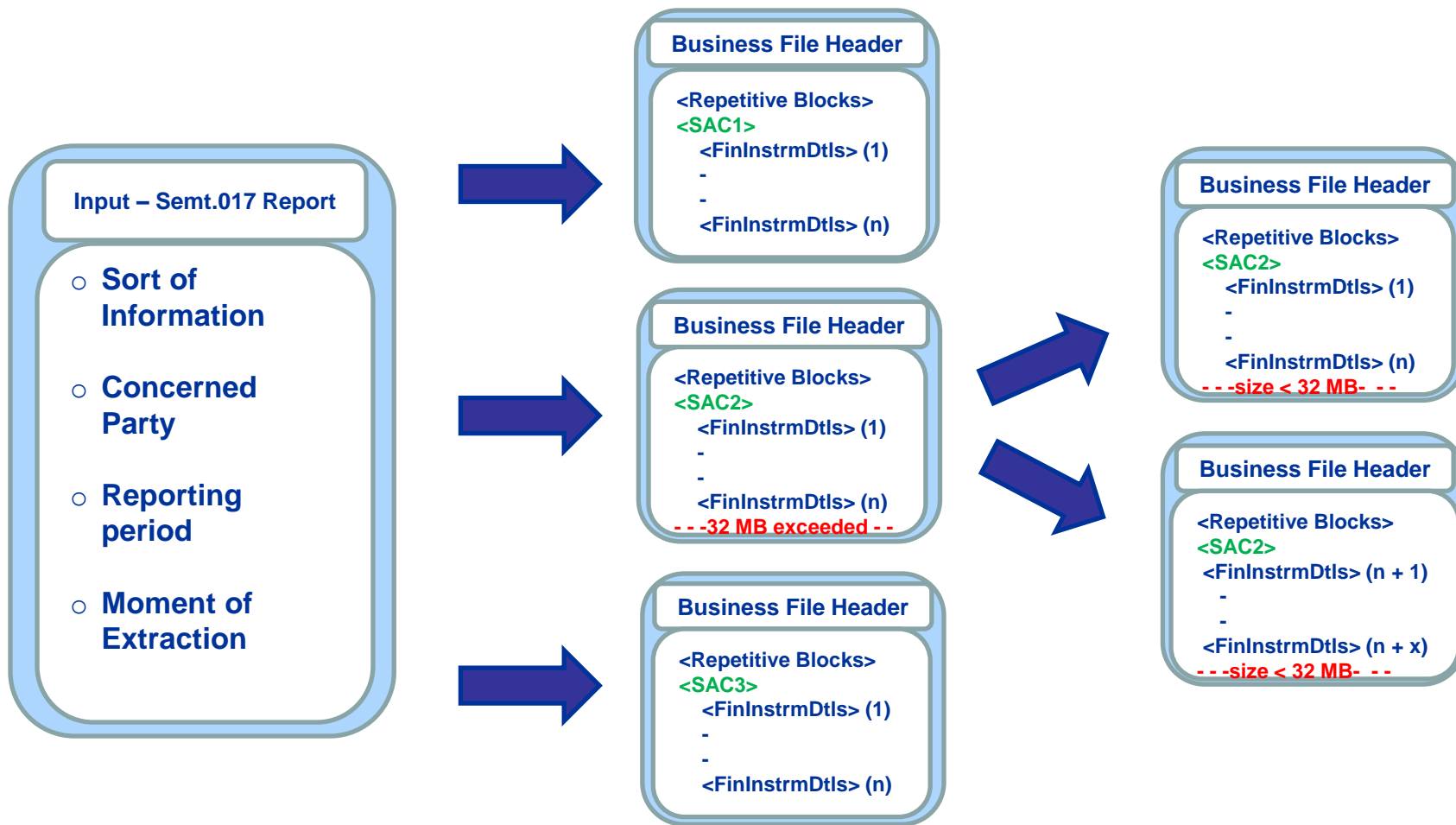


This is the envisioned behavior that will result from the implementation of T2S CR549.

Detailed description of delta versions

Statement of transactions – semt.017

- 1) Safekeeping account is the first level of aggregation as it is the main mandatory field. The report will be generated per each SAC.
- 2) There should be as many " Financial Instrument Details" tags displayed as many securities traded.
- 3) Whenever the file size is exceeded (32 MB), a new one is created upon splitting. The new message aggregation will start at SAC level.



Detailed description of delta versions

Statement of Pending Instructions – semt.018

- ❑ **Availability and timing:** The Statement of Pending Instructions report is available in Complete and Delta form and can be scheduled multiple times intraday. The first report of the day will differ for the Delta and Complete version. The delta version will not contain pending instructions which did not change since SoD or the generation of the previous report (the same logic applies to the subsequent reports).*
- ❑ **Report content:** The delta version of the Statement of Pending Instructions contains all instructions newly pending, modified, which had a change in the status or were cancelled since the last report. Securities account shall be complemented with the following relevant fields:
 - Instructions: information regarding instructions applicable to this report (pending instructions that expect settlement at the current settlement day)
 - Posting Quantity: quantity of the underlying financial instrument to be settled (cancelled when applicable)
 - Posting Amount: amount of money that is to be/was posted to the account (when payment is applicable).

* Please note that for further reference address to ECB presentation on [“Availability of T2S Generated Reports”](#)

Detailed description of delta versions

Statement of Pending Instructions – semt.018

- **Status and Reason:** current status of the underlying instruction (matching status, settlement status, processing status) and reason details (when applicable).
- ❑ **No instructions to report:** If there are no new, modified or with a change in the status pending instructions to report, a Statement of Pending Instructions report is provided containing only the header and general information. In case there is an account with no instructions to report during the reporting period, T2S creates for this account a semt.018 with “ActivityIndicator” set to false.

The Statement of Pending Instructions (semt.018) is used by T2S actors mainly for purposes of **End of Day reporting** and reconciliation.

Detailed description of delta versions

Statement of Pending Instructions – semt.018 – Example

In the following example we will include recycled instructions, new pending instructions and pending instructions which have been modified from the previous report.

Pending Instructions before creation of Delta Report 1:

- Pending Inx A: recycled (ISD in the past: D - 1).
- New pending Inx B (lack of cash)
- New pending Inx C (on hold)

Pending Instructions before creation of Delta Report 2:

- New pending Inx D (lack of securities)
- Pending Inx A: cancelled
- Pending Inx C: released (still pending: lack of securities)

Settlement Date D



Delta - Statement of Pending Instructions 1

- Pending Inx B reported
- Pending Inx C reported

Delta - Statement of Pending Instructions 2

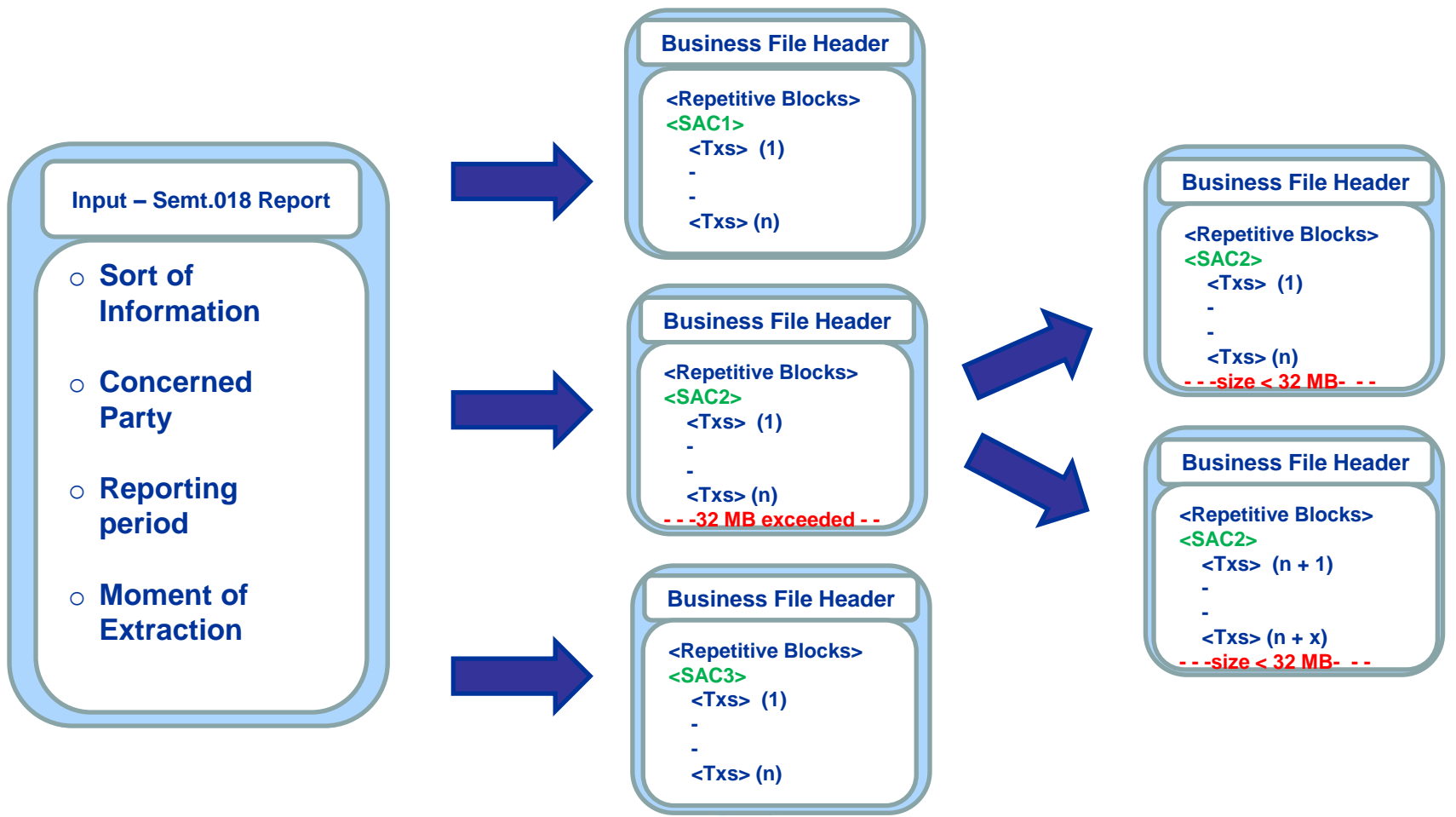
- Pending Inx D reported
- Cancelled Inx A reported
- Pending Inx C (change of status) reported

T2S

Detailed description of delta versions

Statement of Pending Instructions – semt.018

- 1) Safekeeping account is the first level of aggregation as it is the main mandatory field. The report will be generated per each SAC.
- 2) There should be as many "Txs" tags displayed as many pending transactions fulfilling the criteria previously explained.
- 3) Whenever the file size is exceeded (32 MB), a new one is created upon splitting. The new message aggregation will start at SAC level.



Detailed description of delta versions Statement of Settlement Allegements – semt.019

- ❑ **Availability and timing:** The Statement of Allegements report is available in Complete and Delta forms multiple times intraday. The first report of the day will differ for the Delta and Complete version. The delta version will not contain pending allegements which did not change since SoD or the generation of the previous report (same logic for subsequent reports).*
- ❑ **Report content:** The Statement of Allegements (delta) contains the following:
 - New, modified (only partial settlement indicator) or with a change of status alleged instructions from other counterparties for both domestic and cross-border businesses for which T2S has not received a matching instruction from the report receiver.
 - Allegement removals/cancellations are reported in the following cases:
 - For alleged instructions from other counterparties:
 - if a matching instruction has been received
 - if counterparty cancelled its instruction

* Please note that for further reference address to ECB presentation on [“Availability of T2S Generated Reports”](#)

- ❑ **No allegements to report** If there are no allegements to report (before mentioned for delta version), an Statement of Allegements report is provided containing the header section and general details of the message body until securities account tag with the “ActivityIndicator” field set to false.

Detailed description of delta versions

Statement of Settlement Allegements – semt.019–Example

In the following example we will include newly alleged settlement instructions, alleged settlement instructions modified from the previous report and previous allegements that are now cancelled or removed.

Alleged Instructions before creation of Delta Report 1:

- Pending alleged Inx A
- New alleged Inx B
- Modified formerly alleged Inx C (Partial Settlement Indicator)
- Removal of allegement for Inx D (upon matching)

Alleged Instructions before creation of Delta Report 2:

- Pending alleged Inx C
- New alleged Inx E
- Modified formerly alleged Inx A (Priority)
- Cancellation of previously alleged Inx B

Settlement Date D



Delta - Statement of Settlement Allegements 1

- Alleged Inx B reported
- Modified Alleged Inx C reported
- Removal of Allegement for Inx D reported

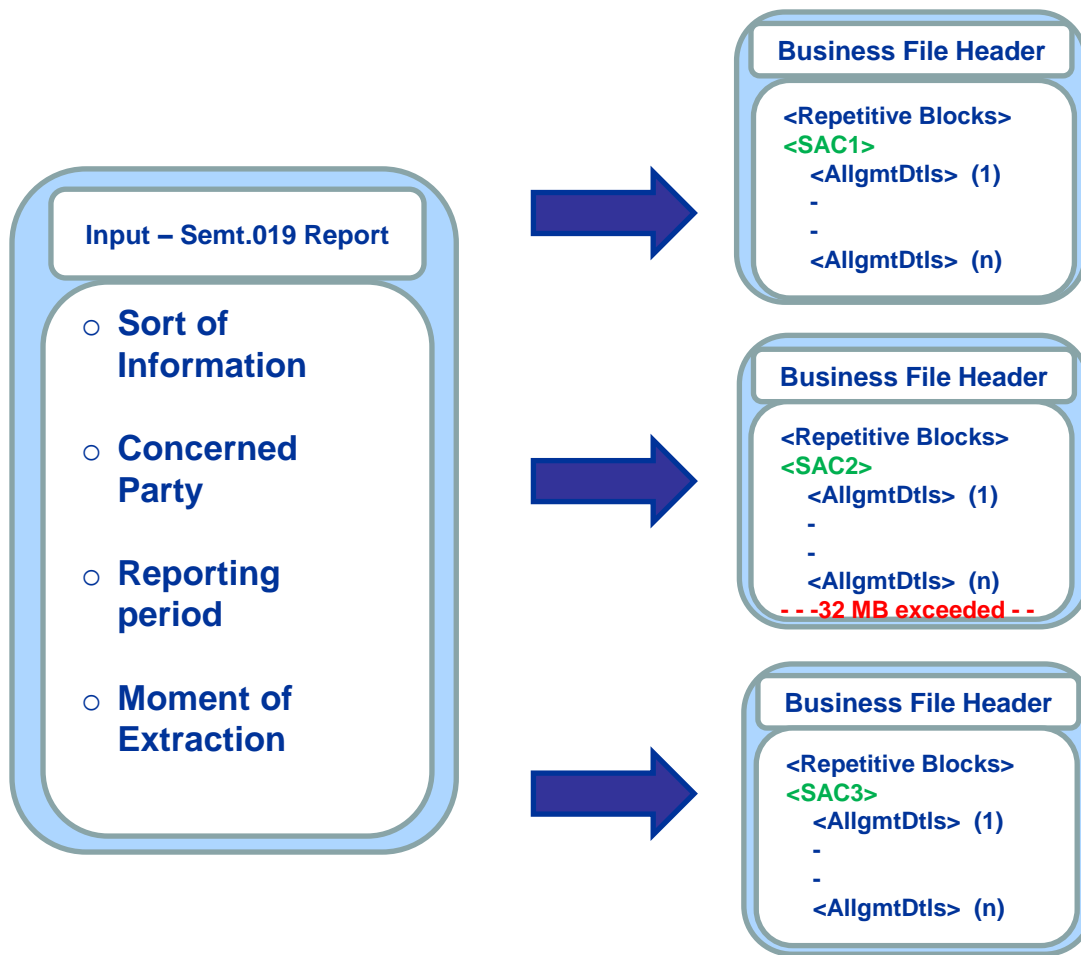
Delta - Statement of Settlement Allegements 2

- Alleged Inx E reported
- Modified Alleged Inx A reported
- Cancellation of Allegement for Inx B reported

T2S

Detailed description of delta versions Statement of Settlement Allegements – semt.019

- 1) Safekeeping account is the first level of aggregation as it is the main mandatory field. The report will be generated per each SAC.
- 2) There should be as many " AllegementDetails" tags displayed as many allegements fulfilling the criteria previously explained.



Thank you for the attention!

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