Delta Reporting Market Practice

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| **Changes to previous versions** |
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| Version 0.1August 2016 | Draft | Initial draft provided by the T2S community |  |
| Version 0.2September 2017 | Update  | Incorporation of JASDAC feedback |  |

# Scope and definitions:

The scope of this document is to illustrate how ISO20022 message formats can be used for delta reporting on securities settlement.

A delta report is a report which only contains data for which the status/content has changed since the generation of the previous report or since the start of the business day. Delta reports use the same message formats as complete reports, but they do not report instances which were not changed during the reporting period.

Delta reports are an efficient way to perform interim reconciliation, in order for actors not to have to rely on large and costly complete reports every day. This is relevant in particular for actors in TARGET2-Securities (T2S) having large amounts of data, mainly positions and pending instructions.

There are two main usage types of delta reports which can be differentiated:

* End-of-day delta reports which replace complete reports for end-of-day reconciliation. In this case an actor configures to receive only one delta report per day and required report type (positions, pending instructions, allegements etc.). The receipt of the full version (instead of the delta version) will be requested only on a weekly, monthly or yearly basis.
* Intra-day delta reports which complement complete reports for intra-day reconciliation. In this case an actor configures to receive several delta reports per day and required report type (positions, pending instructions, allegements etc.)

 **EXAMPLE (Statement of Holdings, semt.002)**

In a securities account (SAC1) a settlement party holds at day T\_0 three different securities positions (ISIN A, ISIN B and ISIN C), each in quantity 100. During day T\_1, a quantity of 40 ISIN B is sold and delivered to another account, i.e. a quantity of 60 ISIN B remains in SAC1.

At the end of settlement day T\_1, the following semt.002 reports would be created, depending on the report configuration of the settlement party in its settlement system:



A delta report only contains data for which the status/content has changed since the generation of the previous report or since the start of the business day. Delta reports use the same message formats as complete reports, but they do not report instances which were not changed during the reporting period.

As indicated above, there are different types of instructions to impact a securities position or a cash balance:

1. Settlement instructions, which transfer securities/cash from one account to another[[1]](#footnote-1). This can be through free of payment (FoP), delivery versus payment (DvP), delivery with payment (DwP) or payment free of delivery (PFoD).
2. Intra-position movements, which move existing positions into a different sub-position type within the same securities account. Intra-position movements are not connected to any cash movement.
3. Intra-balance movements, which move existing cash balances into a different sub-position type within the same cash account. Intra-balance movements are not connected to any securities movement.

In general the concept of delta reporting is the same for all three types of instructions to impact a securities position or cash balance, but small differences have to be considered, as described throughout the document.

# Actors and Roles:

Analogue to Market Practice Custody Holdings Reconciliation, section 1.3 Actors and Roles

Or: There are only two main actors involved in the process, the Settlement Executing Party (e.g. T2S) which generates the report and the Account Owner/Account Servicer which receives the report. For any settlement related report there might be other interested parties which subscribed to receive the report, but they are not relevant in this context.

# Activity Diagram:

Analogue to Market Practice Custody Holdings Reconciliation, section 1.5 Activity Diagram

Or: remove section

# Sequence Diagrams:

Analogue to Market Practice Custody Holdings Reconciliation, section 1.4 Sequence Diagrams

# Business data requirements:

To be added

# Market Practice Rules – Delta vs Complete Reports:

A settlement system could be designed in such a way that all supported report types can be received not only at the end of a business day, but also intra-day, i.e. several times during the business day. This is the case for example for the T2S platform. Configuration of reports can be done based on time triggers or event triggers, throughout the whole business day except during the maintenance window. This practice might differ in various settlement systems where statements may generally be created to report the end-of-day situation only. In addition, such reports differentiate between complete statements and delta statements. Whereas complete statements provide information based on a snapshot taken at a certain point in time, delta statements report changes made during a certain time span. This time span is defined differently for

* The first delta statement received on a certain business day

In this case the delta statement reports changes between the start-of-day and the time of creation of the delta statement

* Subsequent delta statements on the business day

In this case the delta statement reports changes made since the generation of the last statement. This previous statement itself could have been a complete or a delta statement

Delta reports can be used to get an overview of settlement activities performed during a certain time span. This might be relevant for actors as in settlement systems where there are several specific events and cut-offs throughout the day.

The following sections provide a high level overview of the differences between delta version and complete version of the report types mentioned, and the related usage rules. For all delta versions it has to be differentiated if a report is the first one generated on a given business day, or is a subsequent one (intra-day receipt).

## PostingReport

**SecuritiesTransactionPostingReport semt.017, IntraPositionMovementPostingReport semt.016 and IntraBalanceMovementPostingReport camt.084\*[[2]](#footnote-2)**

For all three posting reports, delta is only relevant for intra-day receipt in case more than one report is generated throughout the business day

* + The first delta report received during the day would contain the same data as the complete report.
	+ Any subsequent report would be different depending on the report type
		- Delta report only reports the instructions/movements that were posted since the generation of the previous report, if any.
		- Complete report always reports all instructions/movements that were posted since the start of the current business day.

**Business need**

In general, delta reports are used to prevent duplicate reporting of postings, with each and every report generated throughout the business day decreasing reporting costs and reducing the required processing capacity.

In T2S for example, posting reports can be configured several times throughout the day. This might be relevant for T2S Actors that rely on statements rather than on real-time messages for their internal book keeping. Intra-day reporting would be relevant to inform these actors about the current status of their settlement activities throughout the business day. Several points in time or business events could be considered to receive such reports, e.g. after each partial settlement window, or after the DvP cut-off.

## Modification Report

**SecuritiesSettlementConditionsModificationRequestReport semt.031\* and IntraBalanceMovement ModificationReport camt.081\*[[3]](#footnote-3)**

Each of these reports may be divided into two sub-reports, which can be generated and distributed separately, depending on the configuration and SSS; version that contains all pending requests and version that contains all executed requests.

The SecuritiesSettlementConditionsModificationRequestReport contains Amendment and Hold/Release Instructions related to Settlement instructions as well as to Intra-position movements (Only amendment instructions are applicable to intra-position movements). The IntraBalanceMovementModificationReport contains Amendment Instructions related to Intra-balance movements only.

For SSSs where modification requests are executed immediately, this means that the version which contains all pending requests will be empty on most business days. Only in case of technical issues or special circumstances a modification request might be accepted but not immediately executed. In such cases, the request would be included in the report. Due to this, the version which contains executed modification requests is much more commonly used.

## Report of pending modification requests

This scenario is only relevant for SSSs in which modification requests can be pending in practice, which is the case only if modification requests are not executed immediately.

* + For the report of pending modification requests, the delta version will in any case (end-of-day and intra-day) have a different content than the complete version.
		- The delta report contains all newly submitted modification requests which were accepted by the system since the start of the business day or since the generation of the previous report (delta or complete) but which were not yet executed, if any. In addition it would report all modification requests that were reported as pending in one of the previously received statements on that business day and which expired or were denied by the system in the meantime. Modification requests that were previously reported as pending, but were executed in the meantime, will not be included in the delta report of pending modification requests. Such executed requests will only be included in the report of executed modification requests (both delta and complete).
		- The complete report would always report all modification requests that are pending in the system

## Report of executed modification requests

* + The first delta report received during the day would contain the same data as the complete report. It contains all modification requests which were executed since the start of the business day, if any.
	+ Any subsequent report would be different depending on the report type
		- Delta report contains all modification requests that were executed since the generation of the previous report for executed modifications, if any.
		- Complete report always contains all modifications that were executed since the start of the current business day.

**Business need**

In general, delta reports are used to prevent duplicate reporting of modification requests, with each and every report generated throughout the business day decreasing reporting costs and reducing the required processing capacity.

This might be relevant for users of an SSS in different contexts:

* For internal book keeping, some users may rely on statements rather than on real-time messages. Intra-day reporting would be relevant to inform these actors about the current status of their settlement activities throughout the day.
* For information on the latest attribute values of a modified instruction to impact a securities position or cash balance.

## Cancellation Report

**SecuritiesTransactionCancellationRequestReport semt.033\* and IntraBalanceMovementCancellation Report camt.083\*[[4]](#footnote-4)**

Each of these reports may be divided into two sub-reports, which can be generated and distributed separately, depending on the configuration and SSS; version that contains all pending requests and version that contains all executed requests. Pending cancellation requests will mainly occur in situations where bilateral cancellation is required and the counterparty has not yet instructed its cancellation request, but depending on the SSS there might also be other cases possible.

Settlement instructions and intra-position movements would be included in the same report, while Intra-balance movements would be reported separately, making use of the two new ISO20022 messages.

## Report of pending cancellation requests

* + For the report of pending cancellation requests, the delta version will in any case (end-of-day and intra-day) have a different content than the complete version.
		- The delta report contains all newly submitted cancellation requests which were accepted by the settlement system since the start of the business day or since the generation of the previous report (delta or complete) but which were not yet executed, if any. In addition it will report all cancellation requests that were reported as pending in one of the previously received statements on that business day and which were cancelled by the system in the meantime. Cancellation requests that were previously reported as pending, but were executed in the meantime, will not be included in the delta report of pending cancellation requests. Such executed requests will only be included in the report of executed cancellation requests (both delta and complete)
		- The complete report would always report all cancellation requests that are pending in the settlement system

## Report of executed cancellation requests

* + The first delta report received during the day would contain the same data as the complete report. It contains all cancellation requests which were executed since the start of the business day, if any.
	+ Any subsequent report would be different depending on the report type
		- Delta report would contain all cancellation requests that were executed since the generation of the previous report for executed cancellations, if any.
		- Complete report would always report all cancellations that were executed since the start of the current business day.

**Business need**

In general, delta reports are used to prevent duplicate reporting of cancellation requests, with each and every report generated throughout the business day decreasing reporting costs and reducing the required processing capacity.

This might be relevant for users of an SSS in different contexts:

* For internal book keeping, some users may rely on statements rather than on real-time messages. Intra-day reporting would be relevant to inform these actors about the current status of their settlement activities throughout the day.
* For information on the latest attribute values of a modified instruction to impact a securities position or cash balance.

## Pending Report

**SecuritiesTransactionPendingReport semt.018, IntraPositionMovementPendingReport semt.034\* and IntraBalanceMovementPendingReport camt.085\*[[5]](#footnote-5)**

* For all three posting reports, delta version will in any case (end-of-day and intra-day) have a different content than the complete version
	+ - The delta report will contain all pending instructions/movement requests that were new, modified, cancelled or changed their status or reason code since the generation of the last report or since the start of the business day, if any. It will not show instructions/movement requests which have settled since the last report or SoD (no delta between ‘pending’ and ‘not pending anymore’) and will neither show pending instructions/movement requests for which no modification or status/reason code change has happened.
		- The complete report will contain all instructions/movement requests that are pending on the time of the report generation.

**Business need**

In general, delta reports are used to prevent duplicate reporting of pending instructions and movement requests, decreasing reporting costs and reducing the required processing capacity.

This might be relevant for users of an SSS for internal book keeping, as some users may rely on statements rather than on real-time messages. Intra-day reporting would be relevant to inform these users about the current status of their settlement activities throughout the day. Several times or business events could be considered to receive such reports, e.g. after each partial settlement window, or after the T2S DvP cut-off.

## Allegement Report

**SecuritiesSettlementTransactionAllegementReport semt.019**

For the allegement report, delta version will in any case (end-of-day and intra-day) have a different content than the complete version

* + The delta report will contain alleged settlement instructions, if one of the following conditions applied since the generation of the last report or since the start of the business day (the reporting period):
		- Newly alleged settlement instructions, if any
		- Settlement instructions for which an allegement was removed or cancelled, if any.

The delta report will not show alleged settlement instructions for which there was no change in the allegement status since the generation of the last report or the start of the business day.

* + The complete report will contain all alleged settlement instructions. It will not report settlement instructions for which allegement was removed or cancelled.

**Business need**

In general, the delta report for allegements is used to prevent duplicate reporting of alleged instructions and increase level of information (removal and cancelled allegements), allowing more quality of information.

This might be relevant for users of an SSS in different contexts:

* For internal book keeping, some users may rely on statements rather than on real-time messages. Intra-day reporting would be relevant to inform these actors about the current status of their settlement activities throughout the day. Several times or business events could be considered to receive such reports, e.g. after each partial settlement window, or after the DvP cut-off.
* Some users may also use the delta report of allegements to get information about alleged settlement instructions for which the partial settlement indicator was changed (the updated value will be reported).

## SecuritiesBalanceCustodyReport

**Statement of Holdings, semt.002**

For the statement of holdings, delta version will in any case (end-of-day and intra-day) have a different content than the complete version

* + The delta report will contain all securities positions and sub-positions (if supported by the SSS) in a given account which have changed or became zero since the generation of the last report or since the start of the business day. This includes positions which have turned zero. The change can either be triggered by an increase or decrease of an aggregated position or by a movement between different position types within the same position. If a SSS supports sub-position types, the delta report may either report all positions in a given ISIN if at least one sub-position was subject to a change, or only the sub-positions which were subject to a change are reported.
	+ The complete report will contain all securities positions (aggregated and sub-positions) in a given account on the time of the report generation. In addition, it will report securities for which the position has changed to zero on the same business day.

**Business need**

In general, delta reports can be used to prevent duplicate reporting of securities positions, which decreases reporting costs and reduces the required processing capacity.

This might be relevant for users of an SSS that rely on statements rather than on real-time messages for their internal book keeping. Intra-day reporting would be relevant to inform these actors about the current status of their settlement activities throughout the day. Several times or business events could be considered to receive such reports, e.g. after each partial settlement window, or after the DvP cut-off.

## General market practice rules

1. For the reporting of partial settlement, the same rules apply for complete reporting as well as delta reporting. For a Market Practice on Partial Settlement refer to the related SMPG document. The market practice on partial settlement was implemented in May 2015.
2. For pagination, the same rules apply for complete reporting as well as delta reporting. A description of fields to be used to handle pagination can be found in the Market Practice on Custody Holdings Reconciliation.
3. If there was no settlement activity in a given securities account during the reporting period, an SSS may either send an empty report to explicitly inform that there was no activity, or may not send a report at all. For all delta and complete reports mentioned, the Activity Indicator <RptGnlDtls><ActvtyInd> is set to TRUE if there is at least one item to report. If there is no item to report and a report is sent out, the Activity Indicator is set to FALSE

# Detailed Rules

## Pending Report

**SecuritiesTransactionPendingReport semt.018, IntraPositionMovementPendingReport semt.034\* and IntraBalanceMovementPendingReport camt.085\*[[6]](#footnote-6)**

The delta report will contain all pending instructions, pending intra position movements or pending intra balance movements that were new, modified, cancelled, partially settled or partially executed or changed their status or reason code since the generation of the last report or since the start of the business day. It does not contain instructions or movements which were previously pending but which have settled completely during the reporting period. All four conditions which result in inclusion of an instruction to the delta report shall be defined in more detail in this section.

New instructions, intra position movements and intra-balance movements

These are instructions and movements that were accepted by a settlement system before generation of the report and which have not been reported in a previous statement. It does not contain instructions and movements which were newly submitted within the reporting period, but were already settled prior to the generation of the report.

Modified instructions, intra position movements and intra-balance movements

These are instructions and movements for which a modification of a processing indicator was executed by a settlement system before generation of the report and which have not been reported in a previous statement. Processing indicators in T2S are

* Priority Value
* Linkage
* Partial Settlement Indicator, only applicable for settlement instructions

For example, a modification request which was submitted to a settlement system but which was not yet executed would not lead to inclusion of the instruction in the Pending Report.

Cancelled instructions, intra position movements and intra-balance movements

These are instructions and movements for which a cancellation was executed before generation of the report and which have not been reported in a previous statement. In general, cancelled instructions and movements are not considered pending any longer and are therefore not included in Pending Reports.

The inclusion of cancelled instructions and movements in a Pending Report is a behaviour which is very specific to the T2S delta version of the Pending Report. The complete version of the T2S Pending Report follows the general rule, i.e. excludes cancelled instructions and movements, whereas the delta version explicitly includes them.

Partially settled instruction

These are instructions which have settled partially during the reporting period. This could be the first part or any subsequent part, but not the last remaining part (this way the instruction is fully settled and not pending any longer). In case of partial settlement, situations may occur where an instruction is reported in a delta report, even if there was no visible change in any status. The entry will look exactly the same as in the previous report, as the statement of pending instructions only reports the original quantity and amount, not the remaining ones.

Note: In the specific example of T2S, partial settlement of instructions will be applied during night-time settlement, but only during specific partial settlement windows during real-time settlement. Outside these windows, T2S does not attempt for partial settlement during real-time settlement.

Partially executed intra position movements and intra-balance movements

These are movements which have been executed partially during the reporting period. This could be the first part or any subsequent part, but not the last remaining part (this way the movement is fully executed and not pending any longer). In case of partial execution, situations may occur where a movement is reported in a delta report, even if there was no visible change in any status. The entry will look exactly the same as in the previous report, as the statements of pending intra position movements and pending intra-balance movements only report the original quantity and amount, not the remaining ones.

Note: different to partial settlement on instruction level, intra position movements and intra balance movements can be executed in parts at any time during the business day, whenever the system is available for settlement.

Status change of an instruction

* Matching Status – change from unmatched to matched
* Any change that is causing a change in the pending reason code (settlement status section)
	+ Change of hold status (any hold of own instruction or any hold of counterparty instruction)
	+ Changes in reason why settlement attempt was failing, independent from instruction parameters, e.g. lack of cash or securities, securities or cash account blocked (all for own or counterparty side), change in status of a linked instruction or a pool that hinders settlement, market deadline was missed, partial settlement execution
* Any change in the instruction processing status
	+ Cancellation requested
	+ Cancellation requested by counterparty

In case a status settlement or processing status code was added and removed again (or removed and added) within the reporting period, e.g. instruction was released and set on hold again (same hold status), then the instruction will be included in the delta report, even if the same code is reported as before.

In the specific case of T2S, all pending reasons which do apply are reported to the T2S Actors, which could be several ones. In order for an instruction to be included in the delta version of the report, it is sufficient if one of the codes has changed (was added or removed).

## Allegement Report

**SecuritiesSettlementTransactionAllegementReport Semt.019**

The delta report will contain all newly alleged settlement instructions, as well as all settlement instructions for which allegement was removed or cancelled since the generation of the last report or since the start of the business day. It will also contain alleged settlement instructions modified (i.e. partial settlement indicator). It will not show alleged settlement instructions for which there was no change in the allegement status since the generation of the last report or the start of the business day.

Newly alleged settlement instructions

These are new allegements from other counterparties generated since the start of Day or since the last report of the present Business Date.

Allegement removals/cancellations

They are reported in the following cases to let the interested party know that the request for a settlement instruction to be matched with the one from the counterparty does not exist any longer.

 For alleged instructions from other counterparties:

* + if a matching instruction has been received.
	+ if counterparty cancelled its instruction (or the instruction was automatically cancelled by the system)

Modified

If previously alleged instructions have changed the partial settlement indicator before the generation of new delta report, then the updated value will be reported. On the other hand, alleged settlement instructions for which there was a change in the hold status, priority or linkage section will not be shown.

1. Settlement instructions can also be used to move positions/balances within the same account from an available/deliverable position type to another sub-position type or vice versa. [↑](#footnote-ref-1)
2. \* This is a message type developed on the basis of the Business Justification for the Development of new UNIFI (ISO20022) Financial Repository submitted by Deutsche Bundesbank on behalf of the 4CB in April 2009 which is not part of the standard set of ISO20022 messages yet. [↑](#footnote-ref-2)
3. \* This is a message type developed on the basis of the Business Justification for the Development of new UNIFI (ISO20022) Financial Repository submitted by Deutsche Bundesbank on behalf of the 4CB in April 2009 which is not part of the standard set of ISO20022 messages yet. [↑](#footnote-ref-3)
4. \* This is a message type developed on the basis of the Business Justification for the Development of new UNIFI (ISO20022) Financial Repository submitted by Deutsche Bundesbank on behalf of the 4CB in April 2009 which is not part of the standard set of ISO20022 messages yet. [↑](#footnote-ref-4)
5. \* This is a message type developed on the basis of the Business Justification for the Development of new UNIFI (ISO20022) Financial Repository submitted by Deutsche Bundesbank on behalf of the 4CB in April 2009 which is not part of the standard set of ISO20022 messages yet. [↑](#footnote-ref-5)
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