Insights on Message subscription and Routing configuration

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European Central Bank
Message subscription is a rules-based configuration to specify the business elements which T2S uses to identify the outgoing messages to be sent to the relevant T2S Actor.

Routing configurations specify the technical elements which T2S uses to send a given outgoing message to the relevant T2S Actor.

This presentation explains the concepts of message subscription and routing configuration in T2S.

First half of the presentation gives details about setup of message subscription and it also includes specific scenario to explain usage of message subscription.

Second half of the presentation gives details about setup of routing configuration and explains various parameters to be used in routing configuration in detail.
The presentation aims to address following key questions on Message subscription and Routing configuration

- How is message subscription set up?
- Who can setup message subscription?
- Who can receive messages from T2S?
- Are there any limitations while setting up message subscription?
- What is the concept of routing configuration?
- Which are the different types of transfer services?
- How is routing configuration set up?
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1 Message subscription

2 Routing configuration
What is…

- The **message subscription** defines if a message has to be sent or not to a given T2S Actor.

- The message subscription does not define to which technical address of a recipient (i.e. T2S Actor) the message is actually delivered.

- The **routing configuration** specifies the technical elements (i.e. a technical address) T2S uses to send a given outgoing message to the relevant T2S Actor.

- Routing configuration does not specify the actual set of messages T2S has to send to a T2S Actor.
All participating CSDs, Central Banks and their participants [as directly connected parties (DCPs)] in T2S need to have the flexibility to choose the messages they do or do not wish to receive, so as to handle their daily business activities.

“Message subscription” service of T2S offers a free choice for selecting which outbound messages a T2S Actor intends to receive from T2S.

It also offers T2S Actors the possibility to subscribe to copies of messages from a pre-defined list.

E.g. Copies of an inbound message such as a settlement instruction.
Each participating CSD and Central Bank can define for itself and its participants which messages and copies of messages have to be received.

The “message subscription” for T2S Actors is a configurable item in the T2S Static data with its set of rules.

All outbound messages from T2S will be sent out to the T2S Actor according to their message subscription setup in T2S, except:

- Technical acknowledgements*
- Reactions on erroneous inbound message after technical validations by T2S*
- Query results*
- Reports (set-up via report configuration)
- Invoice and Invoice Cancellation
- Floor/Ceiling notification
- Outbound liquidity transfer messages

* sent as a response by T2S or its infrastructure to the technical address from which the inbound message is received
The set-up is to be done via the T2S GUI (U2A)
- T2S actors are able to maintain the message subscription only as of a future date

The CSD/NCB creates a rule set with the following
- Validity period (i.e. Valid From date & Valid Till date)
- Positive / Negative parameter defining whether a match to a rule in a rule set should trigger T2S sending of the message or not
- Name and description for the Rule set
- Set of rules: Using a set of pre-defined parameters *(Detailed in the next slides)*
  - Valid From/To for each rule
- A rule set is linked to one or more T2S Parties (e.g. recipients)

Possibility to reuse an existing rule set and link it to other Parties (e.g. “profile”)
The potential list of recipients of a message from T2S are referred to as "Interested Parties"

The CSD and the Central Bank can set up the interested parties (i.e. third parties*) via the T2S GUI (U2A).

The list of interested parties depends on the type of outbound message

E.g.: For a confirmation of a settlement instruction the following parties can be interested parties
- CSD
- Account owner (Securities account)
- Business sender, Instructing party
- Third party
- NCB of the DCA owner
- Payment Bank owning the DCA

* A third party that is not an interested party for a given message can be entitled to receive copies.

The CSD will configure if these parties should receive copies of instruction, statuses (and copies), confirmations

The NCB will configure if these parties should receive Debit/Credit notifications for instructions involving cash movements
## Message subscription - Setup
### Parameter types available for message subscription

<table>
<thead>
<tr>
<th>Parameter type</th>
<th>Description</th>
<th>Applicable to</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Message Type</td>
<td>Specifies the type of message</td>
<td>All messages</td>
<td>PartyStatusAdvice</td>
</tr>
<tr>
<td>Instruction Type</td>
<td>Specifies the type of instruction included in the message</td>
<td>Settlement instruction, status, confirmation and BankToCustomerDebitCreditNotification</td>
<td>DFoP, RFoP, DVP, RVP, DWP, RWP, PFoD-CRDT and PFoD-DBIT</td>
</tr>
<tr>
<td>Message status</td>
<td>Specifies the status of the request included in the message</td>
<td>Subset of messages (e.g. outbound statuses)</td>
<td>For instance ProcessingStatus for a static data status advice, while SettlementStatus for LT</td>
</tr>
<tr>
<td>Party</td>
<td>Specifies the party referenced in the message</td>
<td>Subset of messages</td>
<td>BIC of CSD Participant</td>
</tr>
<tr>
<td>T2S Securities account number</td>
<td>Specifies the securities account in the message</td>
<td>Subset of messages</td>
<td>SECAC123 in a settlement instruction</td>
</tr>
<tr>
<td>ISIN</td>
<td>Specifies the financial instrument in the message</td>
<td>Subset of messages</td>
<td>DE0006231004 in an intra-position movement</td>
</tr>
<tr>
<td>T2S Dedicated Cash account number</td>
<td>Specifies the DCA referenced in the message</td>
<td>Subset of messages</td>
<td>CASH123 in a settlement instruction</td>
</tr>
<tr>
<td>Instruction status</td>
<td>Specifies the status of the instruction</td>
<td>Subset of messages (status of settlement instructions, restrictions, maintenance instruction)</td>
<td>CSD Hold status</td>
</tr>
<tr>
<td>Transaction code</td>
<td>Specifies the ISO transaction code for the instruction</td>
<td>Settlement instruction, status and confirmation</td>
<td>CORP, TRAD etc…</td>
</tr>
<tr>
<td>Currency</td>
<td>Specifies the currency code referenced in the message</td>
<td>Subset of messages</td>
<td>EUR</td>
</tr>
<tr>
<td>Already Matched Flag</td>
<td>specifies whether to select only one side of the reporting for “already matched” instruction in T2S.</td>
<td>Subset of messages</td>
<td>TRUE</td>
</tr>
</tbody>
</table>
## Message subscription - Setup

Messages available for inbound and outbound copies

- A subset of messages are available for copies to the interested parties
  (Refer to approved change request T2S_0333_URD)

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Direction</th>
</tr>
</thead>
<tbody>
<tr>
<td>sese.023</td>
<td>SecuritiesSettlementTransaction</td>
<td>Incoming</td>
</tr>
<tr>
<td>sent.013</td>
<td>IntraPositionMovement</td>
<td>Incoming</td>
</tr>
<tr>
<td>camt.066</td>
<td>IntraBalanceMovement</td>
<td>Incoming</td>
</tr>
<tr>
<td>acmt.010</td>
<td>AccountRequestAcknowledgement</td>
<td>Outgoing</td>
</tr>
<tr>
<td>reda.016</td>
<td>PartyStatusAdvice</td>
<td>Outgoing</td>
</tr>
<tr>
<td>reda.008</td>
<td>SecurityCreationStatusAdvice</td>
<td>Outgoing</td>
</tr>
<tr>
<td>reda.029</td>
<td>SecurityMaintenanceStatusAdvice</td>
<td>Outgoing</td>
</tr>
<tr>
<td>reda.030</td>
<td>SecurityDeletionStatusAdvice</td>
<td>Outgoing</td>
</tr>
<tr>
<td>reda.020</td>
<td>SecuritiesAccountStatusAdvice</td>
<td>Outgoing</td>
</tr>
<tr>
<td>reda.028</td>
<td>CollateralDataStatusAdvice</td>
<td>Outgoing</td>
</tr>
<tr>
<td>reda.044</td>
<td>EligibleCounterpartCSDStatusAdvice</td>
<td>Outgoing</td>
</tr>
<tr>
<td>reda.047</td>
<td>SecurityCSDLinkStatusAdvice</td>
<td>Outgoing</td>
</tr>
<tr>
<td>reda.051</td>
<td>AccountLinkStatusAdvice</td>
<td>Outgoing</td>
</tr>
<tr>
<td>camt.025</td>
<td>Receipt</td>
<td>Outgoing</td>
</tr>
<tr>
<td>camt.054</td>
<td>BankToCustomerDebitCreditNotification</td>
<td>Outgoing</td>
</tr>
<tr>
<td>sent.014</td>
<td>IntraPositionMovementStatusAdvice</td>
<td>Outgoing</td>
</tr>
<tr>
<td>sent.015</td>
<td>IntraPositionMovementConfirmation</td>
<td>Outgoing</td>
</tr>
<tr>
<td>sese.024</td>
<td>SecuritiesSettlementTransactionStatusAdvice</td>
<td>Outgoing</td>
</tr>
<tr>
<td>sese.025</td>
<td>SecuritiesSettlementTransactionConfirmation</td>
<td>Outgoing</td>
</tr>
<tr>
<td>sese.027</td>
<td>SecuritiesTransactionCancellationRequestStatusAdvice</td>
<td>Outgoing</td>
</tr>
<tr>
<td>sese.028</td>
<td>SecuritiesSettlementTransactionAllegationNotification</td>
<td>Outgoing</td>
</tr>
<tr>
<td>sese.029</td>
<td>SecuritiesMessageCancellationAdvice</td>
<td>Outgoing</td>
</tr>
<tr>
<td>sese.031</td>
<td>SecuritiesSettlementAllegationRemovalAdvice</td>
<td>Outgoing</td>
</tr>
<tr>
<td>sese.032</td>
<td>SecuritiesSettlementConditionsModificationStatusAdvice</td>
<td>Outgoing</td>
</tr>
<tr>
<td>camt.067</td>
<td>IntraBalanceMovementStatusAdvice</td>
<td>Outgoing</td>
</tr>
<tr>
<td>camt.068</td>
<td>IntraBalanceMovementConfirmation</td>
<td>Outgoing</td>
</tr>
<tr>
<td>sese.032</td>
<td>SecuritiesSettlementTransactionGenerationNotification</td>
<td>Outgoing</td>
</tr>
<tr>
<td>camt.073</td>
<td>IntraBalanceMovementCancellationRequestStatusAdvice</td>
<td>Outgoing</td>
</tr>
<tr>
<td>camt.075</td>
<td>IntraBalanceMovementCancellationRequestStatusAdvice</td>
<td>Outgoing</td>
</tr>
</tbody>
</table>

Depending on the Type of message and its particular usage, a given list of interested parties applies.

T2S will **compare the content** of the message field to the value of a parameter in a rule of a message subscription rule set.

**Note:** T2S enriched fields (such as a T2S DCA when not specified in a settlement instruction) may not be used to send an outbound copy of the inbound settlement instruction, though the T2S DCA could be a parameter setup in the message subscription.
CSD/CB can configure the message subscription features on the basis of rule-based models, i.e. sets of rules combining group of parameters selected in a number of possible parameter types.

The following limits have been defined for maximum overall number of group of parameters for the active rule sets and distinct values for each parameter within each rule

i. Rules: **max 1500**

ii. Distinct parameter values per parameter type: **max 50**
Message subscription - Usage
Inbound copy, outbound copy: highlight (1/2)

- Inbound copy of a message (e.g. a settlement instruction/restriction)
  - Are sent after positive business validation

- Outbound copy

Note: The inbound copies is also available for instructions input via T2S GUI

Note: Even if the DCP1 does not subscribe to the status, other interested parties can receive it

LCMM would identify a potential list of interested parties based on the information in the underlying settlement instruction
A third party that is not an interested party for a given message can be entitled to receive copies.

This is available via the privilege “Third party receipt”:
- The privilege applies to the object type “Party”
- When LCMM identifies that a Party is an Interested Party, INT will further check if any other interested party (i.e., third party) is granted this privilege.
- Then INT will check whether this Third Party has subscribed to the message.

Message subscription - Usage
Inbound copy, outbound copy: highlight (2/2)

DCP1
Settlement instruction (via GUI or A2A)

CSD
Copy of the SI via A2A

DCP3
Copy of the SI via A2A

DCP4
DCP4 though allowed as a third party via a new privilege, has not subscribed for such a copy.

Third party allowed: DCP3 / DCP4

Message subscription check: CSD / DCP3 subscribed

Business validation

Interested parties: DCP1 / CSD

INT

LCMM

Life cycle Management and Matching Interface
**Business scenario**

- Party A delivers to Party B
- Party A owns (linked to) Sec.AC.PtyA
- Party B owns (linked to) Sec.AC.PtyB

- Party C provides custody services for Party B and wants to monitor transactions of Party B
  - e.g. the privilege was granted by CSDA to Party C so that it can receive copies when the interested party is Party B

**Message subscription configuration (Configured by CSDA for its participants)**

<table>
<thead>
<tr>
<th>Rule Set Id</th>
<th>Rule Id</th>
<th>Recipient</th>
<th>Message Type</th>
<th>Safekeeping account</th>
<th>Instruction Status</th>
<th>Positive / Negative parameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rule Set 1</td>
<td>111</td>
<td>Party A</td>
<td>Status advice</td>
<td>-</td>
<td>Accepted</td>
<td>No</td>
</tr>
<tr>
<td>Rule Set 2</td>
<td>112</td>
<td>Party A</td>
<td>Settlement confirmation</td>
<td>-</td>
<td>n/a</td>
<td>Yes</td>
</tr>
<tr>
<td>Rule Set 3</td>
<td>333</td>
<td>CSDA</td>
<td>Settlement confirmation</td>
<td>-</td>
<td>n/a</td>
<td>Yes</td>
</tr>
<tr>
<td>Rule Set 4</td>
<td>444</td>
<td>Party C</td>
<td>Settlement confirmation</td>
<td>Sec.AC.PtyB</td>
<td></td>
<td>Yes</td>
</tr>
</tbody>
</table>
Message subscription - Example
Intra-CSD scenario (Focus on Party A)

<table>
<thead>
<tr>
<th>Rule Set Id</th>
<th>Rule Id</th>
<th>Recipient</th>
<th>Message Type</th>
<th>Safekeeping account</th>
<th>Instruction Status</th>
<th>Positive / Negative parameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rule Set 1</td>
<td>111</td>
<td>Party A</td>
<td>Status advice</td>
<td>-</td>
<td>Accepted</td>
<td>No</td>
</tr>
<tr>
<td>Rule Set 2</td>
<td>112</td>
<td>Party A</td>
<td>Settlement confirmation</td>
<td>-</td>
<td>n/a</td>
<td>Yes</td>
</tr>
<tr>
<td>Rule Set 3</td>
<td>333</td>
<td>CSDA</td>
<td>Settlement confirmation</td>
<td>-</td>
<td>n/a</td>
<td>Yes</td>
</tr>
<tr>
<td>Rule Set 4</td>
<td>444</td>
<td>Party C</td>
<td>Settlement confirmation</td>
<td>Sec.AC.PtyB</td>
<td></td>
<td>Yes</td>
</tr>
</tbody>
</table>

T2S will address the following to Party A

All status advices except the acceptance (e.g. it will receive the rejection notifications, matching notifications, eligibility failure notifications etc…)

All settlement confirmations for which Party A is an Interested Party
# Message subscription - Example

**Intra-CSD scenario (Focus on CSD A)**

<table>
<thead>
<tr>
<th>Rule Set Id</th>
<th>Rule Id</th>
<th>Recipient</th>
<th>Message Type</th>
<th>Safekeeping account</th>
<th>Instruction Status</th>
<th>Positive / Negative parameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rule Set 1</td>
<td>111</td>
<td>Party A</td>
<td>Status advice</td>
<td>-</td>
<td>Accepted</td>
<td>No</td>
</tr>
<tr>
<td>Rule Set 2</td>
<td>112</td>
<td>Party A</td>
<td>Settlement confirmation</td>
<td>-</td>
<td>n/a</td>
<td>Yes</td>
</tr>
<tr>
<td>Rule Set 3</td>
<td>333</td>
<td>CSDA</td>
<td>Settlement confirmation</td>
<td>-</td>
<td>n/a</td>
<td>Yes</td>
</tr>
<tr>
<td>Rule Set 4</td>
<td>444</td>
<td>Party C</td>
<td>Settlement confirmation</td>
<td>Sec.AC.PtyB</td>
<td></td>
<td>Yes</td>
</tr>
</tbody>
</table>

**T2S will address the following to CSD A**

All settlement confirmation for which CSDA is an interested party.
Message subscription - Example
Intra-CSD scenario (Focus on Party C)

T2S will address the following to Party C

All settlement confirmations related to transactions involving Sec.AC.PtyB securities account

(Pre-condition: privilege granted by the CSDA to Party C, when the interested party is Party B)
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1 Message subscription

2 Routing configuration
Routing Requirements

- Any outbound communication from T2S, after the message subscription check, has to be routed (i.e. sent) to the appropriate technical address of the intended T2S Actor as a recipient.

- Any outbound communication generated by T2S must reach the intended T2S Actor in due time (or its network provider if the network provider guarantees delivery).

- An outbound communication may need to be sent to a technical addresses of a T2S Actor.
Routing

Types of transfer service

- Outbound communication via A2A mode: T2S actors can exchanges messages and files by means of two types of transfer service

  - **Real time:** it requires that both parties, i.e. the sender and the receiver, are available at the same time to exchange the relevant data. In case of unavailability of the receiver, no retry mechanism is foreseen. For real-time transfers, T2S exchanges messages and files in push mode only;

  - **Store and forward:** it enables the sender to transmit messages or files even when the receiver is not available. In case of temporary unavailability of the receiver, the connectivity services provider stores messages and files and delivers them as soon as the receiver becomes available again.
<table>
<thead>
<tr>
<th>T2S Business data exchanges</th>
<th>Inbound communication</th>
<th>Outbound communication</th>
</tr>
</thead>
</table>
| Settlement related messages | Message based – Store and forward  
File based – Store and forward | Message based – Store and forward  
File based – Store and forward |
| Static data updates         | Message based – Real time  
File based – Real time | Message based – Real time  
Message based – Store and forward  
File based – Real time  
File based – Store and forward |
| Queries/Report (pull)       | n/a                    | Message based – Store and forward  
File based – Store and forward |
| Reports (push)              | n/a                    | Message based – Store and forward  
File based – Store and forward |
Routing configuration

Set-up

- The setup of routing configurations includes the configuration of the following Static Data objects in T2S:
  - Network services
  - Party technical addresses
  - Links between network services and party technical addresses and
  - Default and conditional routings.

- Hereunder is detailed how the set-up is done and by whom:

<table>
<thead>
<tr>
<th>Static data object</th>
<th>Responsible T2S actor</th>
<th>Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>Network service</td>
<td>T2S Operator</td>
<td>U2A</td>
</tr>
<tr>
<td>Party technical address</td>
<td>T2S Operator, CSD, CB</td>
<td>U2A/A2A (via PartyCreationRequest)</td>
</tr>
<tr>
<td>Link between network service and Party technical address</td>
<td>T2S Operator, CSD, CB</td>
<td>U2A</td>
</tr>
<tr>
<td>Default and conditional routing</td>
<td>CSD, CB, CSD Participant, Payment Bank</td>
<td>U2A</td>
</tr>
</tbody>
</table>
Routing configuration – Setup

Network service

- Network service corresponds to one messaging service of one of the accredited connectivity services providers.

- T2S stores in Static Data all the Network services allowing technical connectivity between T2S Actors and T2S

- T2S Operator creates the following parameters for every network service:
  - Network service name
  - Textual description of network service
  - Type of technical address for the network service

Example 52 – Network Service Definition

![Network Service Example](image-url)
CSDs and Central Banks, when creating their T2S Parties (i.e. their participants), are required to provide the technical addresses in T2S.

- T2S will use these to address the T2S Party for outbound A2A communication.
- Different types of technical addresses could be provided in T2S. Examples: BIC, Distinguished Name, IP address, etc. (depending on the Network providers requirements)
Routing configuration – Setup
Party technical address and Network Service

- Each Party Technical Address has to be linked to the relevant Network Service, so that T2S can use them to route outbound communication.

- Different network services may use the same technical address type, which means that the same Party Technical Address may be used to exchange data using different Network Services.

- Consequently, there is a many-to-many association between the catalogue of Network Services and the set of Party Technical Address defined in T2S.

**Note:**
The linked Network Service identifies the type of Party Technical Address. Consequently, if a Party Technical Address is linked to multiple Network Services, then all the Technical Address Types shall be the same.
T2S applies a mandatory routing for the following outbound communication (i.e. T2S does not allow defining different routing configurations for these kinds of messages).
- Acknowledgement of receipt;
- Reactions on erroneous inbound messages;
- Query responses.

This means that the Network service and Party technical address used for the inbound message will be used for the above-mentioned outbound communications.

For all other type of outbound communication (i.e. message-based/file-based, real-time/store-n-forward), the T2S Actors can define either
- A default routing (OR)
- One or more conditional routings (based on a set of parameters)

<table>
<thead>
<tr>
<th>NETWORK SERVICE NAME</th>
<th>NETWORK SERVICE FEATURES</th>
<th>TECHNICAL ADDRESS TYPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>NetSrvA</td>
<td>Message-based, store-n-forward</td>
<td>Distinguished Name</td>
</tr>
<tr>
<td>NetSrvB</td>
<td>File-based, store-n-forward</td>
<td>Distinguished Name</td>
</tr>
</tbody>
</table>
When configuring a default routing configuration, the T2S Actor (e.g. CSD, Central Bank, DCP) has to specify the following:

- the routing description;
- the network service T2S has to use for the default routing;
- the party technical address T2S has to use for the default routing;
- a compression setting, if T2S must compress the relevant data before sending them to the recipient.

**Table 24 – Default routing configurations**

<table>
<thead>
<tr>
<th>Routing Description</th>
<th>Network Service</th>
<th>Party Technical Address</th>
<th>Compression</th>
</tr>
</thead>
<tbody>
<tr>
<td>Default 1</td>
<td>NetSrvA</td>
<td>&lt;ou=dept_123, o=prtyctbxx, o=netprv&gt;</td>
<td>No</td>
</tr>
<tr>
<td>Default 2</td>
<td>NetSrvB</td>
<td>&lt;ou=dept_123, o=prtyctbxx, o=netprv&gt;</td>
<td>ZIP</td>
</tr>
</tbody>
</table>
When configuring a conditional routing configuration, the T2S Actor (CSD, Central Bank, DCP) specifies the following:

- the sequence number of the conditional routing, specifying the order according to which T2S tries to match the current outbound message with one of the conditional routing configuration;

- a set of conditions specifying the criteria on which the routing is defined:
  - the type of the message,
  - the size boundaries (i.e. the minimum and the maximum size of the message),
  - the currency of the message;

- a Boolean information specifying whether the set of conditions represents a positive or a negative list.

### Table 26 – Conditional routing configurations

<table>
<thead>
<tr>
<th>SEQUENCE</th>
<th>ROUTING DESCRIPTION</th>
<th>MESSAGE TYPE</th>
<th>SIZE</th>
<th>CURRENCY</th>
<th>NETWORK SERVICE</th>
<th>PARTY TECHNICAL ADDRESS</th>
<th>COMPRESSION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Conditional 1</td>
<td>-</td>
<td>-</td>
<td>DKK</td>
<td>NetSrvA</td>
<td>&lt;ou=dept_987, o=prtyccittooo, o=netprv&gt;</td>
<td>ZIP</td>
</tr>
<tr>
<td>2</td>
<td>Conditional 2</td>
<td>-</td>
<td>-</td>
<td>DKK</td>
<td>NetSrvB</td>
<td>&lt;ou=dept_987, o=prtyccittooo, o=netprv&gt;</td>
<td>ZIP</td>
</tr>
<tr>
<td>3</td>
<td>Conditional 3</td>
<td>NTSRM</td>
<td>-</td>
<td>DKK</td>
<td>NetSrvA</td>
<td>&lt;ou=dept_987, o=prtyccittooo, o=netprv&gt;</td>
<td>ZIP</td>
</tr>
<tr>
<td>4</td>
<td>Conditional 4</td>
<td>NTSRM</td>
<td>-</td>
<td>DKK</td>
<td>NetSrvB</td>
<td>&lt;ou=dept_987, o=prtyccittooo, o=netprv&gt;</td>
<td>ZIP</td>
</tr>
</tbody>
</table>
Routing
Focus on Data compression - Usage

- If the size of the outbound communication is smaller than 2KB, then T2S does not compress the data, regardless of compression setting specified in the matched routing configuration.
- If the outbound communication is a report, then T2S compresses the data regardless of compression setting specified in the matched routing configuration.
- For all other types of outbound communication, T2S compresses the data only if this is required by the compression setting specified in the matched routing configuration.
- T2S Actor can choose: “no compression” or “compression using ZIP algorithm”

<table>
<thead>
<tr>
<th>Settlement Day Period</th>
<th>Matched Routing Configuration</th>
<th>Outbound Communication</th>
<th>Compressed Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real-time settlement</td>
<td>Default 1</td>
<td>All individual messages ≤ 32KB</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Default 2</td>
<td>All individual messages &gt; 32KB</td>
<td>Yes</td>
</tr>
<tr>
<td>Night-time settlement</td>
<td>Default 1</td>
<td>All individual messages not listed in Table 20 ≤ 32KB</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Files of messages included in Table 20 ≤ 32KB</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Default 2</td>
<td>All individual messages not listed in Table 20 &gt; 32KB</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Files of messages included in Table 20 &gt; 32KB</td>
<td>Yes</td>
</tr>
</tbody>
</table>
During Night Time settlement T2S will send the following message usages grouped into files (even if routing specifies use of message based service)

<table>
<thead>
<tr>
<th>ISO Message</th>
<th>Message Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>sese.024</td>
<td>CoSD hold, eligibility failure, intraday restriction, provision check failure, partial settlement (unsettled part).</td>
</tr>
<tr>
<td>sese.025</td>
<td>Full settlement, partial settlement (settled part), last partial settlement.</td>
</tr>
<tr>
<td>sent.014</td>
<td>Eligibility failure, under intraday restriction, provision check failure, partial settlement (unsettled part).</td>
</tr>
<tr>
<td>sent.015</td>
<td>Full settlement, partial settlement (settled part), last partial settlement, partial execution.</td>
</tr>
<tr>
<td>cant.054</td>
<td>Cash Posting Notification</td>
</tr>
<tr>
<td>cant.067</td>
<td>Eligibility failure, under intraday restriction, provision check failure, partial settlement (unsettled part).</td>
</tr>
<tr>
<td>cant.068</td>
<td>Full settlement, partial settlement (settled part), last partial settlement, partial execution.</td>
</tr>
</tbody>
</table>

The other message usages will be sent as individual messages, as during the real-time settlement period.
Message subscription and Routing
A Summary

T2S

LCMM
Identify Interested Parties

SDMG
Identify Interested Parties

LQMG
Identify Interested Parties

INT

1. Check for third parties
2. Check message subscription
3. Check routing configuration

T2S Actor

Inbound message

Check for third parties
Check message subscription
Check routing configuration

Outbound message

T2S Actor

Note 1: SETTlement domain does not identify any interested party
Note 2: Any outbound message sent by OPSR (e.g. Scheduler) services would also comply to the above processes

SDMG Static Data Management
LQMG Liquidity Management

LCMM Life cycle Management and Matching
INT Interface
Thank you for your attention

www.t2s.eu
Message subscription – Usage
Use of Copy/Duplicate indicators in BAH

- INT would specify if the outbound message is a DUPL or COPY or CODU.
- This specification is independent of the message subscription.

- If provided in Inbound messages both CopyDuplicate and PossibleDuplicate fields will be ignored.

T2S use of CopyDuplicate
- The DUPL code will be set if a message is requested via the “Resend” function.
- The COPY code will be set if an incoming/outgoing message is being sent as a copy to another recipient than the original recipient (e.g. Instructing Party).
- The CODU code will be set if a message is being sent as a copy to another party other than the original recipient and that the message is a duplicate of a message previously sent.

T2S use of PossibleDuplicate
- The indicator will be set to True if the message being sent is requested via the resend function or if a copy of the message is sent to a party other than the original recipient.