

## Insights on prioritisation processes in T2S

T2S Knowledge Base Creation date - September 2015

Updated – April 2016

**T2S Programme Office** 





- 2 Settlement Order Criteria
- **3** Examples of Competing Orders







# Which factors are relevant when competing transactions are ready for settlement with the same priority?

What is the behavior for competing settlement instructions and settlement restrictions?



Prioritisation in the settlement process

The following elements are considered by settlement in the prioritisation of settlement instructions and settlement restrictions:

- Settlement period
- Priority defined at instruction level or default set-up
- Intended Settlement date (ISD) of a transaction
- Settlement optimisation process
- Arrival time of a transaction (only for real-time settlement)

| Settlement period     | Prioritisation   |  |  |
|-----------------------|--|--|--|
| Night-time settlement | • Prioritisation is used for transactions within a NTS sequence  |  |  |
| Real-time settlement  | • No prioritisation is considered for the first settlement attempt of a transaction  |  |  |
|                       | <ul> <li>Prioritisation is only considered for subsequent<br/>settlement attempts during the recycling and<br/>optimisation process</li> </ul> |  |  |





# Refer to section 1.6.1.9.2 in UDFS v2.0

#### Highest to lowest priority of instructions

| Priority                 | Applicable to   | Who can assign it?                  | How is it assigned?   |
|--------------------------|---|-------------------------------------|---|
| 1 – Reserved<br>priority | <ul> <li>Settlement Instruction</li> <li>Intra-position movement</li> <li>Intra-balance movement</li> </ul> | <ul><li>CSDs</li><li>NCBs</li></ul> | <ul> <li>At instruction level</li> <li>Via priority default<br/>rules*</li> </ul> |
| 2 – Top Priority         | Settlement Instruction  | CSDs                                | <ul> <li>Via priority default<br/>rules</li> </ul>                                |
| 3 – High priority        | <ul> <li>Settlement Instruction</li> <li>Intra-position movement</li> <li>Intra-balance movement</li> </ul> | All T2S Actors                      | At instruction level  |
| 4 – Normal<br>priority   | <ul> <li>Settlement Instruction</li> <li>Intra-position movement</li> <li>Intra-balance movement</li> </ul> | All T2S Actors                      | At instruction level  |





# Refer to section 1.6.1.9.2 in UDFS v2.0

#### **Applicable rules**

- T2S will check whether a priority default is applicable to a settlement instruction only if there is no priority defined at instruction level
- If an instruction does not include a priority and no priority default applies, T2S considers that the priority of the instruction is the same as an instruction with 'Normal' priority
- Modification of the priority in a partially settled instruction only applies to the pending part
- In a pair of matched instructions, T2S takes the highest priority of the instructions for settlement purposes
- In a set of linked instructions\* T2S takes the highest priority of the linked instructions for settlement purposes

\* T2S-generated instructions always carry "normal" priority





2 Settlement Order Criteria

3 Examples of Competing Orders









Prioritisation levels during night-time settlement (NT

#### Prioritisation levels during night-time settlement (NTS)

- 1. Transactions for a NTS sequence: transactions are taken depending on the NTS sequence
  - NTS sequence 0: Liquidity transfers and Intra-balance movements
  - NTS sequence 1: Corporate Action transactions, liquidity transfers and Intra-balance movements
  - NTS sequence ...
- 2. **Priority:** transactions (excl. reservations) with highest priority are taken for settlement first
- **3. Intended Settlement Date (ISD):** transactions (excl. reservations) with an earlier ISD are taken first
- 4. Settlement optimisation process: favouring transactions (excl. reservations) in a way that maximises settlement (i.e. an optimal balance of the volume and value of settled instructions)
- 5. Unsettled reservation: unsettled cash or securities reservations\* are only treated last

\* Intra-balance or intra-position movements where the Balance From is a Deliverable/Earmarked position and Balance To is a Reserved position







### Settlement Order

Prioritisation levels during real-time settlement

Prioritisation levels during real-time settlement during recycling and optimisation\* (there is no prioritisation for the first settlement attempt of a transaction)

- 1. Unsettled reservation: unsettled cash or securities reservations\*\* are taken before any other transaction (i.e. they are automatically pre-empted until the reservation is filled)
- 2. Priority: transactions with highest priority are taken for settlement first
- **3.** Intended Settlement Date (ISD): if the priority is the same, transactions with an earlier ISD are taken first
- 4. To-be-settled-amount of resources: if the priority and ISD are the same, instructions with the highest to-be-settled-amount are taken first
- 5. Arrival time: if the priority, ISD and optimisation process lead to different transactions, the ones with an earlier arrival time are taken first

\* The settlement of transactions according to a predicted ordering is not guaranteed in T2S in real time due to parallel processing of settlement transactions.

\*\* Intra-balance or intra-position movements where the Balance From is a Deliverable/Earmarked position and Balance To is a Reserved position

EUROPEAN CENTRAL BANK





## Unsettled reservations while real-time settlement

- During real-time settlement, pre-empting of unsettled cash/securities reservations are always before any blocking, earmarking or settlement instructions independently of their priority
- If several reservations are not fully filled, the pre-emption mechanism fills firstly the oldest one, based on their arrival within T2S and without taking into consideration the priority

#### Example:

| Reservation | SR 1 for 200 securities   Timestamp: 2014-11-10 11:15:00 |
|-------------|--|
| Blocking    | SR 2 for 100 securities   Timestamp: 2014-11-10 11:50:00 |
| Instruction | SI 1 for 100 securities   Timestamp: 2014-11-10 11:45:00 |
| Reservation | SR 3 for 200 securities   Timestamp: 2014-11-10 12:00:00 |

On 2014-11-10 13:00:00 (current position is 0) 300 securities are credited to the account. The sequence of settlement is: SR 1  $\rightarrow$  SR 3  $\rightarrow$  SI 1  $\rightarrow$  SR 2

Therefore the following settlement will take place:

- → Pre-emption of SR 1 for 200 securities and
- → Pre-emption of SR 3 for 100 securities





2 Settlement Order Criteria

**3** Examples of Competing Orders





# **Examples of Competing Orders**

Derive transaction values from settlement instruction

| Settlement<br>Instruction     | Sec Mvmt<br>Type | Priority<br>Level | Instruction arrival<br>Date/Time |
|-------------------------------|------------------|-------------------|----------------------------------|
| SI 1                          | DELI             | High              | 13.11.2015 at 3 pm               |
| SI 2                          | RECE             | Тор               | 13.11.2015 at 2 pm               |
| •                             |                  |                   | Ļ                                |
| Transaction for SI 1 and SI 2 |                  | Тор               | 13.11.2015 at 3 pm               |

| Settlement<br>Instruction     | Sec Mvmt<br>Type | Priority<br>Level | Instruction arrival<br>Date/Time  |
|-------------------------------|------------------|-------------------|---|
| SI 3                          | DELI             | High              | 13.11.2015 at 2 pm  |
| SI 4                          | RECE             | Normal            | 13.11.2015 at 3 pm  |
| •                             |                  |                   | ↓ International |
| Transaction for SI 3 and SI 4 |                  | High              | 13.11.2015 at 3 pm  |

#### **Rules:**

TARGET 2-SECURITIES

Priority Level  $\rightarrow$  Always higher priority Instruction arrival Date/Time  $\rightarrow$  Always later arrival





#### Priority order for transactions on a recycling event or a sequence during RTS

| Transaction   | Level of<br>Priority | ISD        | Quantity | To-be-settled<br>quantity | Instruction arrival<br>Date/Time |
|---------------|----------------------|------------|----------|---------------------------|----------------------------------|
| Transaction 1 | High                 | 13.11.2015 | 100      | 100                       | 13.11.2015 at 4 pm               |
| Transaction 2 | High                 | 14.11.2015 | 100      | 100                       | 13.11.2015 at 3 pm               |
| Transaction 3 | Normal               | 14.11.2015 | 100      | 100                       | 13.11.2015 at 3 pm               |
| Transaction 4 | Normal               | 15.11.2015 | 200      | 200                       | 13.11.2015 at 3 pm               |
| Transaction 5 | Normal               | 15.11.2015 | 100      | 100                       | 13.11.2015 at 3 pm               |
| Transaction 6 | Normal               | 15.11.2015 | 100      | <b>(75</b> *)             | 13.11.2015 at 5 pm               |
| Transaction 7 | Normal               | 15.11.2015 | 200      | 50*                       | 13.11.2015 at 3 pm               |
| Transaction 8 | Normal               | 15.11.2015 | 50       | 50                        | 13.11.2015 at 4 pm               |

\* Already partially settled

Note: To ease the optimisation process each security is settled for the same amount





# Thank you for your attention

www.t2s.eu





