



SETTLING
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CSD DCP Workshops

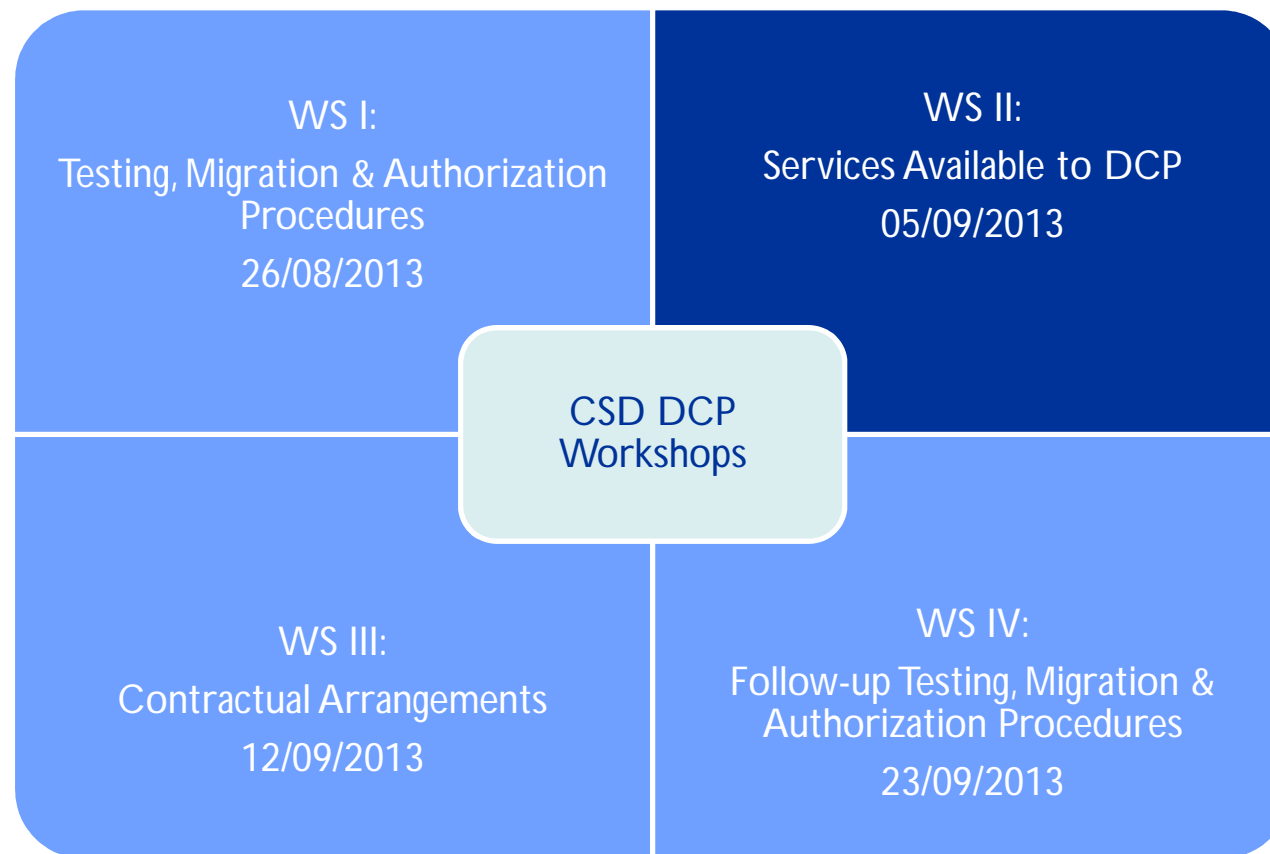
Session II

T2S Services available to DCPs

5th September 2013

Workshop Overview & Timeline

Four workshops on DCP related topics are planned:



Objectives of today's Workshop



Situation

- § In connection with the informal DCP forum, participating potential DCPs asked for workshops on DCP-related topics to increase transparency in areas of User Testing & Migration, offered DCP services and contractual arrangements
- § Four workshops have been set-up
- § End of May CSDs provided answers to a questionnaire sent by the DCP forum which already addressed several questions related to testing and migration



Objective

-
- § Provide a high-level overview of the T2S Services and Functionality related to securities settlement procedures
 - § Introduce applicable T2S Connectivity Modes for DCPs
 - § Overview T2S Functionality for Directly Connected Participants
 - § Introduction T2S Functionality and high-level process flow
 - § Overview of T2S transaction types
 - § T2S Access Rights Concept and Configuration Options for DCPs
 - § Overview T2S hierarchical entity concept
 - § Provide overview of setup for message subscription, access rights and routing

Questions on T2S Service Offerings

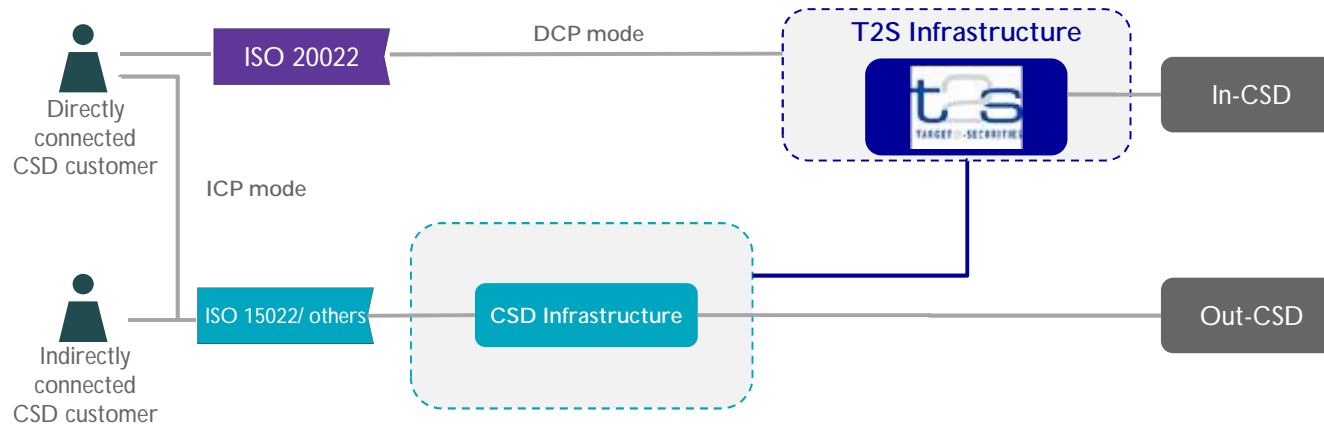
- § *What kind of core- and non-core settlement services do you envisage as relevant when acting as a DCP?*

- § *How do you plan to set up your operational procedures when connecting to the T2S platform?*

Agenda

1. Available Connectivity Options for Directly Connected Participants
2. T2S Functionality: Overview Settlement Platform
3. Hierarchical Model, Access Rights Concept and Configuration Options
4. Appendix

CSD/ DCP Infrastructure in a T2S world



ISO 15022/ others

Customers acting in ICP mode will provide their messages via the existing CSD channel which could be ISO 15022, ISO 20022 or any other message format. To enable the access to the entire T2S/CSD service offering the existing interface between the CSD and its customers will be enhanced.

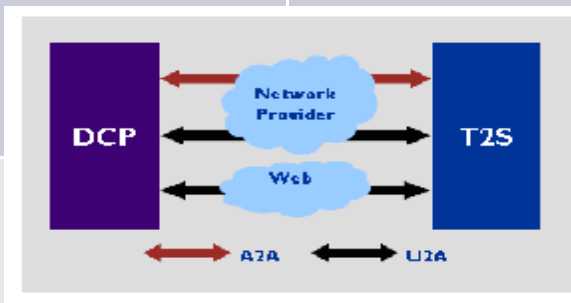
ISO 20022

Customers acting in DCP mode will provide core settlement instructions in ISO 20022 to T2S. The existing ICP connectivity channel to the CSD can still be used for specific settlement and value added services.

- ICP customers
ICP customers send their messages to the CSD. The CSD is responsible for managing the connectivity with T2S
- DCP customers
DCP customers can send instructions in DCP mode directly to T2S. The CSD receives copies of messages exchanged between T2S and the DCP customer from T2S
- T2S will not support information flows out of value added services provided by the CSD. Hence a DCP will still have the need to be connected to the CSD

The DCPs have the possibility to communicate with T2S in two ways

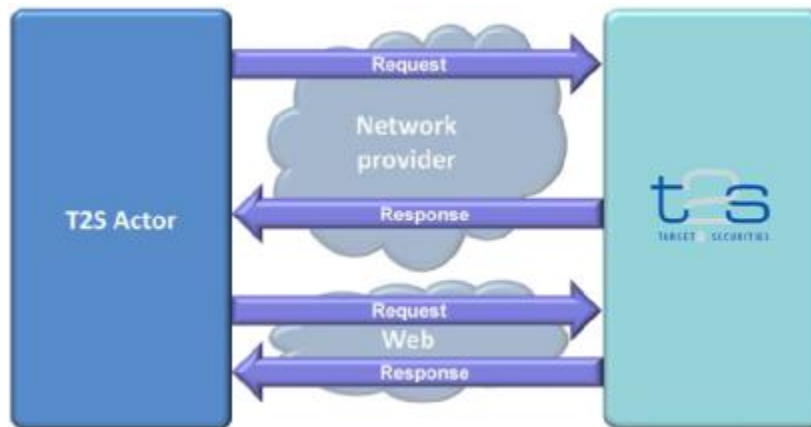
	[1] Application-to-Application (A2A) interaction	[2] User-to-Application (U2A) interaction
Type	Means using ISO20022 messaging via VA-NSP-connections only (with SLAs)	Means using the T2S GUI via VA-NSP-connections or secured (SSL+PKI) Internet-based Access
Basic Functionality ¹⁾	<p>The A2A access mode offers the majority of the T2S functionality, for example</p> <ul style="list-style-type: none"> § Sending settlement instructions to T2S § Creation of static data in T2S, like Party, Securities Accounts, DCAs § Querying T2S for settlement instructions, account postings, account balances etc. § Receiving reports from T2S § Managing liquidity etc. 	<p>The U2A mode offers access to the complete T2S functionality including what is offered in A2A mode, for example</p> <ul style="list-style-type: none"> § Sending settlement instructions to T2S § Creation of static data in T2S, like Party, Securities Accounts, DCAs § Querying T2S for settlement instructions, account postings, account balances etc. § Receiving reports from T2S § Managing liquidity etc. <p>Certain functionality of T2S is <u>offered only</u> in U2A mode, for example</p> <ul style="list-style-type: none"> § Maintaining relationship between CSD Participant and a Securities Account § Creating links between a Securities Account and a DCA § Maintaining static data in T2S § Set-up and Maintenance of Privileges and Restriction rules in T2S



1) Refers to general functionality not necessarily related to DCP relevance

T2S GUI

The T2S GUI can be accessed via standard web browsers without any additional plug-in-based rich internet application frameworks



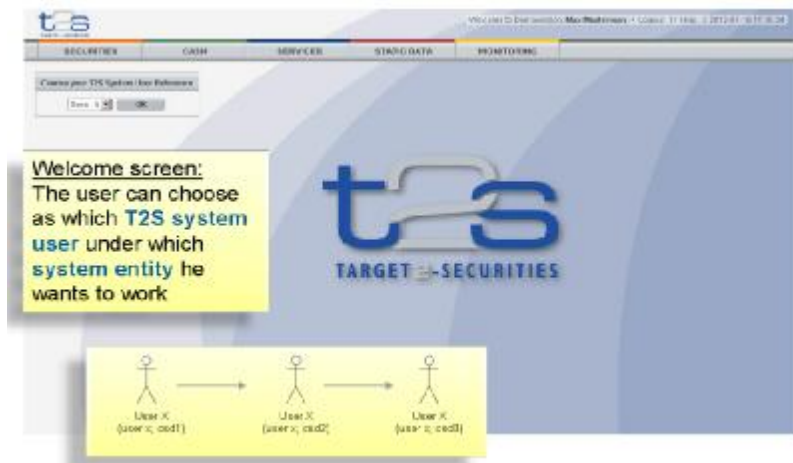
Participants to take into account performance aspects and accessibility of GUI when considering U2A access only

For detailed description of the T2S GUI Functionality and Framework please refer to the T2S User Handbook and the according introduction presentation:

<http://www.ecb.europa.eu/paym/t2s/governance/extmtg/html/mtg36.en.html>

http://www.ecb.europa.eu/paym/t2s/pdf/BFD_v1_8.pdf?41f083c2185141b4c824ccaafde5ae57

http://www.ecb.europa.eu/paym/t2s/pdf/User_Handbook_v1.0.pdf?b8d327fc17d576b634d3f488bed235df

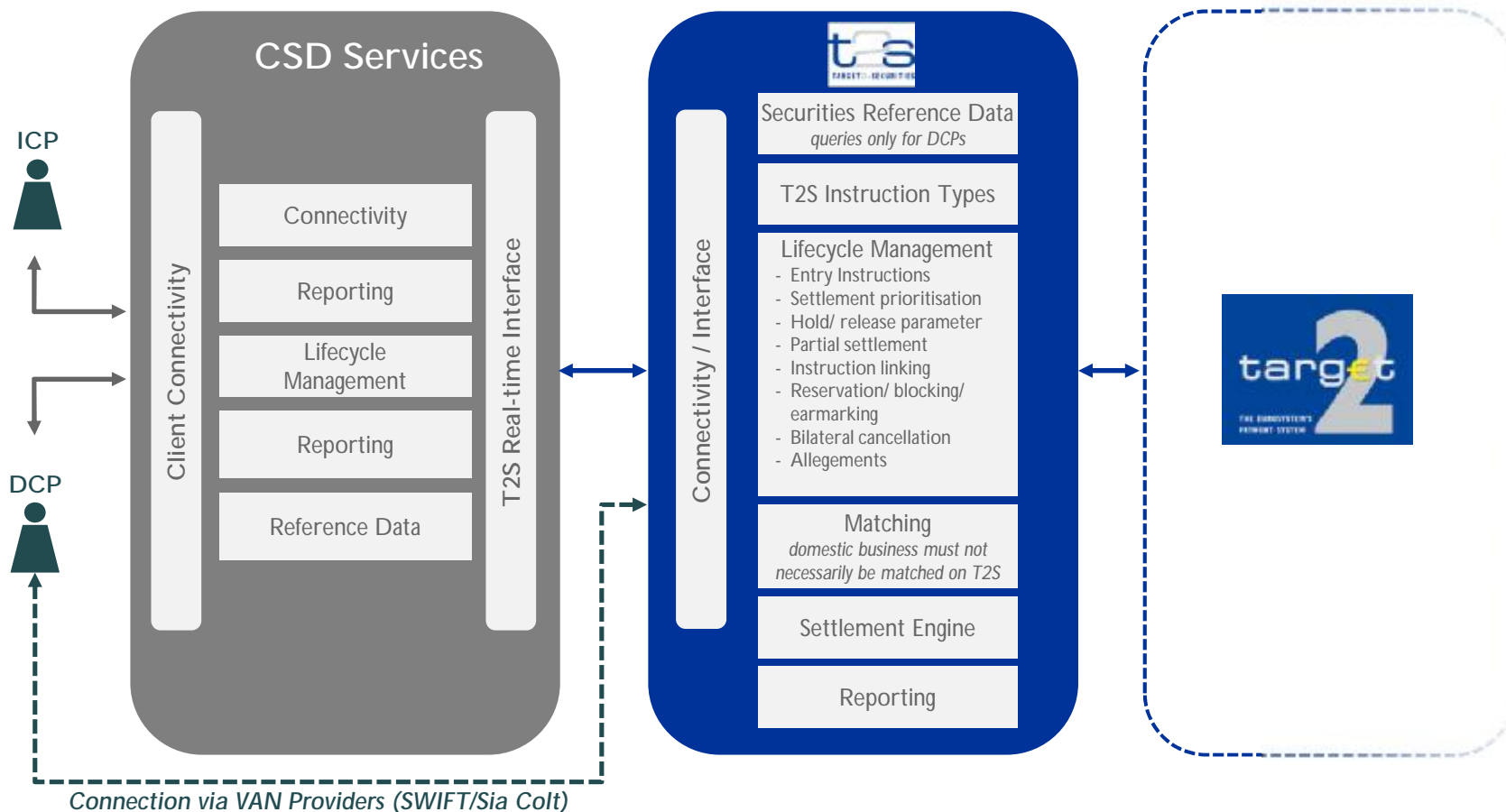


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T2S Functionality: Overview Settlement Platform

T2S will become the central technical platform for securities settlement in central bank money*

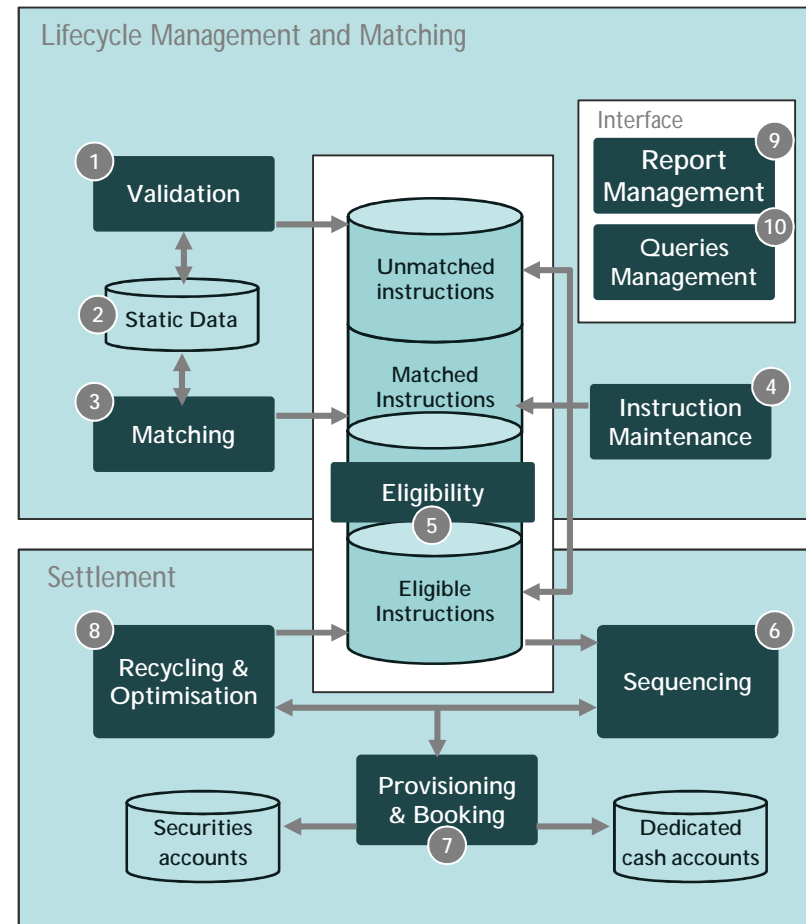


Legend:

- ↔ Communication in ICP mode
- ⋯ Communication in DCP mode (ISO 20022)
- ↔ ISO 20022 Interface to T2S

High-level T2S process flow^{*)}

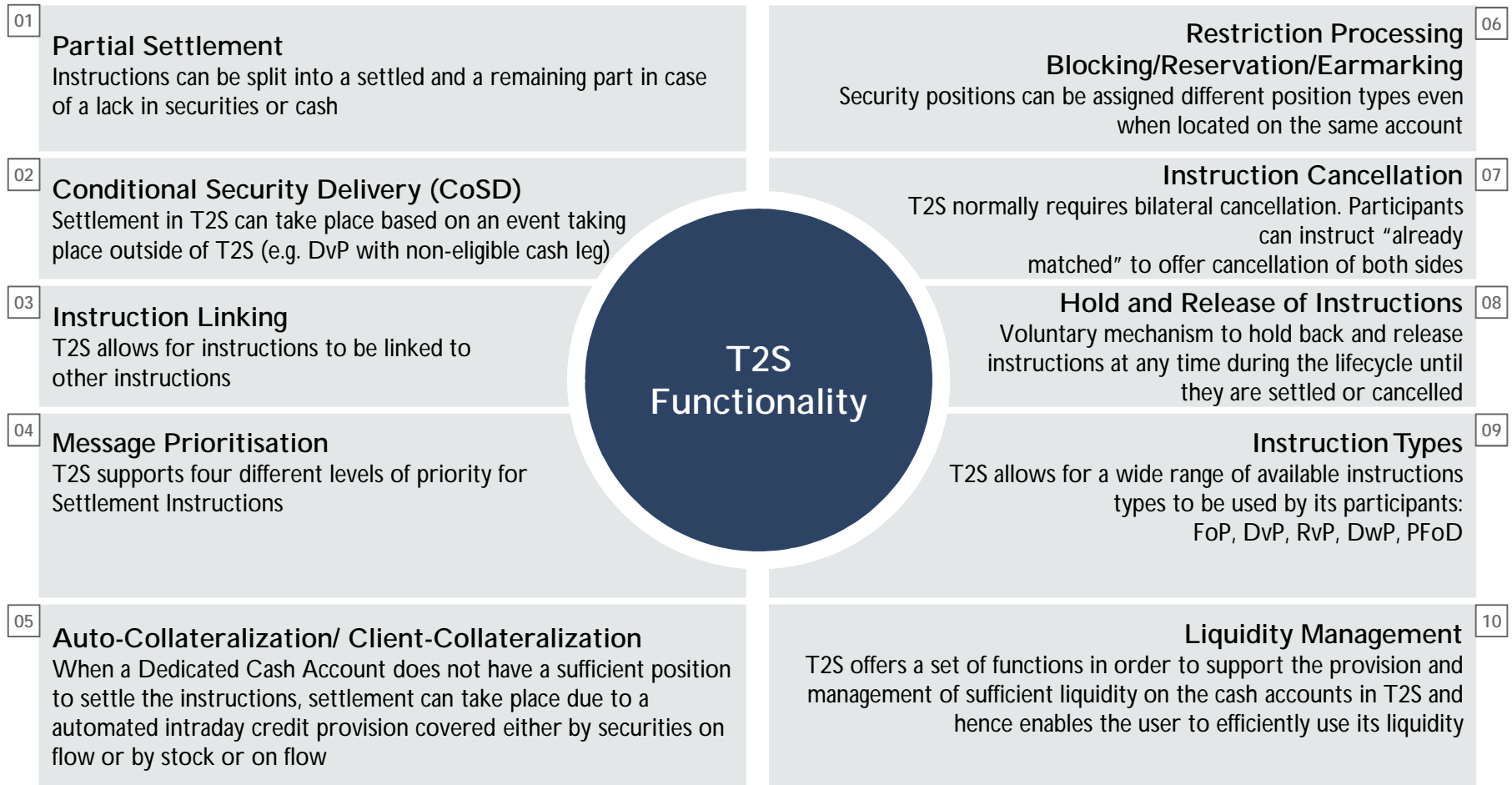
1. Settlement instructions “captured” are processed in the **Validation** component.
2. According to the rules and restrictions stored in the **Static Data**.
3. Once validated, instructions are matched in the **Matching** component.
4. Instructions may be **maintained**.
5. Matched transactions are checked for their **settlement eligibility**.
6. Once eligible, instructions are prioritised in the **Sequencing** component, and...
7. processed, in Real-Time Gross Settlement (RTGS) mode, for the final settlement.
8. In the case of failed settlement, transactions are moved to the **Recycling and Optimisation** components.
9. In some lifecycle stages, **reporting** to the instructing entities is required.
10. T2S parties may **query** the system at any time.



^{*)} Figure shows general lifecycle of a transaction which can be submitted to T2S by all relevant T2S actors

T2S Optimization Features and Functionality

T2S offers a wide range of features and functionalities for its users to improve settlement processing across Europe



1 - Partial Settlement

The partial settlement allows T2S, under specific conditions, to settle only a part of Settlement Instructions, Settlement Restrictions or liquidity transfers



- § T2S provides partial settlement process, i.e. settles only a fraction of the original quantity or amount when full settlement is not possible due to lack of securities or cash.
- § Partial settlement applies under conditions and procedures that differ whether they apply to:
 - Settlement Instructions
 - Settlement Restrictions
 - Liquidity transfers
- § The settlement eligibility depends notably on conditions set by the T2S parties on their matched Settlement Instructions (e.g. threshold in quantity/ cash value).
- § Settlement Instructions are submitted by the T2S Actor (e.g. the DCP) to a full settlement attempt before being submitted to a partial settlement attempt.
- § In case the optimising application process is not able to find a solution for a full settlement, T2S tries to submit the Settlement Instruction for partial settlement provided the conditions are met.
- § T2S attempts to settle the maximum quantity of securities available on the securities position of the seller.

2 – Conditional Security Delivery (CoSD)

The conditional settlement application process allows performing a settlement in T2S with the requirement to fulfil a condition outside T2S before achieving the final booking



- § The fulfilment of the external settlement conditions (Conditional Securities Delivery Configuration) will be managed by an administering party (i.e. a CSD in T2S).
- § T2S automatically detects and performs conditional settlement, based on CoSD rule set defined and maintained by each CSD in the static data.
- § The external condition may relate to cash settlement in a currency not eligible in T2S, as well as to any other condition that would need to be externally fulfilled prior to settlement.
- § T2S identifies the Settlement Instructions which potentially match a CoSD rule set → When one of the rules is met, T2S applies the conditional settlement according to the "CoSD processing condition" of the CoSD rule.
- § CoSD Detection: T2S checks if a CoSD condition has to be handled before the actual settlement of the Settlement Instruction and puts the instruction on CoSD hold.
- § At each step of the CoSD activation, T2S informs the T2S Actors involved; i.e. an according status advice will be sent to the instructing T2S actor (e.g. the instructing DCP).



- 3 - Instruction Linking

- Settlement Instructions can be linked together either via a link specified by a T2S Actor or via a link generated automatically by T2S.
- Settlement Instructions linked via an indicator: a Pool Reference specified by a T2S Actor aim to cover the settlement of specific operations such as coupon stripping, baskets of collateral etc.
- T2S Actors can link their Settlement Instructions through the processing indicators "After", "Before", "With", "Info", or a pool reference, which is a collective reference to identify a set of instructions which are to be settled together all-or-none.
- Settlement Instructions linked automatically by T2S aim to cover the settlement of operations such as realignment, auto-collateralisation, corporate rebalancing liquidity, etc.

- 7 - Instruction Cancellation

- T2S Actors are able to cancel their Unsettled Settlement Instructions through a Cancellation Instruction.
- The T2S Party, the relevant CSD and the authorized parties can cancel instructions of a given T2S Actor.
- Additionally, T2S checks instructions against static data and harmonised rules, and cancels instructions automatically (e.g. when an Unmatched Settlement Instruction has exceeded its recycling period in T2S).
- T2S will accept unmatched or matched settlement instructions from CSDs, CCPs, stock exchanges or other organised markets, and directly connected market participants.

- 8 - Hold/Release Instructions

- The Hold/Release process provides T2S Actors the functionality to hold and release Settlement Instructions, at any time during its lifecycle until they are settled or cancelled.
- T2S Actors who want to hold or release an existing Settlement Instruction need to send a Hold/Release Instruction (Maintenance Instruction with hold indicator = 'YES')
- T2S Actors can also send a Settlement Instruction initially on Hold.
- Additionally, T2S automatically puts a Settlement Instruction on Hold if it fulfils any restriction defined by the CSD
- Settlement Instructions on Hold are not eligible for the settlement process and are kept pending until they are released by all the involved parties

4 - Message Prioritisation

T2S offers the possibility to set four different levels of priority to Settlement Instructions



- § T2S uses priority levels in such a way that if several instructions compete with respect to using the same securities and/or cash resources, in the night-time or real-time optimisation process, preference for settlement is given to the instruction with the highest level of priority.
- § T2S supports four different levels of priority
 - 1 - *Reserved priority* – Can be used only by CSDs and NCBs
 - 2 - *Top priority* – Can be used by SEs, MTFs and CCPs
 - 3 - *High priority* – Available all times for T2S Actors
 - 4 - *Normal priority* – Available all times for T2S Actors
- § The level of priority can be set by the T2S Actor or automatically assigned by T2S based on parameters previously set by the T2S Operator in the static data.
- § T2S Actors can set the level of priority directly in their Settlement Instructions or their Settlement Restrictions sent to T2S.

5 - Auto-Collateralisation/ Client-Collateralisation

Auto collateralisation is an automated intraday credit operations functionality and creates extra liquidity for the settlement via collateral on flow and an stock



- § Auto-collateralisation is an automatic process facilitating real-time DvP settlement in central bank money and is triggered when a buyer does not have sufficient funds to settle securities transactions.
- § A single cash account and securities account can be used for all T2S markets which enables the pooling of liquidity and collateral.
- § There are two types of auto-collateralisation:
 - “central bank auto-collateralisation” in case that the credit provider is the central bank;
 - “client auto-collateralisation” in case that the credit provided is a payment bank.
- § Only Central Banks have the option to set up the relevant close links between parties and financial instruments. This information can be provided directly by the relevant actors, or indirectly via a collateral management system.
- § The auto-collateralisation service requires the configuration of three categories of static data
 - **Securities auto-collateralisation eligibility**, i.e. the specification of which financial instruments are eligible as collateral against provision of credit in a given currency;
 - **Securities valuation**, i.e. the specification of the prices that T2S can use for the valuation of securities positions, when triggering the auto-collateralisation process for the relevant currency;
 - **Close links**, i.e. the specification of securities that cannot be used as collateral by a party (having a close link with the issuer of the securities) in an auto-collateralisation process.

6 - Blocking/ Reservation/ Earmarking of Settlement Instructions

Security positions can be assigned different position types even when located on the same account



§ **Blocking, reservation, and earmarking** on securities, allows a T2S Actor or a T2S operator, to move securities into a specific securities position of a Securities Account, and make them available for a specific purpose; e.g.:

- blocked securities for Conditional Securities Delivery
- earmarked securities for auto collateralisation
- blocked securities for a pledge sub procedure for central bank collateralisation,
- reserved/blocked securities for a dedicated aim with the use of a restriction reference in the Settlement Instruction

§ **Blocking, reservation, earmarking** are referred together as restriction processing

§ Configuration of the according restriction types must be configured in the static data management either by

- the T2S Operator when the purpose applies to every T2S Party whatever their CSD is
- the CSD when the purpose applies only to the T2S Parties of this CSD and their securities positions

9 - T2S Instruction Types

T2S allows a wide number of instructions types to be used by all participants which can be used to take advantage of the full range of the T2S platform functions



Free of Payment <i>(Delivery Free of Payment / Receipt Free of Payment)</i>	Instruction towards T2S is either a DFoP or RFoP. In both cases, securities are delivered / received without payment being made	<p>§ The existing instruction types Free of Payment (DfoP / RfoP) and Delivery against Payment (DvP / RvP) will generally remain unchanged but might be individually enhanced by the CSD regarding new services</p> <p>§ The settlement of DvP / RvP instructions requires a T2S Dedicated Cash Account which is linked to the Securities Account</p>
Delivery vs. Payment <i>(DvP)</i>	An exchange of securities against cash via RTGS accounts. Sell order.	
Receipt vs. Payment <i>(RvP)</i>	An exchange of securities against cash via RTGS accounts. Buy order.	
Delivery with Payment <i>(DwP)</i>	The receipt of cash and securities from one party to another (e.g. netting results from CCPs).	<p>§ The introduction of those T2S instruction types may lead to functional changes which need to be reflected in messaging and reporting</p>
Receipt with Payment <i>(RwP)</i>	Receipt with payment, i.e. the delivery of cash and securities from one party to another (e.g. netting results from CCPs).	
Payment Free of Delivery <i>(PfoD)</i>	Payment free of delivery is an exchange of cash without the delivery of securities	

10 - Liquidity Management

The T2S Liquidity Management application processes include the activities related to the transfers of liquidity between T2S Dedicated Cash Accounts and RTGS accounts, the setting of cash limits and restrictions in T2S, as well as the monitoring of liquidity



§ The T2S features can be categorized into three main categories:

- Liquidity Transfers
- Limit, blocking and reservation
- Liquidity monitoring

Three types of Liquidity Transfer Orders

- Immediate LTO :: Liquidity will be transferred immediately after the transfer was instructed
- Predefined LTO :: Liquidity will be transferred at a certain time or event chosen by the account holder of the account to be debited^{*)}; the transfer will be executed once only
- Standing LTO :: Liquidity will be transferred at a certain time or event chosen by the account holder of the account to be debited; The transfer will be executed every settlement day until it is deleted

Cash Limits, blocking and reservation

- Granting intraday credit by setting up limits T2S allows the definition of limits by CBs vis-à-vis other parties (auto-collateralisation limit) and limits by payment/settlement banks vis-à-vis their clients
- T2S also provides T2S Actors with the possibility to set restrictions on cash balances à Accordingly, T2S Actors can block and reserve dedicated amounts for specific purposes

Liquidity monitoring

- T2S provides features in order to inform a T2S Dedicated Cash Account holder and any other authorised T2S Actor about settled amounts, cash balances, blockings and reservations as well as exceeding of thresholds



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CSDs will migrate their core settlement service in central bank money on T2S

Services outsourced to the T2S platform

- § Provide core settlement for all securities denominated in Euro and foreign currency if supported by the NCB
- § Lifecycle management (incl. validations) and instruction interface
 - § instruct settlement transactions
 - § query the settlement transaction status
 - § maintain settlement instructions

- à Technical responsibility of lifecycle management is with T2S;
- à Legal responsibility remains with the CSD

- § Matching¹⁾
- § Bookings and master of the securities accounts
- § Set up, change and maintenance of static data for e.g.
 - § participants
 - § securities
 - § rules (e.g. subscription services)

- à CSDs are responsible for static data management of their customers (e.g. set up of securities accounts for DCPs)

- § Reporting

Services remaining at CSDs³⁾

- § Additional functions due to special national and market specific requirements and all non-settlement business via customer interface;
 - § notary function
 - § asset servicing
 - § corporate actions and income services
 - § primary markets activities
 - § issuer services
 - § collateral management
 - § securities lending services
 - § registered shares services
- § Pre-Settlement services (e.g. trade-confirmation, order-routing)
- § Matching²⁾
- § Admission of securities and participants to settlement including
 - § maintenance of the securities accounts
 - § provision of static user and securities data
- § Involved as the primary place of deposit
- § Settlement processing in currencies which are not eligible on T2S
- § CSD will require relations with all relevant CSDs acting as the primary place of deposit for those securities
- § Provisioning and invoicing of T2S services

1) Matching must not necessarily be performed on T2S platform respectively on CSD side
2) If matching is performed on CSD side, then for domestic business only
3) CSD services are offered via CSD's ICP channel subject to specific product and service offering of each individual CSD

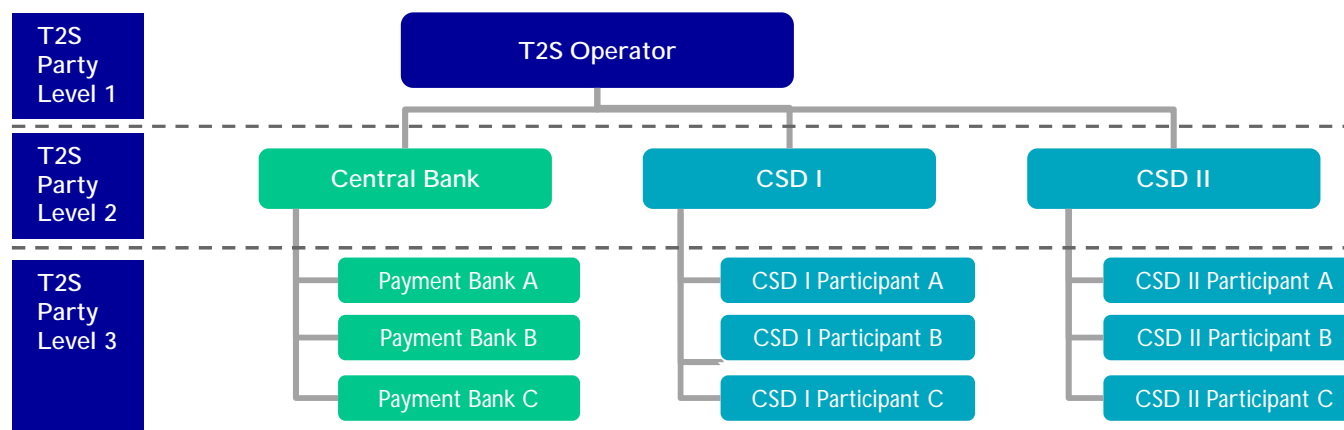
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T2S Hierarchical Access Rights Model

The T2S Party Model is based on an hierarchical structure

- § Legal relationships between parties in T2S determine a hierarchical party model based on a three-level structure.
- § The T2S Operator is the only party on the top level of the hierarchy and it is in a legal relationship with each party of the second level, i.e. each CSD and each CB in T2S.
- § Legal relationships also exist between each party belonging to the second level of the hierarchy (i.e. a CSD or a CB) and all its participants (i.e. CSD participants for the CSDs and payment banks for the CBs).



- § Being a DCP in one CSD does not automatically imply becoming a DCP on the cash side (i.e. in one or several NCBs) or in other CSDs
- § While at the same time being a DCP in one NCB does not automatically imply becoming a DCP on the securities side (i.e. in one or several CSDs) or in other NCBs as well

Access rights and privileges for DCPs

The functions a DCP can perform in T2S depend on the access rights that the CSDs and/or Central Banks will grant to the DCP

- § Through their individual contractual relationships DCPs have with their CSDs each CSD may define additional conditions under which they will accept a participant to become a DCP for each part of the service they offer.
- § CSDs must grant access rights to the participant specifying exactly what the participant is allowed to do on T2S and what it is not.
- § A privilege identifies the capability of triggering one or several T2S user functions and it is the basic element to assign access rights to users
- § It depends on the access rights that the CSD grants to the DCP, e.g. privileges to
 - § Send settlement instructions (SI) to T2S on a securities account
 - § Amend/ Cancel SI on a securities account
 - § Instruct party hold/ release settlement instructions on a securities account
 - § Query T2S
- § The more T2S functionality a DCP wants to access, the more privileges it will require from its CSD^{*)}

^{*)} However CSDs are from a functional and legal perspective to a certain extent limited in granting access rights to the DCPs

T2S Framework Agreement Schedule 6 SLAs Responsibilities of T2S Actors

Extract of service responsibilities related to DCPs

Eurosystem's responsibilities <i>(section 3.1 sched. 6 FWA)</i>	CSD's responsibilities <i>(section 3.2 sched. 6 FWA)</i>
<ul style="list-style-type: none"> § Inform the Contracting CSD if technical problems with one of its Directly Connected Parties (DCPs) are detected § Throughout the whole Crisis management process, the Eurosystem will appropriately involve the DCPs, in accordance with the arrangements agreed with the Contracting CSD and Participating CSDs. § Provide a monthly Service Level Report to the Contracting CSD which includes the Service Levels obtained by its DCP § If an incident is reported by a DCP of the Contracting CSD, the Eurosystem will inform the latter without undue delay, and keep the Contracting CSD informed about the resolution path of such incident. § The Eurosystem has to ensure that sufficient efforts are made to fulfil all KPIs¹⁾, and must take remedial action as soon as it detects that a KPI may not be, or is not, fulfilled 	<ul style="list-style-type: none"> § Provide contact details for technical staff that is capable of resolving technical issues with their DCPs § Proactively report any problem or incident relating to T2S including connectivity problems, provide all information that might be helpful and cooperate where requested by taking all appropriate actions for solving the problem or incident § All DCPs shall receive, accept and understand all information to facilitate their smooth functioning in T2S § Proper operational management of its own organisation as well as their customers including DCPs § Proper operational management of technical links to T2S from CSD and DCPs with the support of the Eurosystem if needed § Restore consistency of sent DCP instructions after crisis²⁾
Technical Neutrality <i>(section 3.4 sched. 6 FWA)</i>	
<ul style="list-style-type: none"> § The Eurosystem shall make reasonable efforts to ensure that, in normal circumstances, no DCP T2S Actor receives a different Service Level based on historic or forecasted volumes, its name, its country of legal incorporation or of the location of its data centres, or any other factor. Abnormal circumstances might require a temporary deviation from this principle. § If a group of DCPs using the same Network Service Provider, [...] exceeds its expected peak volume, the Eurosystem will reduce the message throughput from such a group [...], with the aim to meet the Service Level for other Directly Connected T2S Actors (on the condition that the overall volume and workload parameters specified in Chapter 6 of this SLA are not exceeded). 	

1) Please refer to section 4ff of schedule 6 of the T2S Framework Agreement for Service Levels for production environment, test environment and platform sizing

2) Detailed procedures for incident priority setting and incident handling will be specified in the Manual of Operational Procedures (MOP). The MOP will provide a reference guide for the operational procedures (in normal and abnormal situations) which the DCPs (including the Contracting CSD) and the Eurosystem should follow to ensure a smooth functioning of T2S.

Questions to DCPs

- § *What are your foreseen contingency measures in case of connectivity issues on the DCP channel?*
- § *How do you plan to set up your account structure on T2S?*
- § *What service do you envisage as relevant?*

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Questions from the DCP Forum (1/3)

Questions gathered by the DCP Forum Members (29. Aug 2013)

What services will be available to DCPs?

What services will NOT be available to DCPs, i.e. services and activities ONLY available in ICP mode?

1. Static data and access rights configuration. Any specific requirements / restrictions on the hierarchical structure / account structure of static data setups by DCPs? Preference for a consistent approach across CSDs.
2. There is need for some flexibility in the configuration of DCP/ICP mode: will it be possible to mix functions and reporting as DCP/ICP in the same accounts? Will it be possible to mix transmission modes (e.g. instructions in DCP mode, reporting in ICP mode)? Some services will potentially only be offered in ICP mode, can they be used also in DCP accounts?
3. Level of harmonization across CSDs with respect to those T2S functionalities that will not be supported in some CSDs (e.g. earmarking, blocking, reservations); any specific restrictions for DCPs?
4. Service levels for repos and triparty transactions (handling of return legs, accrued interest calculations, etc): differences across CSDs and any specific restrictions for DCPs?

Questions from the DCP Forum (2/3)

5. Please consider the Business case and questions on External CSD settlements (see further below). Any other similar cases?

Business case on External CSD settlements:

External CSD settlement (settlement with CSDs outside T2S). Some CSDs have confirmed these trades can be instructed only in ICP mode. DCP participants of CSDs joining T2S in different waves will have to instruct in ICP or DCP mode in line with T2S migration waves. DCPs will have to set up their own applications for sending Cross Border settlement instructions by following different rules and channels.

Questions:

5a) Will CSDs maintain current rules and deadlines during the whole migration period till the last wave?

5b) Will CSDs joining T2S in different waves harmonize rules and deadlines prior their migration in T2S?

6. Matching functionalities: considering that DCPs will typically have large business volumes and numerous securities accounts (both omnibus accounts and individual segregation accounts), the risk of cross-matching will be heightened for DCPs, more than for ICPs. What services and functionalities will be available specifically for DCP usage, to help minimize such risk?
7. Review of other functionalities and operational processes that are specifically mentioned for DCP usage in the Framework Agreement.
8. What services will be available via A2A / via U2A connectivity mode? Differences in service levels?

Questions from the DCP Forum (3/3)

9. Level of information on DCP activities required by CSDs: what type of information will be required (position updates, or settlement statuses) and for what purposes? How will such information be retrieved from T2S (via a drop copy from Swift, from the DCP, etc) and how frequently?
10. Functionalities for DCAs and liquidity transfers: clarifications about services available to DCPs vs ICPs, and for U2A vs A2A (reference to slides 28, 35-37 and 41 of the “Functional Aspects” presentation, given at the Ljubljana InfoSession <http://www.ecb.europa.eu/paym/t2s/governance/sessions/html/mtg20.en.html>)

Additional questions related to Testing, Migration and Authorization Procedures:

11. During TMAP workshop #1 it was mentioned that the vast majority of test cases will be common between DCP and ICP users. For the 10% that will remain different, what specific services will be available to DCPs to accommodate their testing needs?
12. Account operator/Sponsored access for DCPs: if technical sender is different from the business sender, who is the party that needs to obtain DCP certification and authorization? Need for a harmonized/consistent approach across CSDs.
13. Contingency arrangements: will it be possible to switch between VAN SPS? Will it be possible to switch between DCP mode and ICP mode? Please consider both questions in relation to testing/migration period as well as for production.

Summary of DCP Questionnaire Service Scope (1/2)

All answers on the following questions of the DCP Questionnaire have been provided by the CSDs on an individual basis*

DCP Service/Configuration - Scope

[3.1.1] What services will be offered by each CSD to DCPs and by when will the respective service descriptions be made public? Which services will not be made available to DCPs?

[3.1.2] Please could you provide a more detailed description of the DCP services that each CSD will offer for each asset class (equities, fixed income, funds, etc.), for which types of operations (OTC, on-exchange, repos etc.) and by when (i.e. as of their migration date or after)?

[3.1.3] Do CSDs plan to offer the main T2S features (H&R, partialisation, prioritisation linkage, etc.) to DCPs?

[3.1.4] When will the user adaptations general requirements be provided (first draft, intermediary versions, final release)?

[3.1.5] Could you please explain how you intend to implement the T2S access rights concept for DCPs (e.g. one access right/ user per CSD, each user is to be identified via its BIC 11)? Will there be a single proposed set of DCP access rights? Or will there be a 'menu' to choose from depending on the DCP/CSD preferences?

[3.1.6] Once an entity declares itself to be a DCP, what degree of flexibility will it have in terms of its business activity?

- Do all instructions of the DCP have to be channelled via DCP mode or will the DCP also be able to send some instructions in ICP mode?
- Does the CSD allow the DCP configuration on securities account level/ instruction level? Which additional configurations will be allowed by the CSD? For example, if a securities account is administered in DCP mode (i.e. instructions indicating this account are sent directly to T2S and the reporting is also received directly from T2S), is it possible to operate the securities account in a so-called "mixed mode", i.e. certain instructions indicating this SAC, selected by the DCP (not imposed by the CSD), can also be sent in ICP mode or the reporting for instructions sent in DCP mode can be received in ICP mode? How does the CSD receive information about the DCP instructions and the related reporting (i.e. frequency of copies received, real-time, number of batches per day)?

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Summary of DCP Questionnaire Service Scope (2/2)

[3.1.7] From our perspective, user adaptations general requirements documentation should provide at least:

- A full overview of the CSD services (pre-settlement, settlement, corporate actions, position management, reporting, connectivity...)
- For each of the above, a quick reminder of what is provided, a general description of the service and the process that will be provided in the T2S settlement day (highlighting the changes), and what will be the required user adaptations (high level), distinguishing between ICPs and DCPs.
- (i) All of the functional topics mentioned in this document should be covered (e.g. for settlement: matching, validation, etc.) and (ii) all of the functional questions included in this document should be answered.

[3.1.8] When will user adaptations detailed requirements be provided (first draft, intermediary versions, final release)?

[3.1.9] The user adaptations detailed requirements documentation must provide, at least, the following for each service impacted by T2S:

- A detailed description of the processing (sequence diagram, input/output information), indicating interactions between ICPs and/or DCPs, the local market infrastructure (CCP, CSD, NCB...), T2S, and other possible actors (e.g. issuer / paying agents).
- Specifications of specific business rules

[3.1.10] Within T2S there will be interactions between CSDs and CCPs, what will be the impact on DCPs?

[3.1.11] What settlement-related services may still require a link with CSDs i.e. services which are not (fully) performed by T2S? Especially in the case of cross-border settlement with non-T2S CSDs

[3.1.12] In particular, please could you describe the cases where a DCP may have to send its instruction to the CSD?

[3.1.13] In what cases will the CSD interfere with the T2S settlement process (e.g. using CSD hold)?

Configuration

[3.3.1] How do CSDs intend to receive updates on their DCPs activity: real-time, batch, and what will be the associated cost?

Set-up

[3.4.1] Will the CSDs ensure that the right access model/privileges are assigned for all systems (including T2S) or will the DCP be able to "serve itself"? When will the DCP be able to start making these necessary configurations in T2S static data? During the migration weekend or even prior to this?

Consolidation

[3.5.1] Are DCPs allowed to use a single T2S interface to instruct/receive reports on all their T2S accounts irrespective of the CSD with which the securities accounts are held?

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slide 10

CSDs survey on offering of DCP services

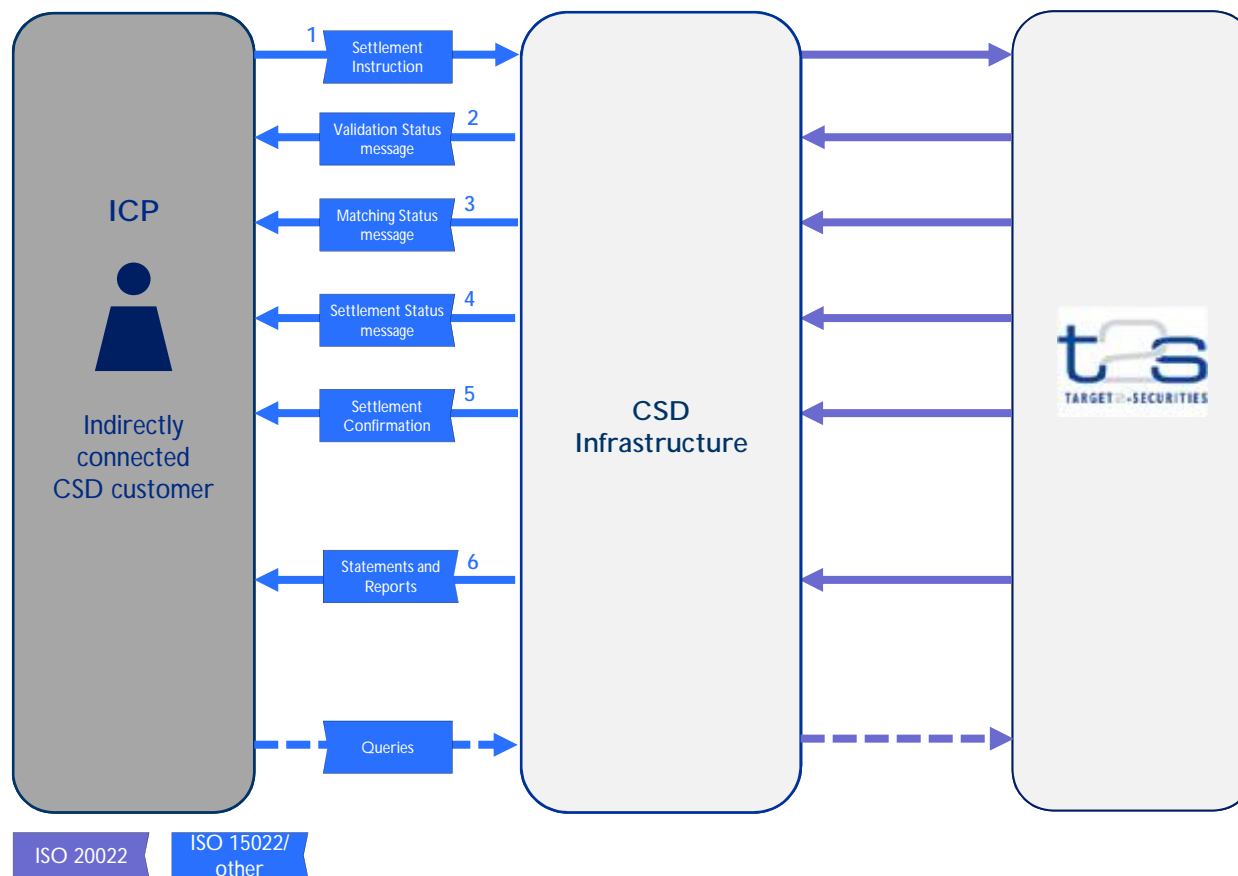
	CSD	Offering of DCP Services <i>Decided to provide Decided not to provide Decision open</i>	Timing of service offering description <i>If the decision has been made to provide DCP services please indicate by when a description of the service offering will be communicated</i>	Timing <i>If the decision has been made to provide DCP services please indicate by when these services will be provided</i>
Wave 1	BOGS, Greece	Decided to provide	Still open	Still open
	Monte Titoli, Italy	Decided to provide	Already agreed and communicated to participants through the User Requirements document	Since the T2S go-live date
	MSE, Malta	Decided to provide	Service Offering description will be communicated at a future date	DCP Service Offering commencement will be duly announced
	Depozitarul Central, Romania	Decided to provide	By the end of 2013	T2S go-live (June 2015)
	SIX SIS Ltd, Switzerland	Decided to provide	By the end 2013	Wave 1
Wave 2	Euroclear, Belgium	Decided to provide	Early 2014	Wave 2 launch
	NBB SSS, Belgium	Decided to provide	Mid 2014	Wave 2 launch
	Euroclear France	Decided to provide	Early 2014	Wave 2 launch
	Euroclear, Netherlands	Decided to provide	Early 2014	Wave 2 launch
	Interbolsa, Portugal	Decided to provide	By Q4 2013	Wave 2 launch

CSDs survey on offering of DCP services

	CSD	Offering of DCP Services <i>Decided to provide</i> <i>Decided not to provide</i> <i>Decision open</i>	Timing of service offering description <i>If the decision has been made to provide DCP services please indicate by when a description of the service offering will be communicated</i>	Timing <i>If the decision has been made to provide DCP services please indicate by when these services will be provided</i>
Wave 3	OeKB, Austria	Decided to provide	March 2014	As of migration T2S (3rd wave)
	CBF, Germany	Decided to provide	Service scope published via homepage, task forces, workshops and on bilateral meetings. Technical specification by the end of 2013	As of migration T2S (3rd wave)
	VP Securities, Denmark	Decided to provide	Pending on the ongoing discussion on possible (partly) T2S harmonization of CSD DCP services	With migration of local currency to T2S (expected for 2018)
	Keler Ltd, Hungary	Decided to provide	By the end of 2013	As of migration (3rd wave)
	LuxCSD, Luxembourg	Decision to provide	LuxCSD service is based on the Clearstream infrastructure and hence the same timeline applies as for CBF	As of migration (3rd wave)
	VPLux, Luxembourg	Decided to provide	Pending on the on-going discussion on possible (partly) T2S harmonization of CSD DCP services	2016
Wave 4	Estonia CSD	Decision open	Tbd	Tbd
	Iberclear, Spain	Decided to provide	Communicated to the interested DCPs on bilateral meetings	Depends on each of the services. Communicated to interested DCPs
	Euroclear Finland Ltd	Decided to provide	Tbd	As of migration (4th wave)
	Lithuania CSD plc.	Decision open, finalize questioning of participants	Tbd	Wave 4
	KDD, Slovenia	Decided to provide	By mid 2014	At the time of KDD's migration to T2S
	CDCP, Slovakia	Decision open	Tbd	Decision on provision of DCP services will be made after migration to T2S

ICP Processing Example DvP Transaction¹⁾

Customers acting in ICP mode will provide their messages in ISO 15022 respectively in any other message format existing with the CSD (also ISO 20022). The existing interface between the CSD and its customers may be subject for enhancement to enable the access to the entire service offering



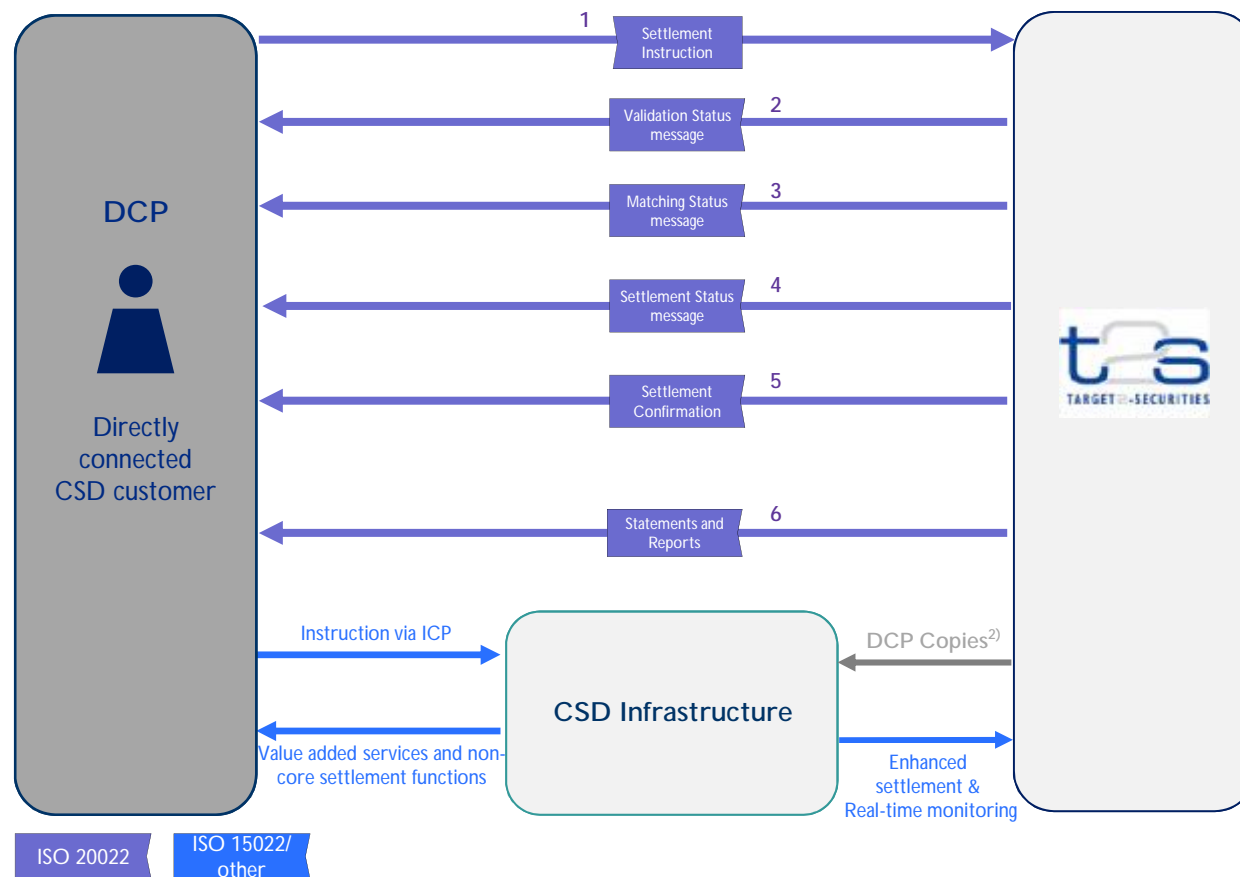
ICP connectivity

- The CSD-ICP customer instructs via the existing connectivity channels and the CSD forwards the instruction to T2S
- In ICP mode the CSD is responsible for managing the connectivity with T2S
- The customer is not required to be ISO 20022 compliant
- Additional queries of instructions, positions or static data can be performed by the ICP customer if needed

1) Example shows possible number of messages to be exchanged between the participant and the CSD for DvP instruction depending on routing configuration

DCP Processing Example DvP Transaction¹⁾

Customers acting in DCP mode will provide core settlement instructions in ISO 2022. The existing connectivity channel to the CSD will be used for specific settlement and value added services



DCP connectivity

- Standard instruction is sent by the customer directly to T2S (compliance with ISO 20022 necessary)
- CSD receives copies of messages exchanged between T2S and DCP customer from T2S according to the routing configuration
- Depending on the business context the CSD needs to execute additional process steps and monitoring to execute and mirror settlement instructions in T2S (i.e. CSD validation hold)
- Value added services (i.e. custody processing) and non-core settlement functions (i.e. regulatory reporting) will not be available through direct connectivity to T2S and will require a connection to the CSD

1) Example shows possible number of messages to be exchanged between the participant and the CSD for DvP instruction depending on routing configuration

2) CSD will receive copies according to routing configuration and legal requirements agreed with the corresponding CSD