

Collateral Management

Triparty Interoperability

Validation of high level concept

London, September 2007



Triparty Interoperability



- **Conceptual Model**
- Application to CCP GC business
- Settlement approach
- High level scenarii

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Conceptual model

ASSUMPTIONS

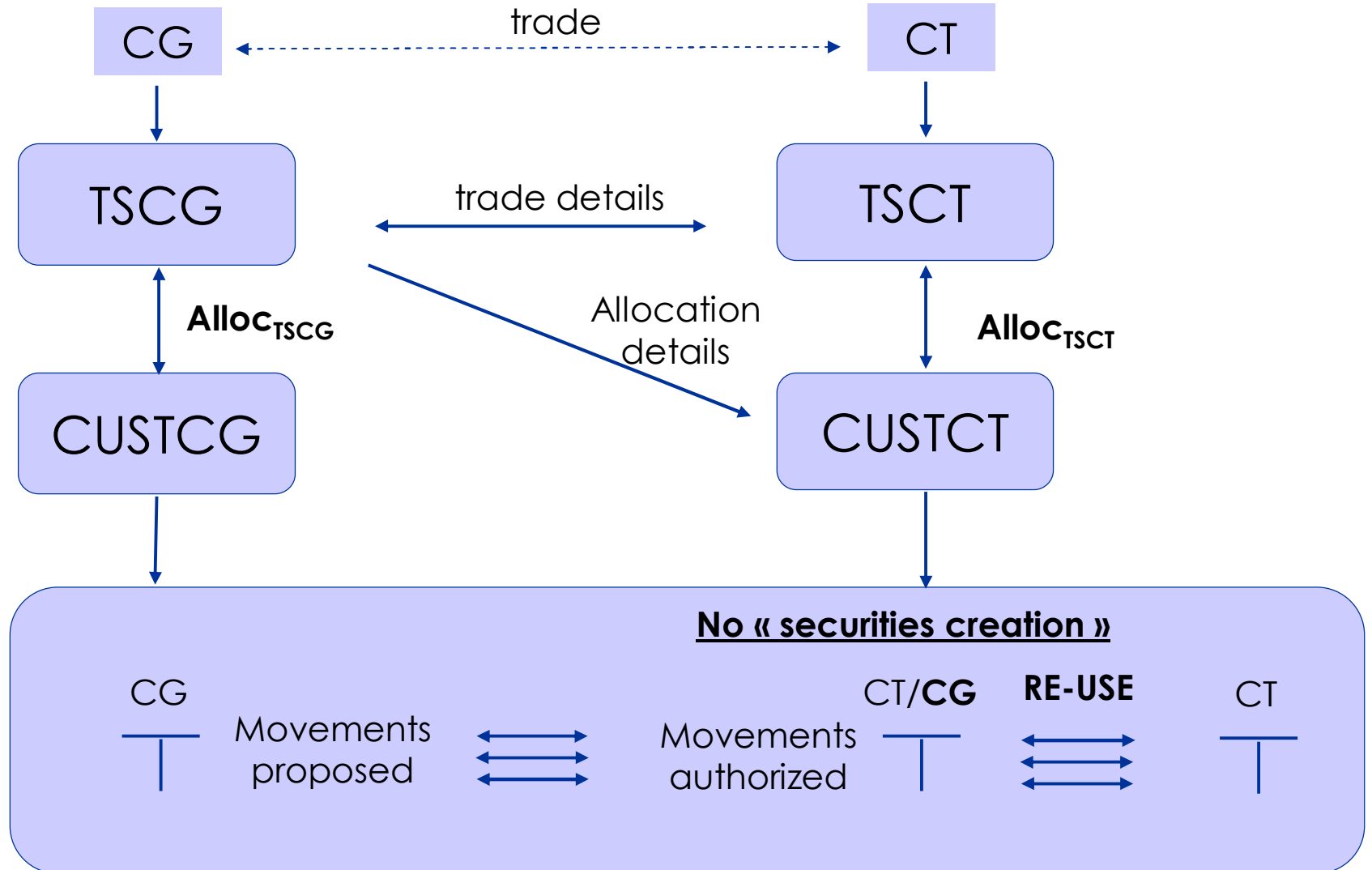
- 1) There are no settlement impediments;
- 2) Each triparty system keeps the required level of control on the assets subject to the collateral management services it provides to its customers, thereby avoiding « securities creation »;
- 3) Existing service levels achieved in each respective triparty system shall not face significant downgrade;
- 4) The interoperability model has to ensure a level-playing field for each triparty agent and its respective customers.

TERMINOLOGY

- CG Collateral Giver
- CT Collateral Taker
- CCP Central Counterparty
- TSCG Triparty agent of the Collateral Giver
- TSCT Triparty agent of the Collateral Taker
- CUSTCG Custodian of the Collateral Giver
- CUSTCT Custodian of the Collateral Taker
- $ALLOC_{TSCG}$ Allocation algorithm run by the Triparty agent of the Collateral Giver
- $ALLOC_{TSCT}$ Allocation algorithm run by the Triparty agent of the Collateral Taker
- SSS Securities Settlement System

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Conceptual model – with RE-USE



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Conceptual model – pre-requisites

SOME PREREQUISITES TO ANY IMPLEMENTATION:

- Alignment of securities data (reference data, including pricing, rating, FX rates etc...)
- Alignment of custody events handling procedures (e.g. automatic exclusion)
- Alignment of screening algorithms (haircuts, concentration calculations ...)
- Alignment of the collateral allocation algorithms specifically with respect to re-use (timings of the allocation processes, processing of substitutions)

MITIGATING FACTORS:

1. Restriction in the scope in terms of eligible assets (e.g. ERC baskets, EuroGC, ECB, ...)
2. One third party is owner of the baskets definition and provides the two triparty agents with an unambiguous list of eligible securities.

➔ SOME IT DEVELOPMENTS AND PROCESS REFINEMENTS MOST PROBABLY REQUIRED

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Application to CCP GC business

CCP GC business

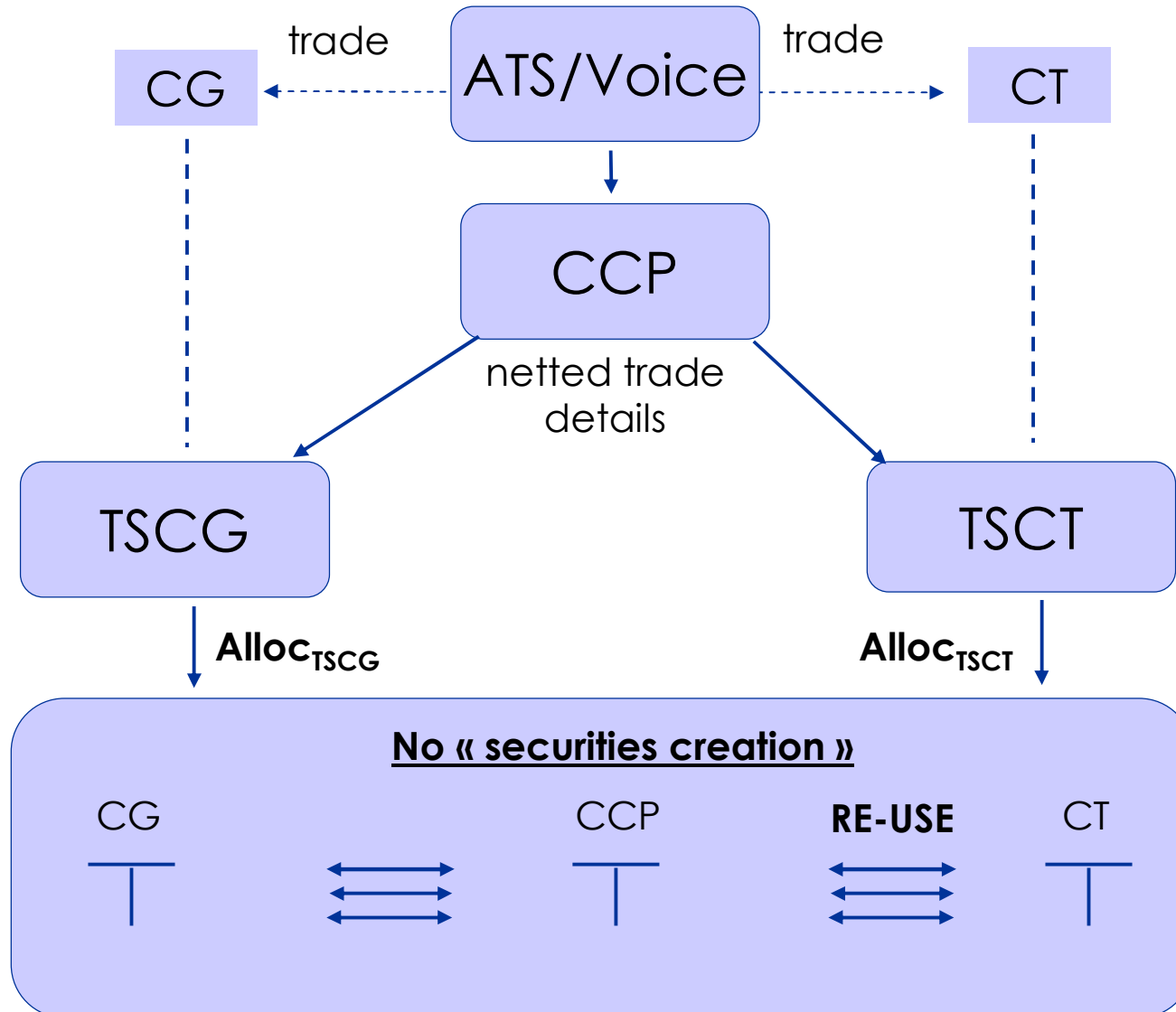
- The business being considered (GC product) implies collateral re-use;
- By definition of its role, the presence of a central counterparty simplifies the implementation of the triparty interoperability model;
- The CCP would establish a relationship with BOTH triparty agents;
- The collateral movements could then be operated under Power of Attorney, as it is the case today, in a bilateral environment.

VOLUMES AND NETTING

- Volumes and potential activity to be confirmed;
- The netting effect, at GC basket level, may ultimately limit the volumes processed in triparty;
- But contrarily to the bilateral GC business,
 - netting will be at GC basket level by the CCP (i.e. no settlement netting of individual lines of collateral)
 - the exact lines to be transferred will result from an allocation process run by the triparty agent

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Application to CCP GC business



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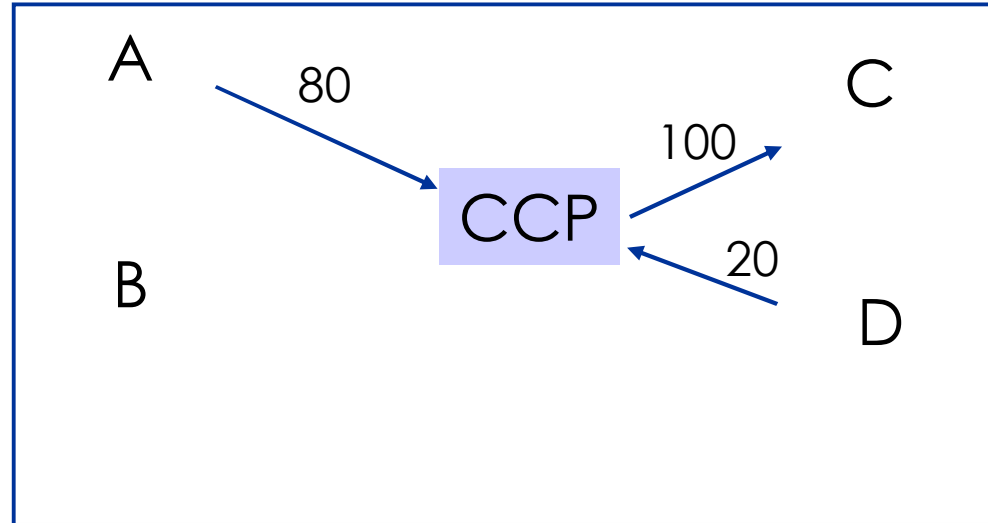


- Conceptual Model - Review
- Application to CCP GC business
- **Settlement approach**
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Settlement approach for CCP GC business

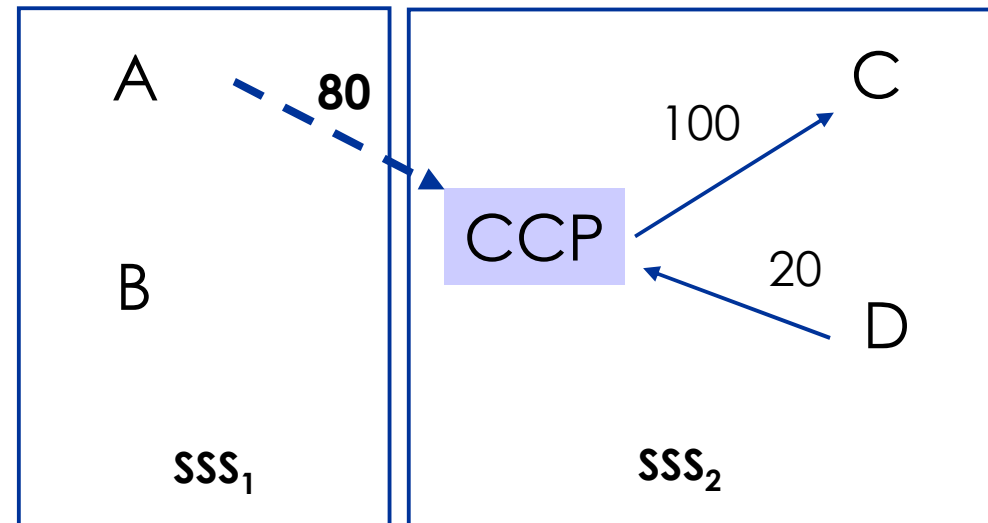
Multilateral netting



Settlement

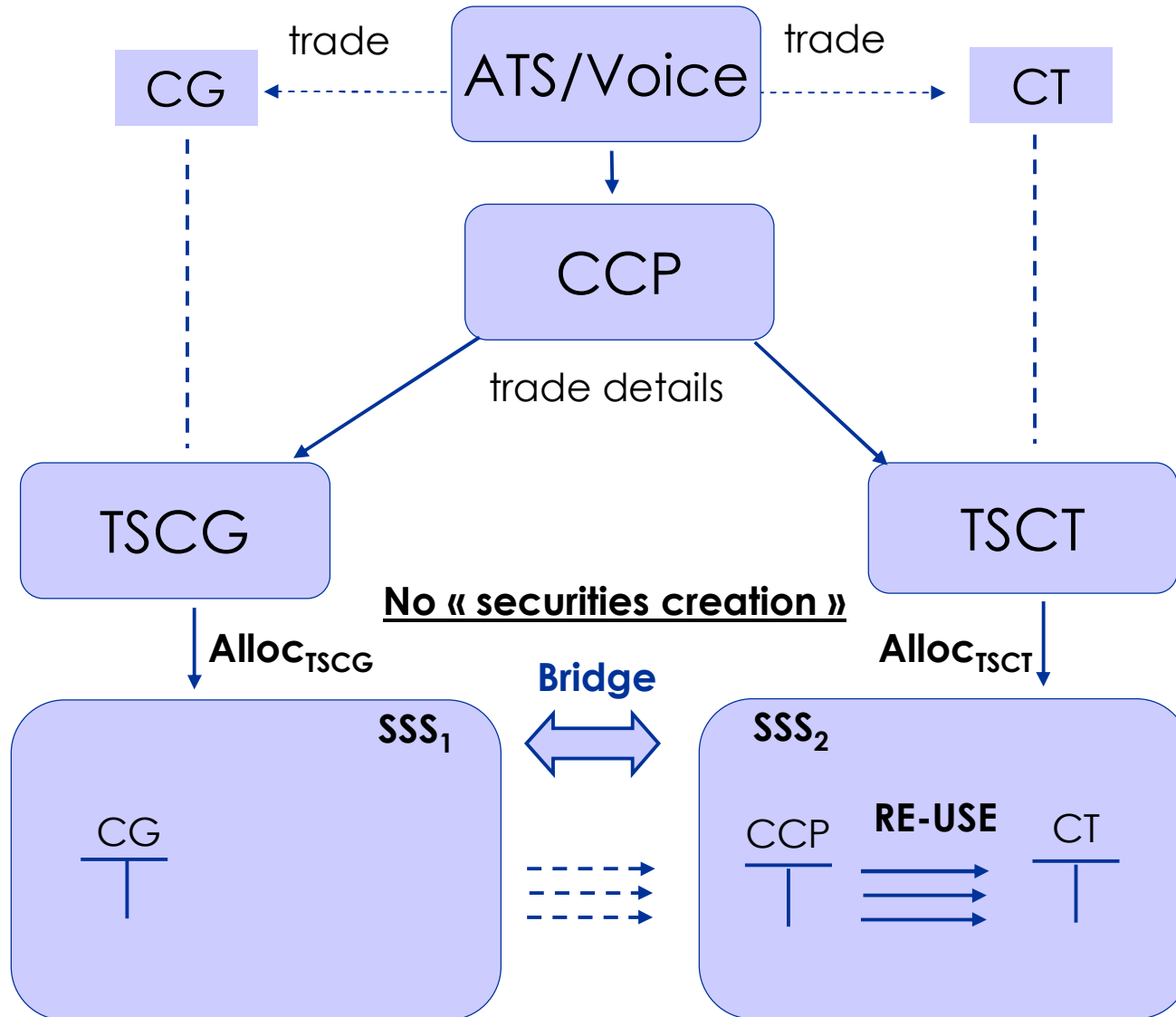
Assumption:

The net giver delivers across the Bridge when securities are required for a net taker in the other SSS



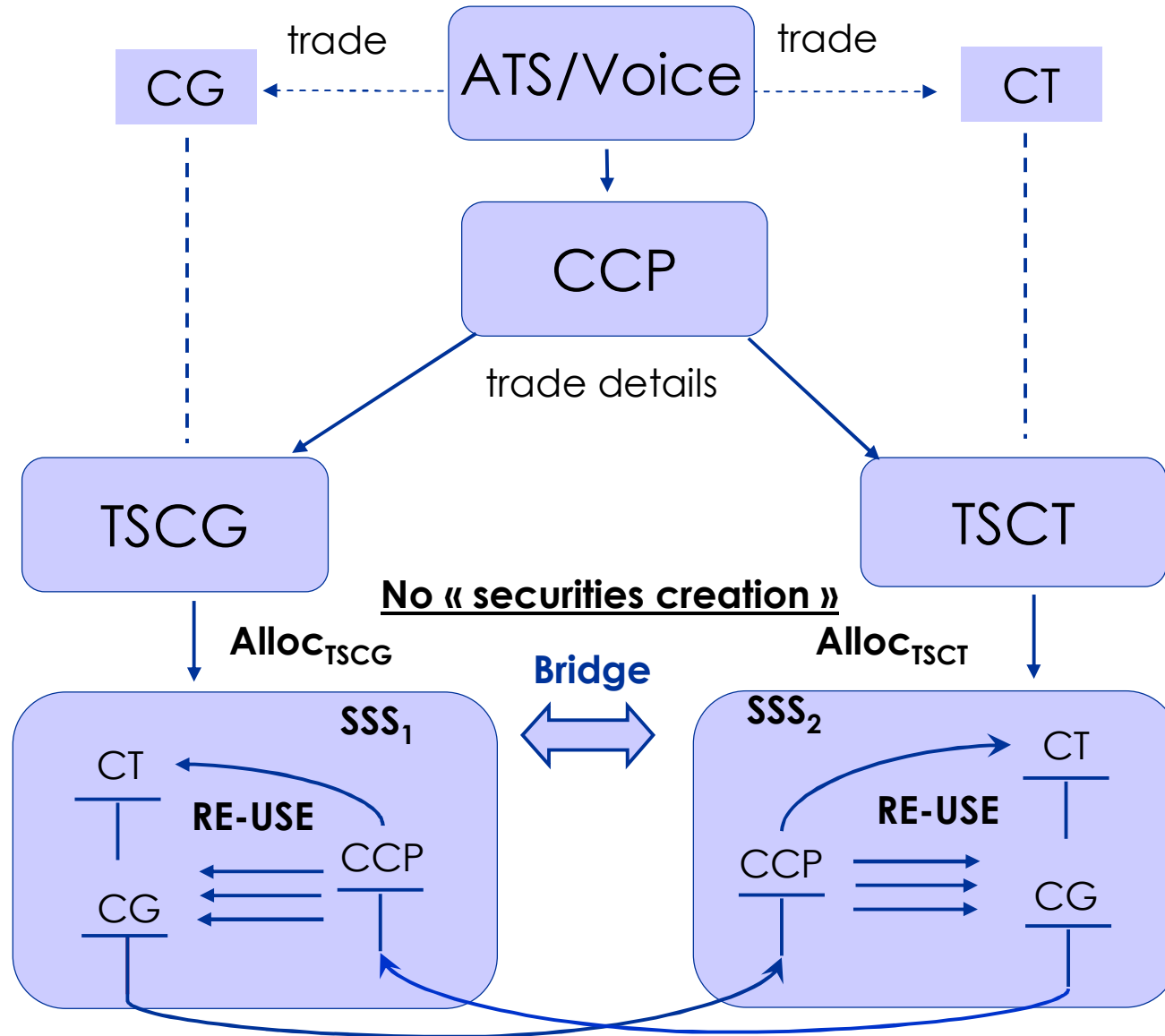
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Settlement approach for CCP GC business



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Settlement approach for CCP GC business



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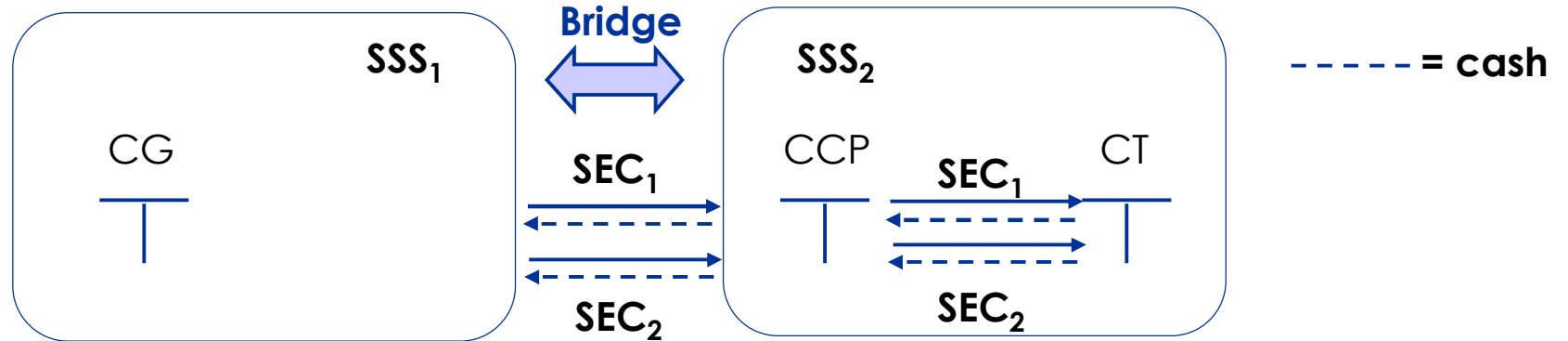


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High level scenarii

New trade

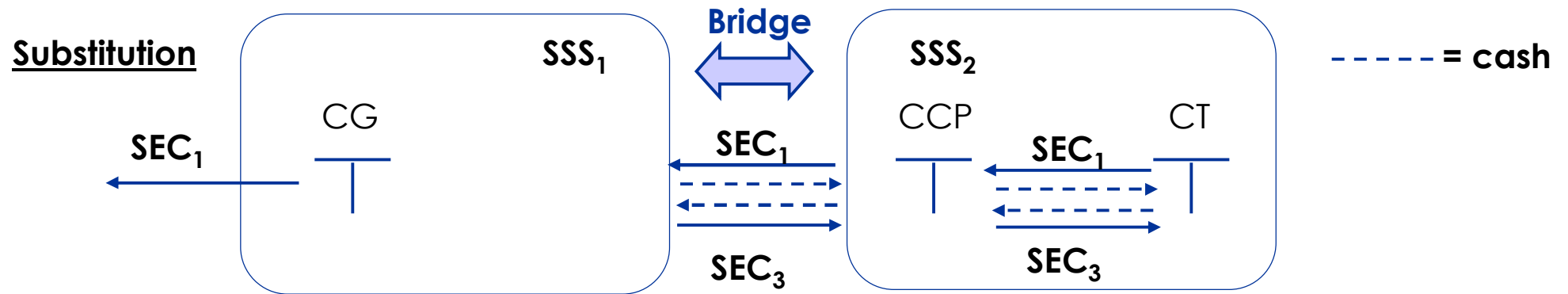


Process:

1. TSCG identifies available securities and triggers its allocation process
2. The resulting instructions are generated inter-SSS (bridge)
3. THEN TSCT triggers its allocation process
4. The resulting instructions are generated intra-SSS (internal)

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High level scenarii



Process:

1. TSCG identifies a need for substitution and triggers a substitution
2. The corresponding instructions are generated inter-SSS (bridge)
3. THEN TSCT identifies a need for substitution and triggers the substitution
4. The corresponding instructions are generated intra-SSS (internal)

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High level scenarii

SCENARIO #1

$SSS_1 = EB, ALLOC_{CG} = AutoSelect (A/S)$

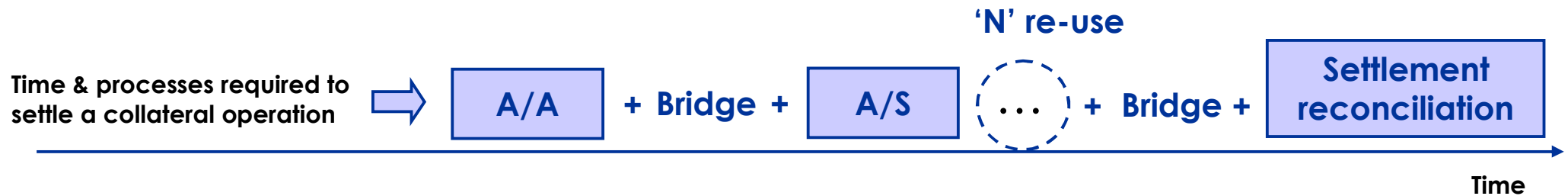
$SSS_2 = CBL, ALLOC_{CT} = AutoAssign (A/A)$



SCENARIO #2

$SSS_1 = CBL, ALLOC_{CG} = AutoAssign (A/A)$

$SSS_2 = EB, ALLOC_{CT} = AutoSelect (A/S)$



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High level scenarii

- Having 2 Securities Settlement Systems adds some constraints on the model
- First high level analysis based on the new Bridge enhancements to be implemented in Q2-2008

IMPORTANT ASPECTS STILL TO BE ANALYZED IN DETAILS:

- Impacts on the current service level and ways to minimize such impacts
- Liquidity – potential impact on the ICSDs treasury
- Inter-ICSD credit - meaning exposure related to Bridge settlement
- Customer credit – impact on the credit line of customers at the ICSD

- **NEEDS FOR PROCESS REFINEMENTS AND ASSESSMENT OF I.T. DEVELOPMENTS TO BE DONE AFTER DETAILED ANALYSIS**