Insights on the use of Business Application Header BAH

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T2S Programme Office
European Central Bank

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Scope of the presentation

The presentation aims to address the following key questions related to the Business Application Header (BAH).

- What is the Business application header?
- What are the key fields of the BAH?
- How the fields are used and filled in?
- BAH examples

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Definition (1/2)

Business application header (BAH):

The Business Application Header is part of each business message exchanged between directly connected CSDs, CBs or any parties authorized by them and T2S. The Application Header facilitates the message processing as it stores the information necessary for the processing at one central place. An ISO 20022 Message together with its Business Application Header forms a Business Message.

For T2S it is a business XML message which among other contains:

- The “Party From”
- The “Party To”
- A Message Definition Identification
- An unique Business Message Identifier
- A digital signature for authentication / non-repudiation purpose

Business Sending Party:

Party creating and signing the business payload of the messages sent.

Definition (2/2)

Business sending user:

For inbound messages (messages sent to T2S) it is the User belonging to the Business Sending Party creating the business payload of the request and signing the message.

Party identification:

Each party in T2S is identified by 2 Business Identifier Codes (BICs): It's own Party BIC and its Parent's BIC (Parent in T2S)

For the Inbound messages (messages sent to T2S), the Party is also identified by a System User Reference, Certificate DN and Signature.

System User Reference is used for authentication of the message because the User certificate for digital signature are defined at the level of the User_id / User Reference in T2S.

BAH example (single message incoming sese.023)

BUSINESS APPLICATION HEADER

```
- <AppHdrxmlns="urn:iso:std:iso:20022:
- tech:xsd:head.001.001.01">
<Fr>
<FIId>
<FinInstnId>
<BICFI>AARBDE5W100</BICFI>
<ClrSysMmbId>
<ClrSysId>
<Prtry>T2S</Prtry>
</ClrSysId>
<MmbId>ADMNUSERLUXCSDT1</MmbId>
</ClrSysMmbId>
<Othr>
<Id>TRGTXE2SXXX</Id>
</Othr>
</FinInstnId>
</FIId>
</Fr>
```

```
<To>
<FIId>
<FinInstnId>
<BICFI>TRGTXE2SXXX</BICFI>
<Othr>
<Id>AARBDE5W100</Id>
</Othr>
</FinInstnId>
</FIId>
</To>
<BizMsgIdr>D2977R15</BizMsgIdr
>
<MsgDefIdr>sese.023.001.03</Msg
DefIdr>
<CreDt>2014-09-
23T11:37:39Z</CreDt>
```

BAH SIGNATURE…

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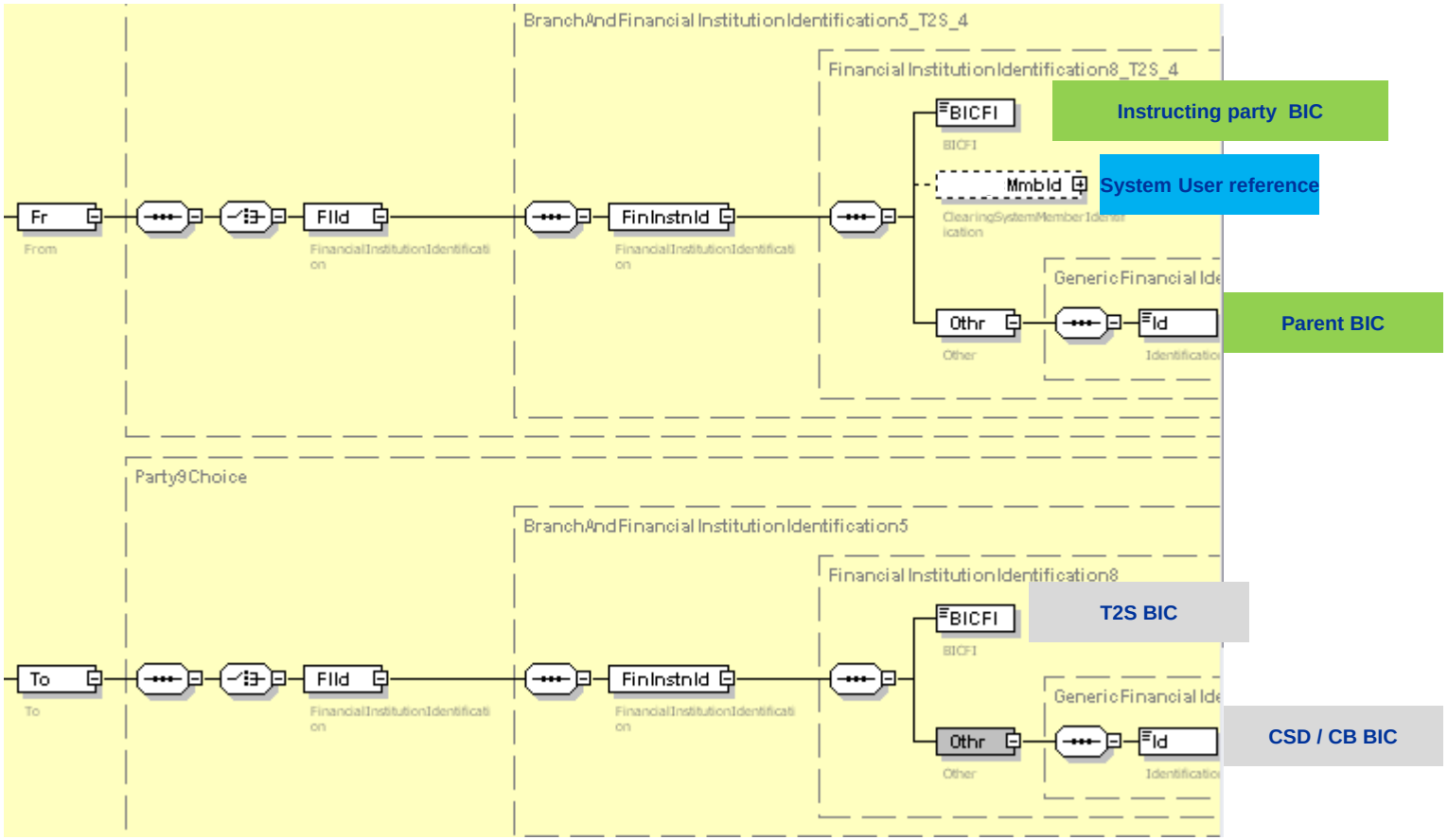
Message sent to T2S: Inbound header (single message)



FROM

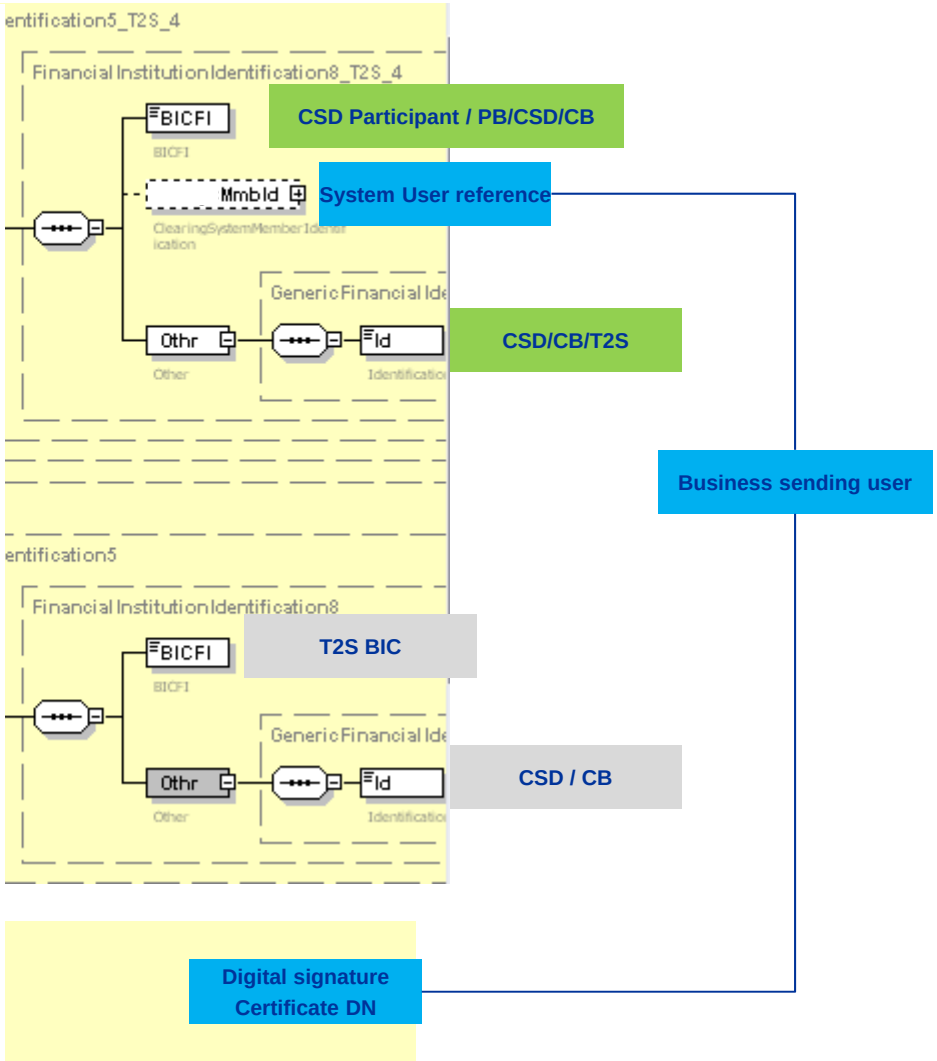
TO

Signature

Message sent to T2S: Inbound header (single message)

1. The System User reference and the Signature are used to authenticate the message

2. The Business sending party is the party to which the Business Sending User belongs

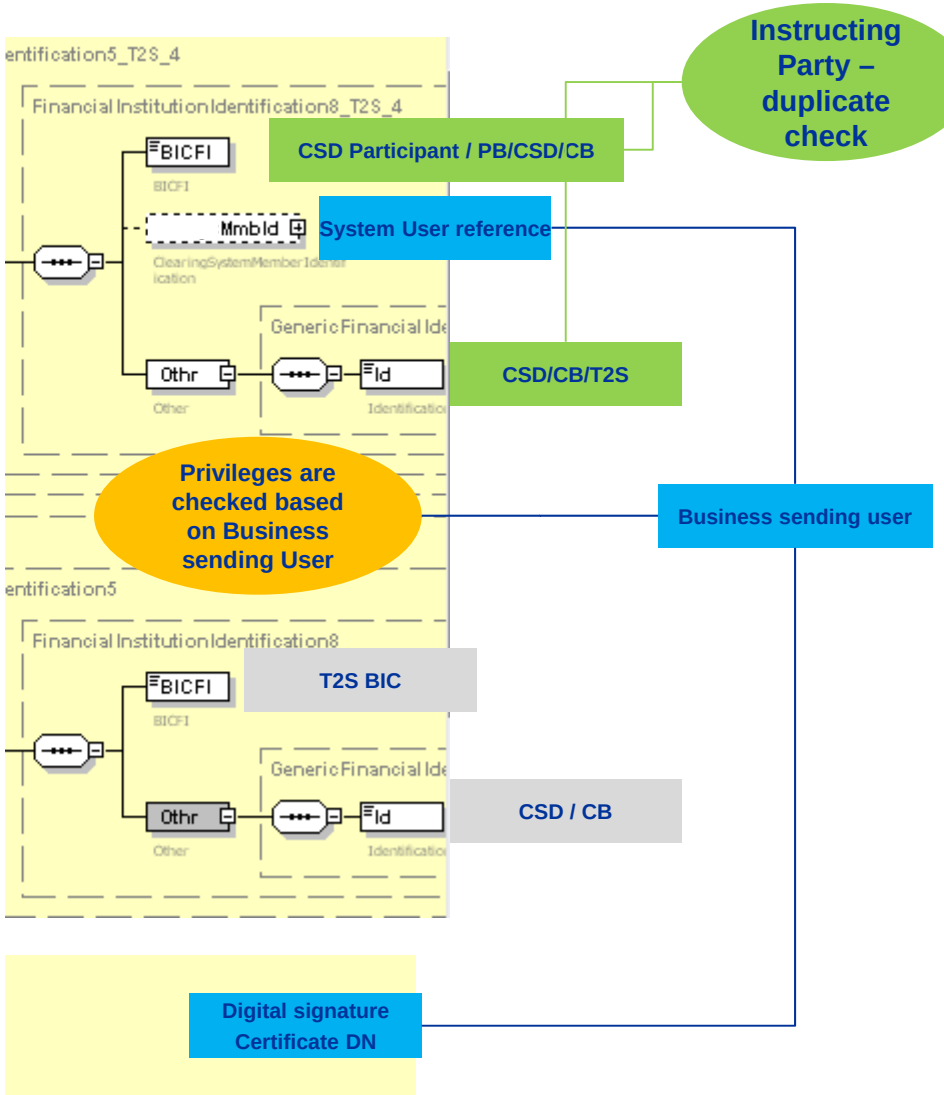


Message sent to T2S: Inbound header (single message)

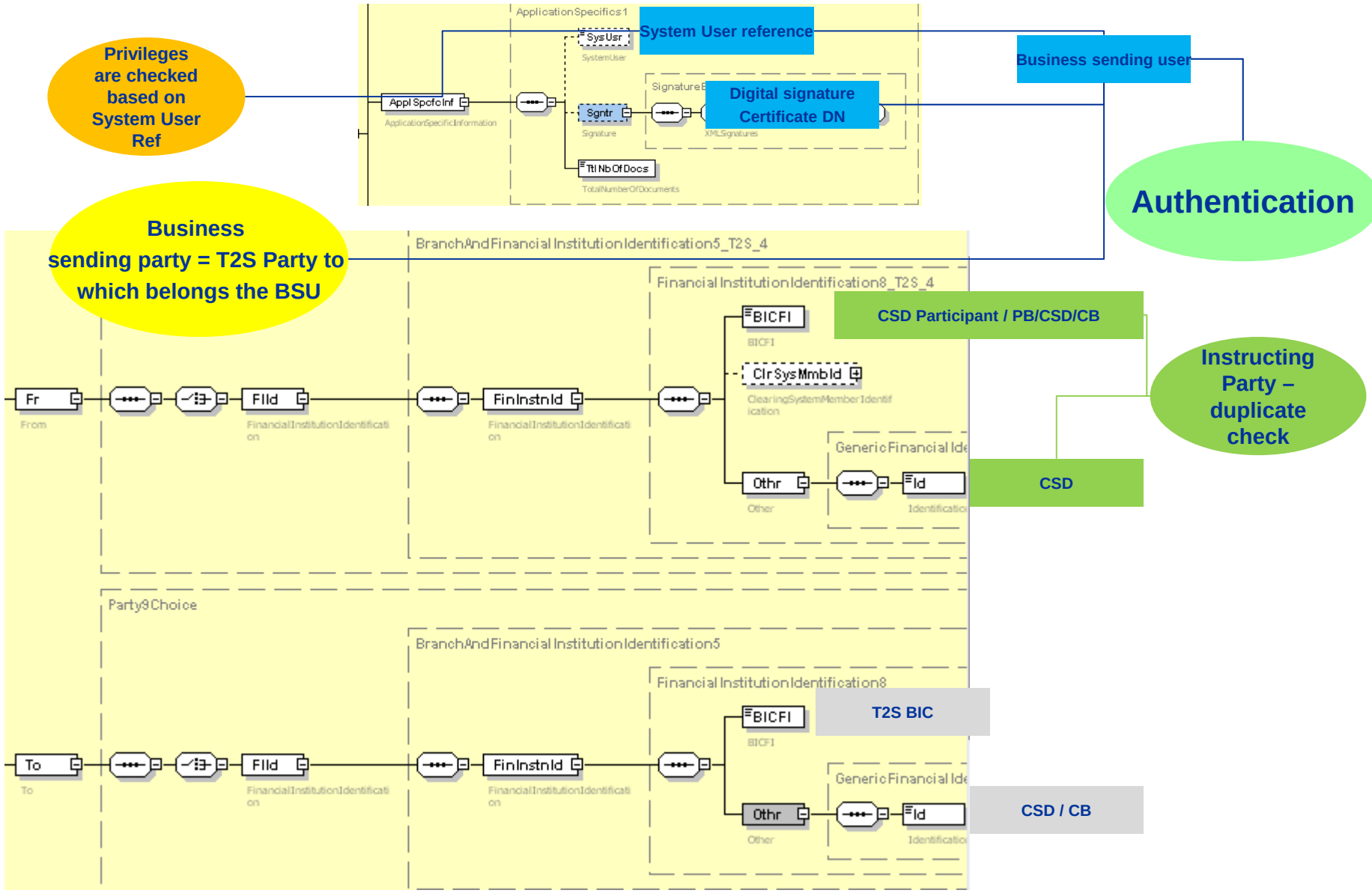
3. Privilege check:

T2S checks that the Business Sending User is allowed to instruct for that Party

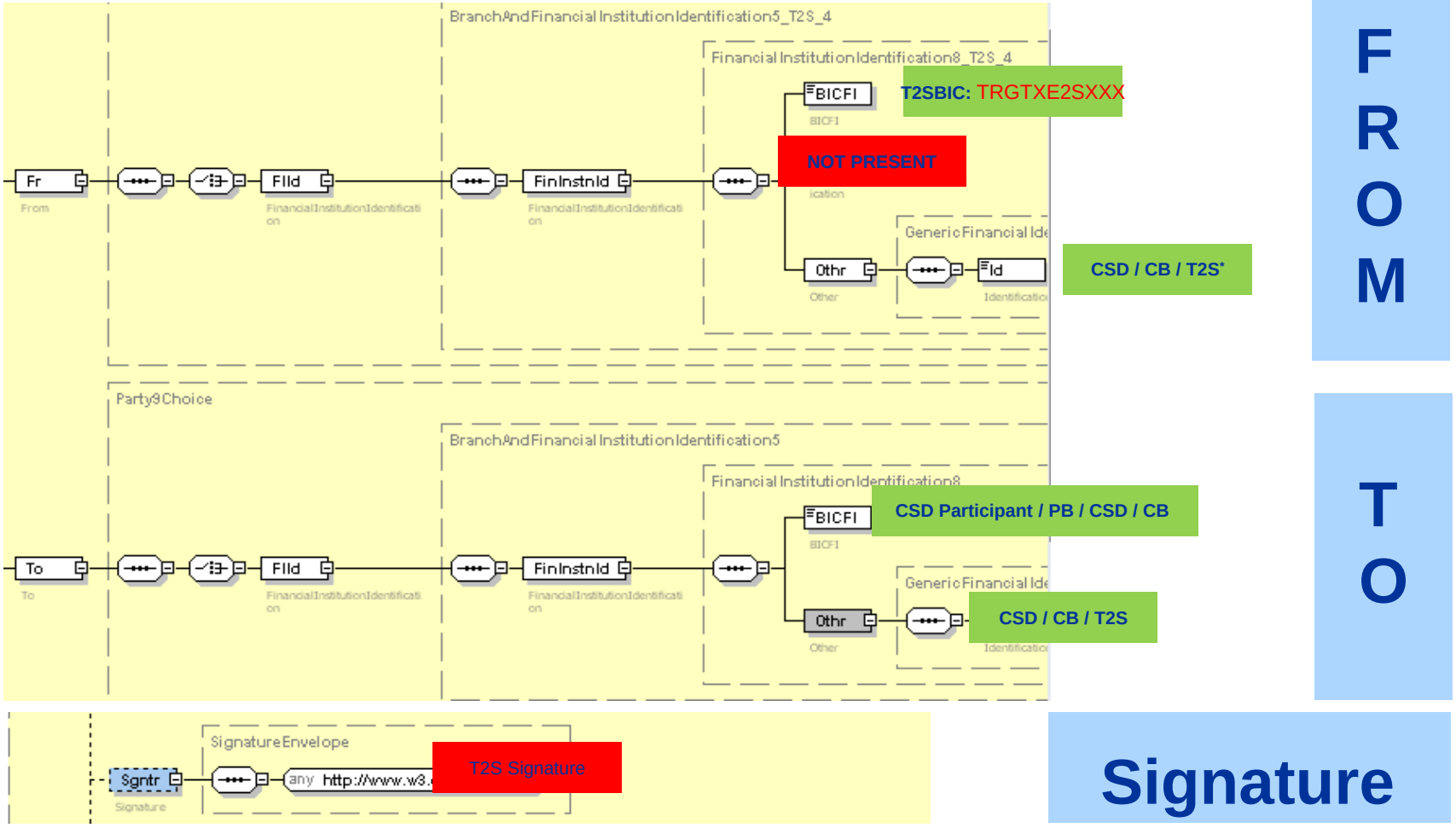
4. The Duplicate check is performed for the T2S Actor's Instruction Reference and Instructing Party (Party BIC and its Parent BIC)



File sent to T2S: Inbound file header



Message sent by T2S: Outbound header single message



* The <Othr><Id> field in the FROM section includes the parent BIC of the party who owns the Business Data. It can happen that in certain circumstances this filed could inlcude T2S BIC (e.g. In case of BillingReport / Invoice - camt.077 message) which would result into reporting of T2S BIC twice in the FROM section of the BAH.

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Copies of inbound messages

It is possible for a Party in T2S to subscribe to inbound copies of messages sent to T2S by another T2S party (i.e. CSD or CB requesting copies of the messages sent by their DCP participants).

In that case the inbound copy message sent by T2S will contain two BAHs:

1. The usual BAH for T2S outbound message.
2. The BAH of the initial message sent to T2S will be included in the related (<Rltd>) message block within the BAH of the inbound copy message.

Copy duplicate and possible duplicate indicator

T2S outbound messages have at the end of their BAH two fields indicating if a message is a copy and / or that possibly the message has been sent twice.

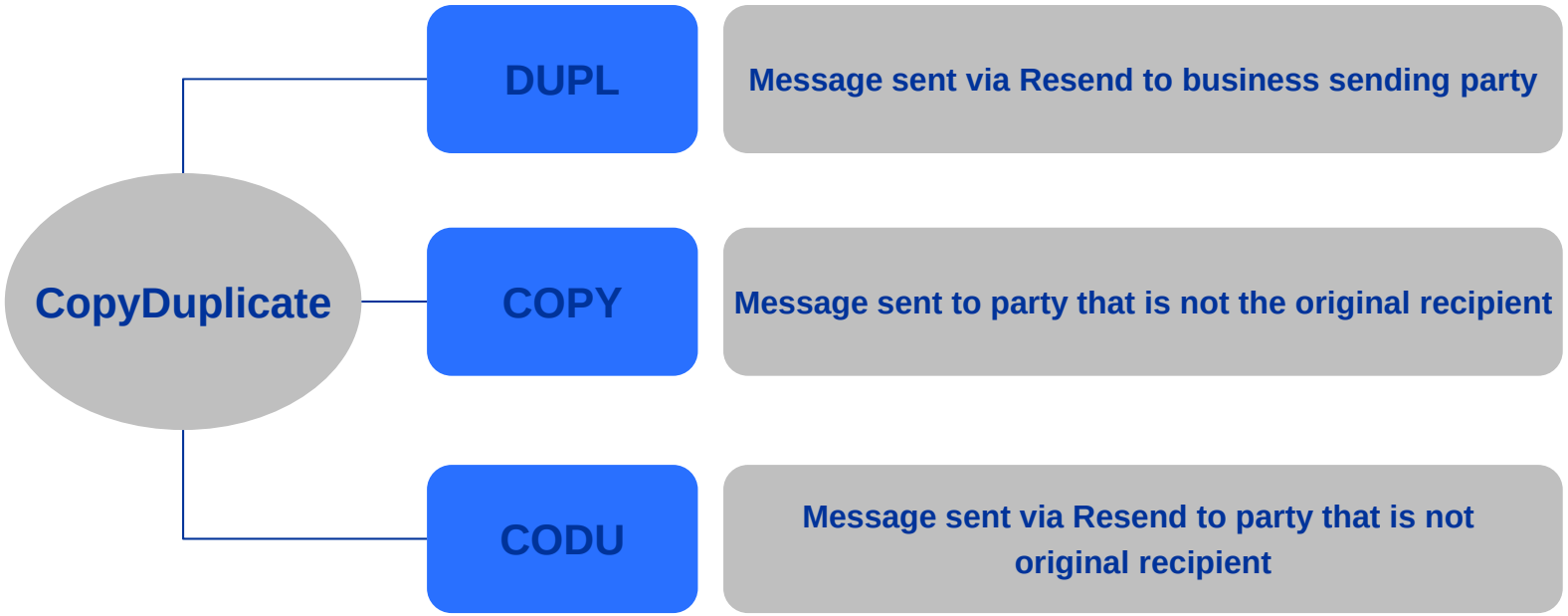
<CpyDplct>COPY</CpyDplct>

<PssblDplct>true</PssblDplct>

(see details next pages)

For T2S inbound messages these fields are not used.

Copy duplicate indicator



NB: The field is optional and is omitted when there is nothing to report

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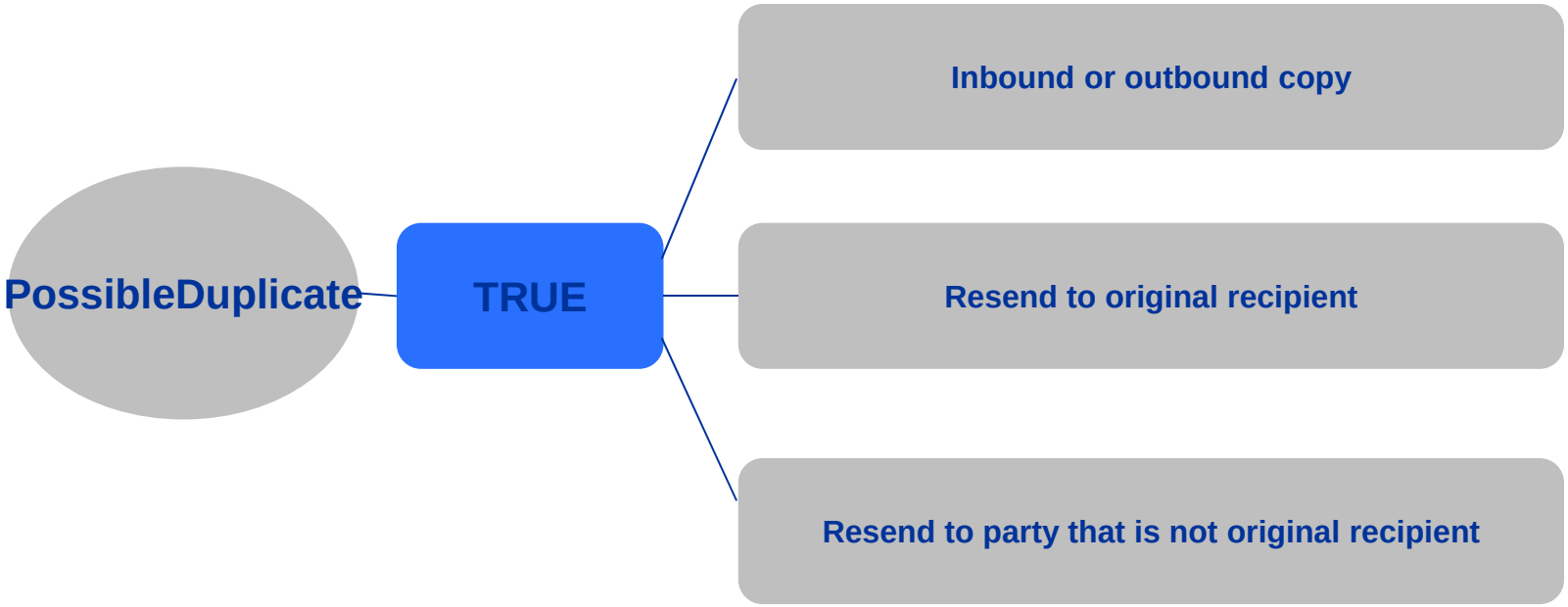
Possible duplicate indicator



NB: The field is optional and is omitted when there is nothing to report

Priority (1/2)

- Priority (<Prty>) is an optional element in BAH
- Priority element provides a sequence number which informs the recipient of the message about the business order of LCMM status outbound messages received from T2S.
- Allows to ensure that there isn't a missing message.
- Independent counter is present for each party technical address per business day.
- Ignored for inbound message.
- Format: YYYYMMDD12345678 e.g. <Prty>20141020000000062</Prty>
- A sequence number is not populated for copy of an inbound message because the copy of the inbound message is independent of the LCMM status notifications.
- Status notification messages (sese.024) for Cancellation requested by the counterparty have their own priority and are not included in the sequence order of status notifications related to the lifecycle of a settlement instruction

Thank you for your attention

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