New CBI Architecture

Collections Area SEPA

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Revisions

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27-04-2009	00.00.01	02/11/2009	Mixed Business working party	• Para. 2.7 – Updated names of Excel documents
22-07-2009	00.00.02	02/11/2009		• Para. 2.4 – Added how to apply electronic signatures • Para. 2.7.1, 2.7.2, 2.7.3 – Modified figures 7, 11 and 13 in line with the new way to apply electronic signatures • Updated related record layouts (See Excel documents STIN-ST-001, STIN-ST-002 and STIN-ST-003)
26-11-2009	00.00.03	18/12/2009	Mixed Business working party	• Para. 2.9.1 – Added clarification about non-uniqueness of Creditor Agent • Para. 2.9.1 – Eliminated glitch in check at point 1 • Para. 2.9.5 – Corrected minimum value of <ChrgsAmt> • Para. 2.5.3 – Corrected "BTOB" code and related check referred to in para. 2.9.1
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14-06-2011	00.00.05	19/11/2011		• Paras. 2.9.1, 2.9.5 – Added clarification about the decimal places in amounts • Paras. 2.4, 2.6, 2.7 – Eliminated reference to the PKCS#7 signature • Para. 2.5.3 – Updated related ISO messages • Paras. 2.7.1.1 and 2.7.2.1 – Eliminated glitches • Paras. 2.7.3.1, 2.8.1, 2.8.2, 2.8.3, 2.8.4 e 2.9.4 – Updated in accordance with the new structure of the ISO record layouts • Para. 2.9.1 – Updated checks on Initiating Party, OrgnlCdtrSchmeId and CdtrSchmeId; updated checks on End-to-end identifier, Category Purpose; eliminated applications check on Charge Bearer • Para. 2.9.5 – Added check on the <Cd> field in the Reason block with reference to external ISO table; replaced TxInfAndSts with OrgnlPmtInfAndSts and PrtryId with Othr • Para. 2.9.7 – Replaced PrtryId with MmbId
08-08-2012	00.00.06	17/11/2012		• Para. 2.9.1: - Added applications checks on Tax Identifiers - Eliminated reference to the URL of the external code lists - Eliminated the applications check on the Instruction Identification field • Added Appendix D relating to the table of countries in the SEPA area • Paras. 2.7.1.1 and 2.8.1 – Eliminated the sequence requirement for the Instruction Identification field • Paras. 2.5.3 and 2.9.1 – Added reference to the "COR1" as an alternative to the "CORE" code in the Core/B2C schema
22-10-2013	00.01.00	01/02/2014		• Para. 1.1: added reference to document "STUS-MO-001" • Para. 2.9.1:

17/02/2014 26/09/2014		31/03/2014 02/03/2015		- Updated the applications checks on Tax Identifiers following the outcome of the consultations held on 13/11/2012 - Eliminated the applications check that compared the Debtor and Ultimate Debtor field names and the Creditor and Ultimate Creditor field names - Eliminated applications check on the presence of the Purpose field if the IBAN of the Debtor Account starts with IT • Para. 2.9.4 – added recommendation on use of type "8" status in the case of IR-EF conversions • Para. 2.9.5 - corrected the glitch relating to the Amount field within Charges Information. Updated the applications checks on Tax Identifiers following the outcome of the consultations held on 13/11/2012 • Para. 4: - Appendix A: added clarification about the use of characters not included in the EPC minimum set - Appendix D: updated the name of the document listing the countries in the SEPA • Para. 2.9.1: - Extended the rule on the presence of the Debtor Agent field to the case when the IBAN starts with SM Eliminated the applications check on the Regulatory Reporting block if the IBAN charged ≠ IT • Para. 2.9.1: - Added applications check on the value set for the mandate id: impossible to set a value comprising just spaces and/or characters not included in the basic Latin set - Eliminated the applications check on the Regulatory Reporting/Amount field regarding consistency of the transaction amount with the CVS amount
03/06/2015		01/02/2016		• Par. 2.8.1 – Added the Collection Type, among the others, as collection request (Group) identifier • Par. 2.9.1 – check Added: CdtrSchmeId format control
10/05/2016		20/11/2016		• Par. 2.9.1: - Eliminated COR1 code from Local Instrument/Code - Eliminated the applications check on "Sequence Type" field regarding mandatory presence of "FRST" in case of "Amendment Indicator" set to "TRUE" and Original Debtor Agent set to "SMNDA" - Modified the applications check on "Original Debtor Agent" field • Corrected the glitch relating to the issuer field in xsd schema CBISDDTechValStsLogMsg.00.01.00 • Modified data type related to "amounts" in all the xsd schemas
28/03/2019		18/11/2019		• Par. 4, Appendix A: added clarification about the use of "/" and "//" in identifiers, in accordance to EPC IGs

14/10/2019		18/11/2019		• Updated the CBI Scpa logo and eliminated references to the Consortium
14/09/2022		19/11/2023	Standards Working Group	As of November 21, 2023, the reference ISO messages for the SEPA Direct Debit will be updated, as specified in the SDD Implementation Guidelines published by the EPC. The new IGs will take the 2019 versions of the ISO messages as a reference instead of those used to date (2009 versions). Therefore, the service request message will be based on the pain.008.001.08 message instead of the previous pain.008.001.02, while the technical validation status and the collection status message will be based on the pain.002.001.10 schema instead of the previous pain.002.001.03. • Additions related to the migration of EPC Implementation Guidelines for SDD collections involving the use of the new versions of ISO messages (pain.008.001.08 and pain.002.001.10): ○ Par. 2.9.1, bullets 11, 26: described the newly introduced application checks regarding the usage of structured and unstructured field of Postal Addresses for Debtor and Creditor. ○ Par. 2.9.5, bullet 14, introduced application check on Purpose field, previously not included in the collection status message.
09/05/2023	00.01.01	19/11/2023	Standards Working Group	Changed the version number of all XSD schemas from 00.01.00 to 00.01.01, for the release dated 19/11/2023, which will introduce non-backward-compatible changes to XSD schemas.
02/11/2023	00.01.01	17/03/2024	Standards Working Group	Changed effective date due EPC decision on rescheduling SEPA releases to March 17, 2024.

Confidentiality and transmission

Contents

1 Introduction

This document contains the functional specifications for CBI's New Services in the Collections area. In particular, the following aspects are covered:

- SEPA Direct Debit (also "SDD") Collection Requests
- Collection status for Originator

Access Banks have the option to make principal functions available to customers:

- SDD Collection Request
- SDD technical validation status
- SDD status for Originator

Executing Bank are only obliged (See CBI Circular no. 4/2009) to offer the full set of "principal" functions listed above if they have also joined the SEPA Direct Debit scheme as Creditor Account Banks, signing the related EPC Adherence Agreement. This principle applies both for "Core/Business to Consumer" transactions (also "B2C") and for "Business to Business" transactions ("B2B"), which are services that can be performed independently pursuant to the EPC Rulebook and specific Adherence Agreements. For this reason, two separate SDD presentation functions are published in the Directory (see para. 2.5.6).

For each of these services, the following aspects are covered:

- Parties involved in carrying out service requests
- Characteristics of the service
- Description of workflow
- Service levels
- Messages

1.1 REFERENCE DOCUMENTS

This document makes frequent reference to the CBI technical documents listed below:

- *STFW-MO-001 - CBI Service Management Framework*;
- *STPG-MO-001 - New Services General Part*;
- *DIRECTORY-MO-001 Directory Requirements*;
- *FIRMA-MO-001*;
- *STUS-MO-001 Guide to using the XML standards.*

These documents are, for all purposes, an integral part of the technical documentation for CBI's "SEPA Direct Debit Collection Requests and Status for Originator" service.
In particular, document "STUS-MO-001 Guide to using the XML standards" contains important information for customers intending to use the service.

2 SEPA Direct Debit Collection Requests and Status for Originator

2.1 PARTIES IDENTIFIED

The parties indicated in the functional description of CBI's new "SDD Collection Requests" and "SDD Status for Originator" services are described below.

The following parties are indicated in the description:

Party that initiates the collection request (Initiating Party)
The party that initiates the collection request (under a CBI contract signed with an Access Bank)

Creditor (Beneficiary/Originator/Biller)
The Beneficiary is the holder of the current account to be credited with the collection requested by the sender. This may coincide with the Initiating Party. If the Initiating Party is not the Creditor, the collection request is submitted by the Initiating Party based on an authority from the Creditor

Debtor the holder of the current account to be debited with the collection requested

Ultimate Creditor
The ultimate beneficiary of the collection request/instruction

Ultimate Debtor
The ultimate debtor of the collection request concerned

Access Bank of the Initiating Party/Originator
The Bank that provides the Initiating Party/Originator of the collection request with telematic access to the CBI circuit. This party is also referred to as the "Logical Sender" of the collection request (as well as "Logical Recipient" of the related progress reports).

Originator's Executing Bank (Creditor Account Bank/Creditor Agent/CB)
The Bank where the creditor account is held and that, therefore, credits the account under a specific service contract. This party is also referred to as the "Logical Recipient" of the collection request (as well as "Logical Sender" of the related progress reports).

Payer's Bank (Debtor Agent/DB)
The Bank where the debtor account is held and that, therefore, carries out the checks needed to complete the collection transactions.

Clearing & Settlement Mechanism (CSM)
Platform that manages the multilateral clearing and settlement of collection transactions for banks participating in the scheme.

Clearing Agent
Party that governs a CSM.

2.2 DESCRIPTION OF SERVICES

This paragraph provides a functional description of the "SEPA Direct Debit Collection Requests" and "Status for Originator" services.

At a macro level (fig. 1), note that the Initiating Party/Originator orders a SEPA Direct Debit collection request (so-called "payment initiation" phase) **(1)**, either directly using the front-end application made available by the Access Bank or by importing it from a business application. The Originator's Access Bank - if not the recipient of the request as the Executing Bank - sends this request to the Originator's Executing Bank **(2)** which, after local checks, executes the transaction **(3)**, including if appropriate a reference number for checking/reconciliation purposes elsewhere in the chain of collection.

Figure 1

Looking at a more detailed banking workflow (**Fig. 2**), following the service request made by the Initiating Party/Originator, the Originator's Access Bank - if not the recipient of the request as the Executing Bank - sends this request to the Originator's Executing Bank **(1)**, which performs the local diagnostic checks envisaged in the XML Schema **(2)** and then the applications checks defined in the CBI standard **(3)**, arranging within one hour of receipt to send a "technical validation status" message to the Originator's Access Bank **(4)**, in order to notify the Initiating Party about a) acceptance of the flow[1] and b) whether or not it is correct (acceptance/rejection of the entire group based on the outcome of the formal and applications checks).

The Executing Bank then performs substantive checks on the requests in accordance with its own internal procedures. These may be performed both with reference to the data contained in the entire group **(5)**, and at a logically subsequent moment in relation to the individual transactions, with reference to the results of internal checks or reports received from the Clearing Agent / Payer's Bank in the settlement phase **(7)**.

If the outcome of phase 5 or 7 above is negative, the Executing Bank must notify the Initiating Party/Originator, preparing a specific substantive progress report (status message) covering, respectively, the entire group **(6)** or the individual transactions contained in it **(8)**.

Each substantive progress report is followed by a corresponding (interbank) diagnostics message ("status report control" or "transmission control message").

[1] For the purposes of the new CBI services, the term "flow" means "logical message", "group", "logical support".

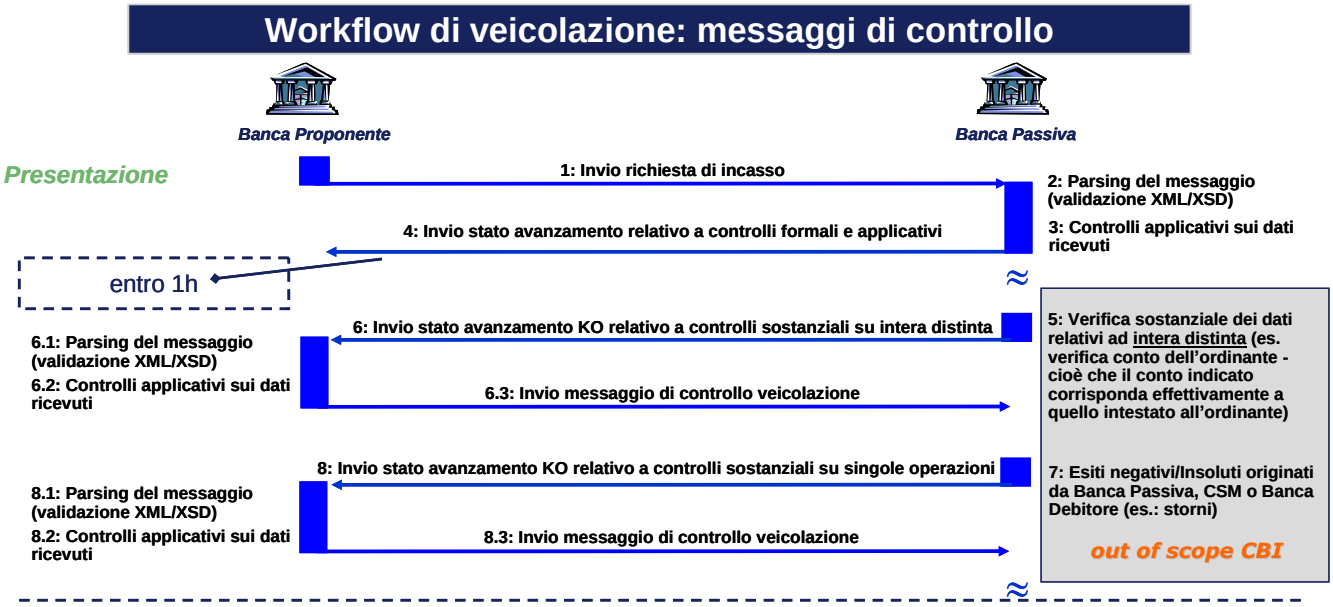
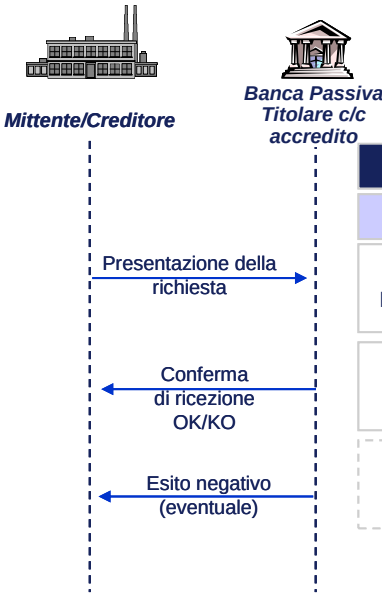


Figure 2

The SLAs for the services provided by the set of SDD functions are outlined below (**Fig. 3**). Comparison with the equivalent EPC timings indicates that these relate to the interbank relationship (presentation to Payer's Bank/DB, with different criteria for B2B and B2C, see SDD Rulebook current at the time), while the CBI timings relate to the Initiating Party – Executing Credit Account Bank. The timing of presentations to the CBI circuit are not defined but, obviously, are affected by the downstream time limits established in the relevant SEPA schema (e.g. the customer cannot under any circumstances send flows on the same date as the due date "D"). The ISO20022 reference messages have been adopted by CBI with reference to the EPC SDD Implementation Guidelines and appropriate practice, retaining in general in the maximum level of compliance.



	SEPA (validi su DB)		CANALE CBI	
	SLA	MESSAGGIO	SLA	MESSAGGIO
Presentazione della richiesta	Max D-14; Min D-2; D-5 (D-1)	Customer Direct Debit Initiation	Non definibile a livello di sistema	Definito sulla base dello standard ISO e delle apposite I.G.
Conferma di ricezione OK/KO	-	Payment Status Report	1h da ricezione	Definito sulla base dello standard ISO e delle apposite I.G.
Esito negativo (eventuale)	-	Payment Status Report	Non definibile a livello di sistema	Definito sulla base dello standard ISO e delle apposite I.G.

Figure 3

The progress reports defined by CBI therefore comprise:
a) technical validation status OK/KO based on diagnostic checks of the entire group (originated by the Creditor Bank / CB);
b) KO status of the entire group following substantive checks (CB);
c) KO status of the individual transactions following substantive checks (CB, CSM or DB).

The "substantive" progress reports referred to in letters b) and c) above, otherwise known as "Status for Originator", are therefore only provided in the case of negative outcomes (KO), such as rejection by the Executing Creditor Account Bank or later parties in the collection chain (CSM, Debtor Bank).

2.3 CHARACTERISTICS OF THE SERVICE

The SDD is a pre-authorised collection procedure, standardised throughout the entire SEPA area[2]. The mandate (pre-authorisation) is exchanged between Debtor and Creditor in a manner beyond the scope of the service request procedure. The principal characteristics of the mandate are however included - together with the type of authorisation - in each collection request. This allows any DB checks envisaged in the relevant SDD schema to be performed (only required for B2B transactions, see the Rulebook concerned).

The service described has the following characteristics:
- Sends service requests containing one or collection requests (groups) (via **XML message** or **message + file**);
- Forwards information "without delay", as guaranteed by the current CBI architecture;
- Sends receipt confirmations following formal checks on the flows;
- Sends a "Status" report to the Initiating Party/Originator containing details about the group or transaction not processed correctly.

The CustomerDirectDebit message

- may contain **one or more direct debit requests**
- may be used in:
  - **"direct mode"**: sent directly to the Creditor Agent
  - **"indirect mode"**: sent to the Creditor Agent via a Forwarding Agent (CBI Access Bank)
- may also be sent by an **authorised Initiating Party that is not** the Creditor (e.g. Payment Factory)
- many be used both **domestically and cross border within the SEPA area**
- must contain **summary information about the mandate** given by the Debtor to the Creditor, but must not be treated as a mandate
- may not be used by the Creditor Agent to settle the collection, since this bank must refer to the ISO message **FIToFICustomerDirectDebit**

The SDD is presented in a "MIXED" format, since this gives the greatest flexibility consistent with market requirements, while also be perfectly compliant with the current SEPA Customer to Bank recommendations. This approach (optional depending on use and requirements) enables the Payment Information to contain multiple data types e.g. Creditor, Creditor Account, due date, within the same logical message (group). The only restriction imposed by CBI is, of necessity, the uniqueness of the Creditor Agent, being the Executing Bank of the group, for both forwarding purposes (same requirement for the Access Bank) and to assure the completeness of the flow (in particular, for checking any electronic signature applied).

[2] CBI does not define checks on the geographical area concerned / reachability. In addition, the procedure covers the C2B route and, therefore, is subject to the recommendations contained in the SDD Implementation Guidelines.

In addition, the SDD flow is consistent for each type of mandate signed by the Debtor (B2B[3] / B2C), enabling different functions and forwarding procedures to be managed separately from the time (channel) of presentation.

2.4 ELECTRONIC SIGNATURE

The originator may apply an electronic signature to the SDD presentations and to the subsequent progress reports (technical validation, status). This is optional. The message structure only supports signatures **attached in a single envelope**; if there are several signatures, these must be included in the same envelope.

Information about how to apply the electronic signature is provided in the current version of "FIRMA-MO-001".

2.5 WORKFLOW

This chapter analyses in detail the workflow used by the CBI circuit to provide the "SDD Collection Requests" and "SDD Status for Originator" services.

2.5.1 Service workflow

The following definitions, used extensively throughout this document, are provided so that the service workflow can be described in the best possible way:

Physical SDD collection service request message (service request)
Service request (see the definitions in doc. *STFW-MO-001 – CBI Service Management Framework*) containing one or more logical SDD collection request messages. Sent by the Access Bank to the Executing Bank, as final recipient of the collection requests.

Logical SDD collection request message (SDD collection request/group)

- Represents the logical entity via which the Originator (Initiating Party) instructs its Executing Bank (Creditor Agent) to collect a batch (group) of individual requests.
- Each logical message (group) contains one or more sub-groups (Payment Information), which in turn comprise one or more collection requests (Payment Transactions).
- Each logical message (group) is consistent (optional information in italics) in terms of:
  - Initiating Party/Originator[4];
  - type of group (B2B/B2C)[5];
  - payment method (always "DD")[4];
  - Creditor Agent [5];
  - Service Level (= "SEPA") and related types of commission[4].
- Each sub-group is consistent in terms of:
  - Collection sequence (first in series, standing order, last in series, single/one-off);
  - *Category Purpose* (optional at sub-group and individual transaction level);
  - Due date;
  - Creditor;
  - Creditor account;
  - *Ultimate creditor;*

[3] Only allowed if the Debtor belongs to the corporate segment, pursuant to current regulatory definitions.
[4] *guaranteed by the structure of the message.*
[5] *guaranteed by the applications checks on the message.*

- *Charges account.*

It follows that each of these elements may be repeated within the group.

- Each logical message is transmitted within a physical SDD collection service request message.

Physical technical validation status message (status report)
Status report containing one or more logical technical validation status messages. Generated by the Executing Bank in response to a *physical SDD collection request message* received earlier.

Logical technical validation status message
Indicates the status of the processing of an SDD collection request.
The status is based on the outcome of the formal and application checks carried out by the Executing Bank on the group received.
The message is sent by the Executing Bank via a *physical technical validation status message*.
The structure of the logical message is compliant with the requirements of ISO 20022 for messages relating to the Payment Initiation service (*see* www.iso20022.org).

Physical SDD collection request status message (related service request)
Related service request containing one or more logical collection request status messages. Sent by the Executing Bank after making substantive checks on the collection requests, but only if these are not successful.

Logical SDD collection request status message (related logical request)
Contains information about the unsuccessful outcome of an entire group or individual collection request, due to failing the substantive checks carried out by the Executing Bank. This message includes a flag (MsgQual) indicating if the unsuccessful outcome relates to the entire group (MsgQual=6) or to individual requests (MsgQual=8). Given this characteristic, this document will specify logical status messages as either type 6 or type 8 progress reports.

2.5.2 Transmission workflow and checking messages

Before discussing the transmission workflow associated with the "SDD Collection Requests and Status for Originator" service, the following additional definitions are needed with respect to those given earlier:

Physical transmission control message
Status report containing one or more logical transmission control messages. Generated by the Access Bank in response to a *physical collection request status message* received earlier.

Logical transmission control message
Message used by the Access Bank to notify the Executing Bank about the status of the formal and application checks carried out on a logical collection request status message. Transmitted within a physical transmission control message. Although a typical message within the CBI circuit, is structure is similar to other ISO20022 compliant messages.

The transmission workflow implementing the "SDD Collection Request and Status for Originator" service is complex, characterised by a series or two or more pairs of messages exchanged by CBI banks, although is must be remembered that the status messages are only sent (required) if errors are found.

As shown in the following sequence diagram - illustrating the entire transmission workflow, highlighting the types of physical messages exchanged - the transmission control messages are sent by the Access Bank after the receipt of status messages.

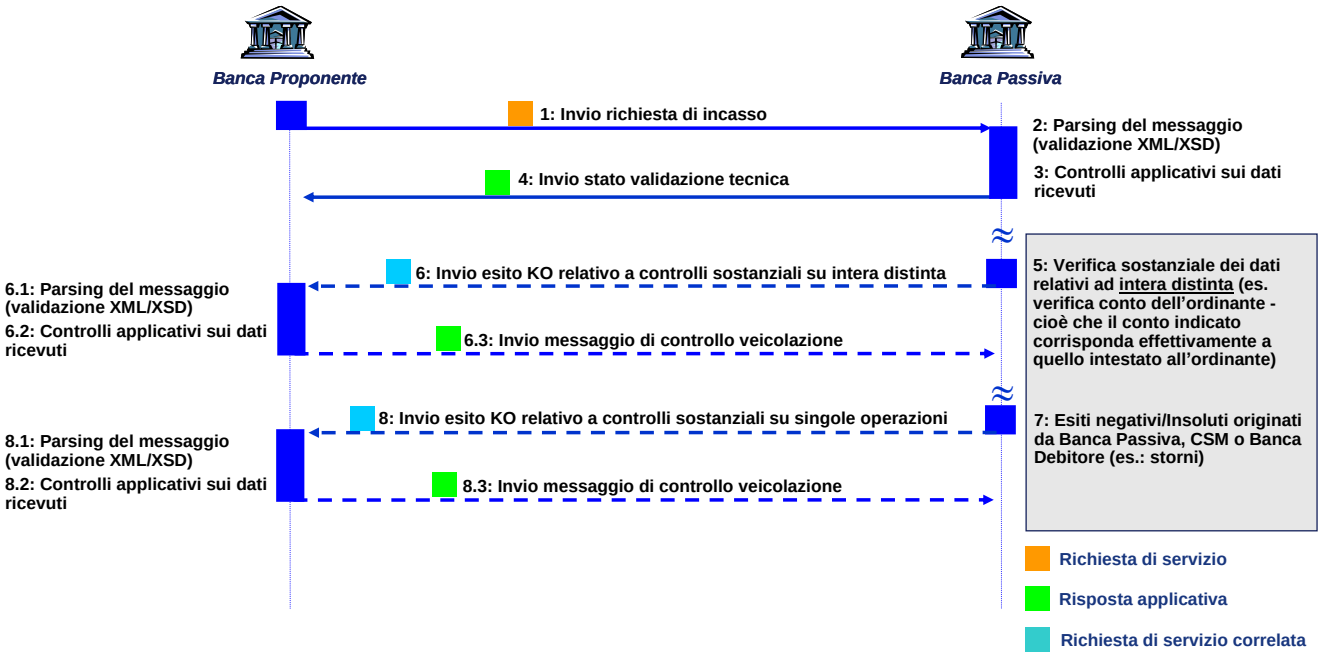


Figure 4

2.5.3 Logical payment request messages

Each SDD collection request - group - relates to a specific type of collection. In particular, there are two types of group:

- SDD Core/B2C Collections;
- SDD B2B Collections.

Each of the above types of group is identified by the use of a "Local Instrument" field that must explicitly take the value "B2B" or the value "CORE/COR1" for each sub-group. If both types of sub-group described above are present within one group, the logical message is rejected due to failure of the applications checks on consistency. The Core/B2C collection procedure referencing the "COR1" code is optional and may be used following bilateral agreements between the Customer and its Bank.

The CBI SDD messages correspond to the following ISO messages:

1) SDD Collection Request (*Direct Debit Payment Initiation Request 008.001.02*)
2) Technical validation status (*Status Report 002.001.03*)
3) Status (*Status Report 002.001.03*)

} SDD Progress Report

2.5.4 Inclusion of payment requests in service requests

As indicated in the definitions, each service request must follow consistency criteria regarding the types of logical entity transmitted and the groups contained therein.
Note that a service request may include the following:

- just groups of Core/B2C SDD Collections;
- just groups of B2B SDD Collections.

As discussed below, non-compliance with these consistency criteria by the Access Bank of the Initiating Party/Originator represents a reason for the Executing Bank of the Initiating Party/Originator to reject the payment requests made.

2.5.5 Transmission workflow and messages exchanged

The Access Bank receives the collection requests (groups) from its customer Originators and, for each, prepares the corresponding logical and physical messages in accordance with the XML structure defined by the CBI standards.
The standards used for the Bank - Customer exchange fall within the realm of the competitive services that each Bank decides to provide its Customers. Nevertheless, the structure of the messages and the rules established by CBI can also be used for Bank - Customer communications. As such, logical payment request messages could be prepared directly by Customers using the CBI standards.
In this case too, before forwarding them, the Access Bank must carry out all necessary checks to ensure compliance with the rules established by the standards.

Before transmitting the logical collection request messages, the Access Bank partitions the groups by recipient Executing Bank and by type of group prepared or received.

The Access Bank therefore prepares homogeneous batches (of groups) for each:
- "logical" recipient (Executing Bank - Creditor Agent);
- reference party of the "logical" recipient (e.g. STD, GPA);
- Logical Network address of the reference party;
- group type.

A physical service request message **(1)** is prepared for each batch of groups and submitted to the recipient Executing Bank.

The Executing Bank carries out the formal XSD checks **(2)** on the entire physical message received and, if there are problems, returns a General Purpose error message (*see doc. "STPG-MO-001 New Services General Part*) and rejects all the groups contained in the service request.

If the formal XSD checks are completed successfully, the Executing Bank carries out the application checks **(3)** envisaged in relation to the individual logical messages received.
For each physical service request message received, based on the outcome of the above checks the Executing Bank returns just one physical progress message **(4)** containing the status of each group contained therein. Based on this message **(4),** it follows that the Executing Bank can selectively discard individual groups.

The Executing Bank then carries out substantive checks **(5)** on the collection requests taken as a whole and, if these are unsuccessful, generates a progress report for the Originator's Access Bank, informing it about the rejection of the entire group for substantive reasons (internal checks, e.g. account name, failure of signature powers check) **(6)**.

At the same time (logically) as or subsequent to **(5)**, the Executing Bank carries out substantive checks on the individual transactions **(7)** and, if successful, forwards the charging instructions to the next party in the collection chain (e.g. CSM).

Lastly and only in unsuccessful cases, the Originator's Executing Bank sends a progress report detailing the individual collection requests **(8)** that were not successful (e.g. KO of individual transactions following substantive checks by the Executing Bank or rejection/refusal of the charge by the Debtor). This report contains details of the individual instructions contained in the original collection request so that outcomes/non-collections can be reconciled.

The logical progress messages regarding substantive checks **(6), (8)** can be included in physical progress messages at different times, depending on when these checks are completed by the Executing Bank; accordingly, by contrast with progress message **(4)**, there is no need for the subsequent physical progress messages to match 1:1 with the service requests received by the Executing Bank. Accordingly, within an individual physical status message it is possible to refer to groups and individual instructions originally included in different service requests.

In any case, for each related service request, the Access Bank must produce just one physical transmission control message after carrying out its formal and application checks on them.

2.5.6 Addressing of physical messages

This paragraph clarifies the criteria adopted for addressing the physical messages - service requests, technical validation status reports, status messages and transmission control messages - relating to the transmission workflow that implements the "SDD Collection Requests" service.

The service request **(1)**, containing the logical collection request messages, is addressed by reference to the Directory. The Access Bank identifies the delivery address by querying the non-profiled services made available by the Executing Bank. The Service node involved has a Naming Attribute of cn=**INC-SDDC** for SEPA Direct Debit Core/B2C collection requests, and cn=**INC-SDDB** SEPA Direct Debit B2B collection requests.

The Executing Bank sends the status report **(4)**, containing the technical validation status messages, to the Access Bank using the return address indicated by the latter in the network header for the request message **(1)**.

The subsequent level 2 status reports, containing progress messages **(6)** and **(8)**, are addressed by the Executing Bank with reference to the Directory. Commencing from the Customer node (Initiating Party/Originator), the delivery address is found from the Access Bank Service node whose Naming Attribute is cn=**STAT-RPT-INC-SDD**, from among the Services contained in the profile associated with the customer concerned.

Lastly, all the transmission control messages produced by the Access Bank following receipt of level 2 status reports are sent to the return address indicated in the network header for those responses.

As a direct consequence of the addressing criteria described above, the "Service Name" included in the network and service headers of the technical validation status messages differs from that used in the collection request status messages.
The following association exists between the "Service Name" and the messages transmitted:

- **Service request:** "Service Name" set to "INC-SDDC" or "INC-SDDB", depending on the types of group transmitted;

- **Technical validation status:** "Service Name" set to that indicated in the corresponding service request ("INC-SDDC" or "INC-SDDB");

- **Collection status:** "Service Name" set to "STAT-RPT-INC-SDD";

- **Transmission control messages for collection status reports:** "Service Name" set to "STAT-RPT-INC-SDD".

The following figure outlines the addressing of queries that reference the Directory.

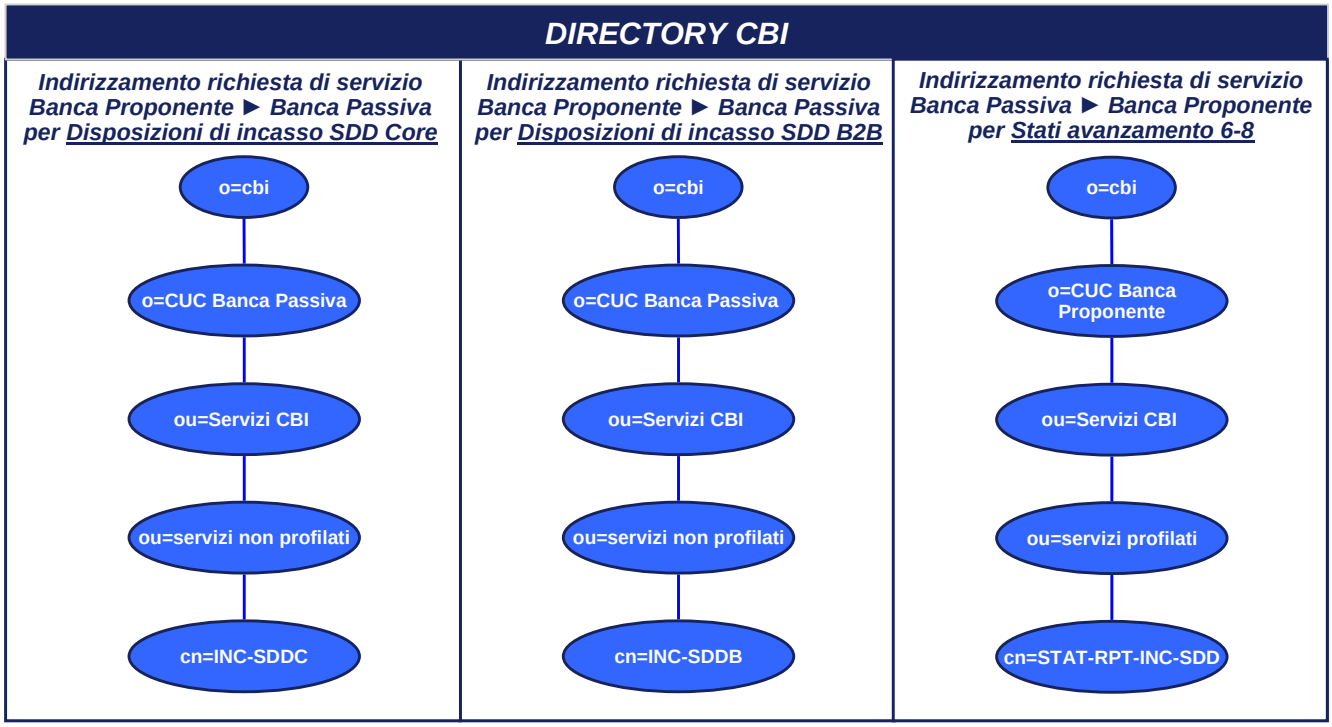


Figure 5

2.5.7 Analysis of the principal workflow characteristics

As seen in above paragraphs, the "transmission" workflow describes the provision of the service in the most complete manner. This is because, in addition to ensuring that the service complies with the business requirements, it also takes account of all the issues associated with proper management of the messages exchanged. In particular, it introduces the concept of "transmission control" in relation to the related service requests - containing the collection status reports - sent by the Executing Bank.

Note also that, with respect to the collection status messages, the technical validation status messages do not require additional transmission control messages because:

- they are status reports and, as such, are sent to the return address indicated in the corresponding service request message;
- they refer to every collection request (1:1 match) contained in the service request.

Given their characteristics, these messages play a dual role that includes transmission control of the logical entities contained in the service request. They also transmit the technical validation status reports relating to the collection requests submitted by the Access Bank.

Bearing in mind how the messages transmitted are addressed, analysis of the transmission workflow described above shows that its functioning is based on pairs of physical messages consistent with those indicated in the document *STFW-MO-001 CBI Service Management Framework*.

Given the above, analysis of the transmission workflow for the "SDD Collection Requests" and "SDD Status for Originator" services identifies two different types of pairs of physical message, whose characteristics are summarised in the following tables:

Service request - status report

Message	**SDD Collection Request (1)**	**Technical validation status (4)**
Type	Service request	Status report
Content (logical messages)	SDD Collection Requests	Status of formal and applications checks carried out on the collection requests
Addressing	Directory, non-profiled services, INC-SDDC, INC-SDDB	*Return address*
Service name	INC-SDDC, INC-SDDB	INC-SDDC, INC-SDDB
Logical initiating party	Access Bank	Executing Bank
Initial sender (owner ID msg log)	Initiating Party	Executing Bank
Logical recipient	Executing Bank	Access Bank
Final recipient	Executing Bank	Initiating Party

Related service request - status report		
Message	**Collection request status (6,8)**	**Transmission control (6.3, 8.3)**
Type	Related service request	Status report
Content (logical messages)	Collection request status	Status of formal and applications checks carried out
Addressing	Directory, profiled services, STAT-RPT-INC-SDD	*Return address*
Service name	STAT-RPT-INC-SDD	STAT-RPT-INC-SDD
Logical initiating party	Executing Bank	Access Bank
Initial sender (owner ID msg log)	Executing Bank	Access Bank
Logical recipient	Access Bank	Executing Bank
Final recipient	Initiating Party	Executing Bank

2.6 SERVICE LEVELS

Based on the sequence diagram for the "SEPA Direct Debit Collection Requests", Service Level Agreements (SLA) have been established for all status reports sent during the process.

The timings involved are illustrated in the sequence diagram for the collection request and the transmission of the status to the Originator.

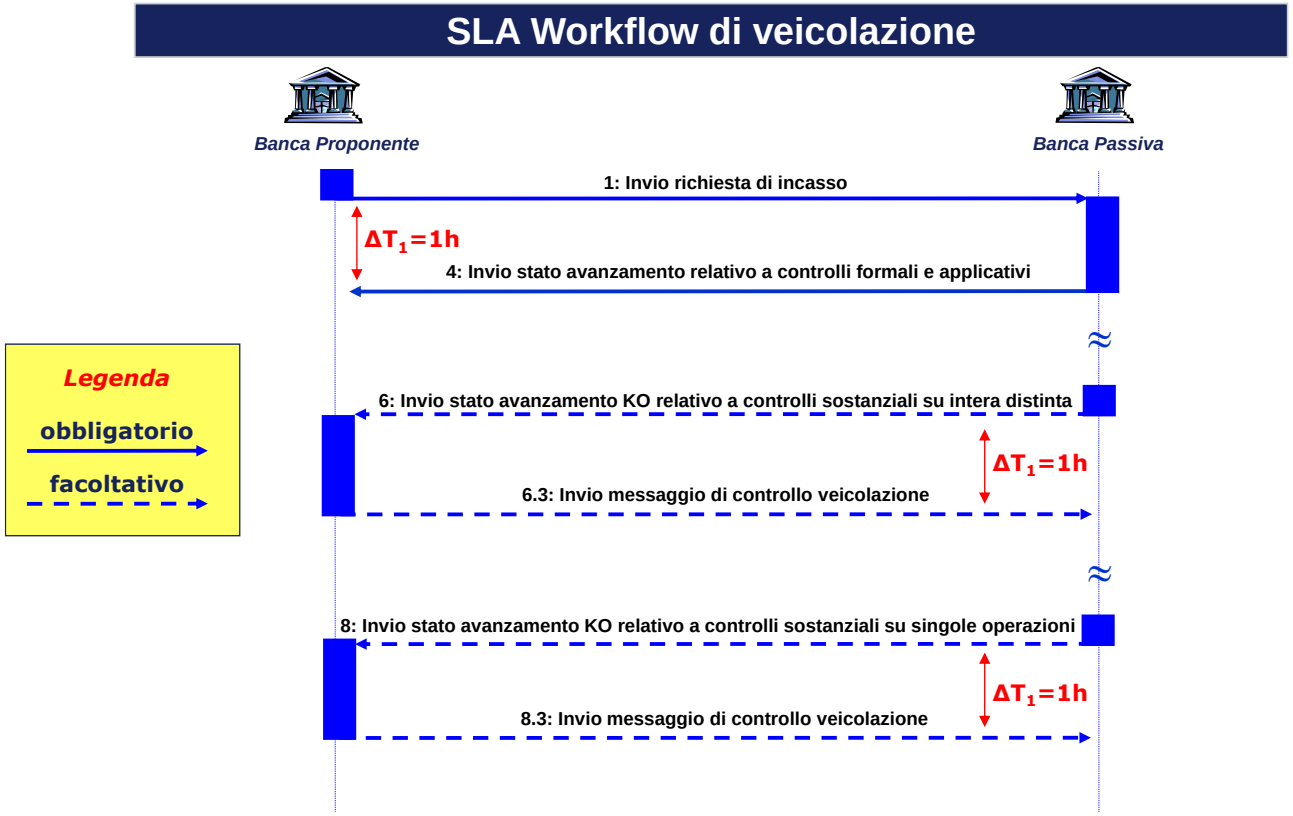


Figure 6

The service levels established are summarised in the following table.

Interval	Description	Value
ΔT_1	Interval between receipt of the "outbound" message and sending the corresponding "return" message	1 hour (max)

CBI does not define any additional time limits, since these are beyond the scope of its activities.

2.7 MESSAGES USED

This paragraph describes the structure of the messages used as part of the transmission workflow.
As indicated earlier, the following message types are used to provide the service:

- CBISDD – Request Message (service request);
- CBISDD – Technical Validation Status Message (status report);
- CBISDD – Status Report Message (related service request);
- CBISDD – Status Report Control Message (status report).

This document makes frequent reference to specific tags included in these messages, in order to describe clearly the functionality available.
The record formats are described in detail in the following Excel files, which also specify any application checks associated with each field:

- STIN-ST-001-CBISDD-ReqMsg;
- STIN-ST-002-CBISDD-TechValStsMsg;
- STIN-ST-003-CBISDD-StsRptMsg;
- STIN-ST-004-CBISDD-StsRptCtrlMsg.

2.7.1 Physical service request message

The physical request message for the SDD Collection service has the characteristics summarised in the following table:

CBI SDD – Request Message: characteristics	
<XML tag root>	<CBISDDReqPhyMsg>
Message type	Service request
Type of logical message	SDD Collection Requests
Compliance (logical messages)	ISO20022 as revised in accordance with the Message Implementation Guide (MIG) issued by the CBI community
Electronic signature	Application to all informational content of the logical messages. The service rules envisage application on an optional basis using solely the "attached in a single envelope" method
CBI Service Name	INC-SDDC, INC-SDDB
Addressing	Directory, non-profiled services, service name INC-SDDC, INC-SDDB
Initial sender logical messages	Initiating Party (Sender)
Logical sender physical message	Access Bank
Final recipient logical messages	Executing Bank
Logical recipient physical message	Executing Bank

The structure of the physical service request message, prepared by the Access Bank, is defined in order to allow application of the electronic signature to all the informational content of the logical messages, based on the general principles described in document *STFW-MO-001 – CBI Service Management Framework* and the rules for the management of electronic signatures set out in document *FIRMA-MO-001*.

The structure of the message is shown in the following figure.

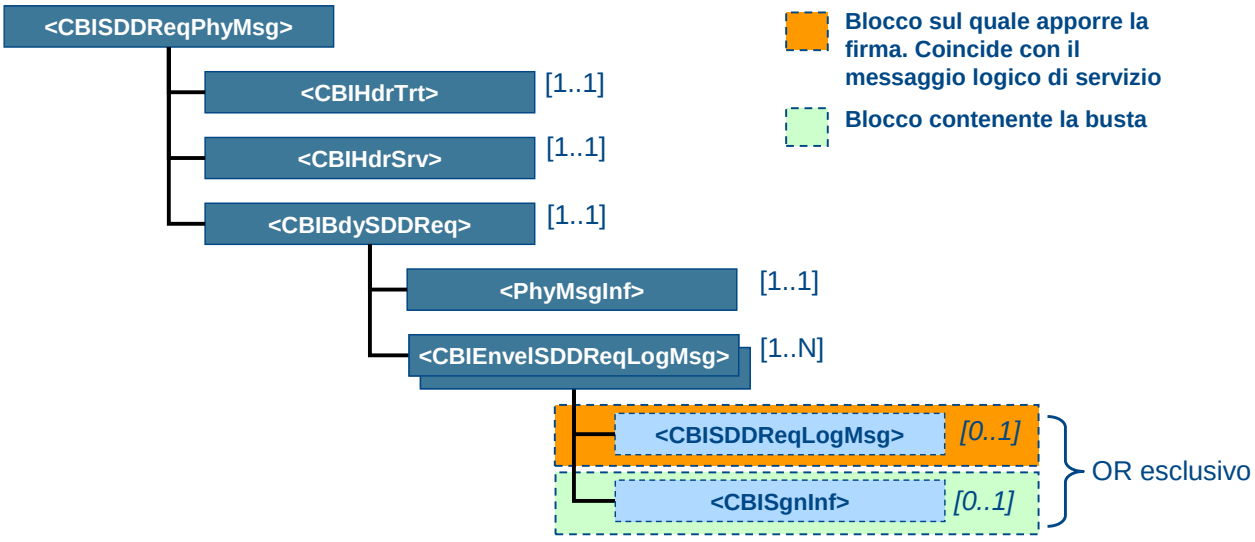


Figure 7

The body of the physical message (<CBIBdySDDReqPhyMsg>) contains one or more logical SDD collection request messages.

2.7.1.1 Logical SDD collection request (group) message

Each logical message, represented by the <CBISDDReqLogMsg> block in the above figure, is included - together with any signature information - in a block (<CBIEnvelSDDReqLogMsg> in the figure) that serves as an "envelope" for the logical message.

The logical collection request message is structured to have the following main characteristics:

- ability to transmit **one or more collection sub-groups (collection segments)**;
- ability to transmit **one or more collection requests within each sub-group**;
- ability to transmit **information for reconciliation purposes**: the message may include information for reconciliation purposes.

The following figure describes the macro structure of each logical SDD collection request message:

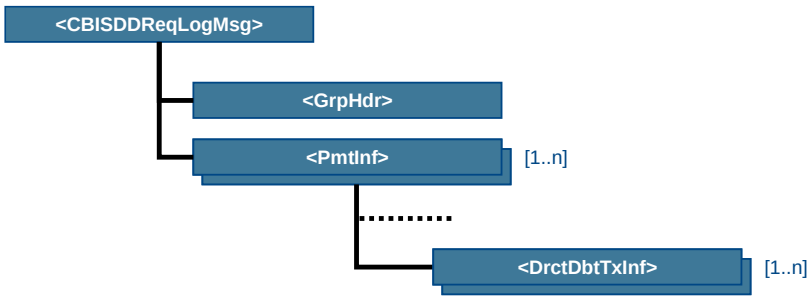


Figure 8

The structure of the logical message was determined with reference to the ISO20022 standard for Payment Initiation (Customer Direct Debit Initiation UNIFI), defined as recommended by the international community with a view to harmonising payment systems in the SEPA area (*see UNIFI Message Definition Report*). Accordingly, the structure on the logical message can only be **"Mixed"** (see next figure), with the possible presence of multiple segments of Creditor information (Payment Information <PMTINF> sub-groups) within each group, each containing one or more collection requests (<DRCTDBTTXINF> blocks).

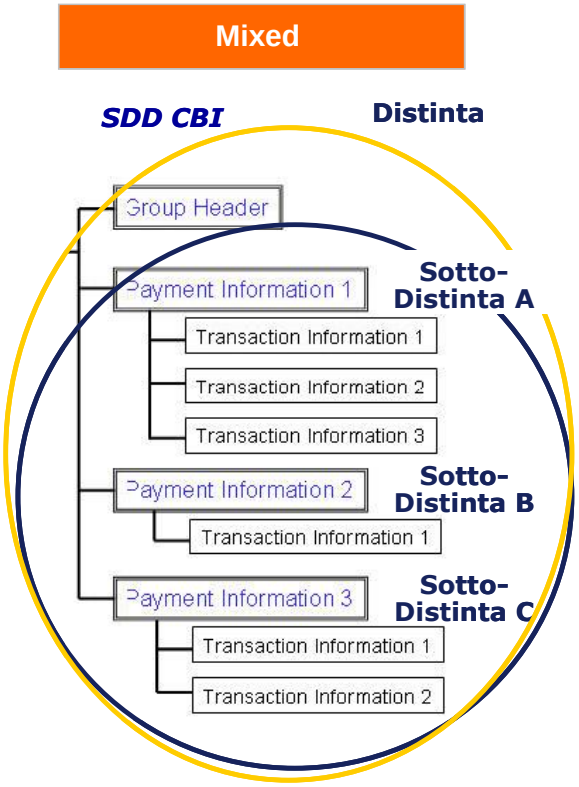


Figure 9

The "Mixed" format gives the greatest flexibility: it covers individual Payment Information ("Grouped" format in ISO20022 terms) with *n* transactions (in the current group), as well as the most basic form of individual Payment Information with just one transaction (group with one transaction).

The blocks containing each logical message are described briefly in the following sections. A detailed description of the fields comprising the various blocks is provided in document STIN-ST-001.

<GrpHdr>: General information about collection requests

The Group Header block contains information common to the entire group of transactions (individual collection requests), primarily in order to identify correctly the message and the parties concerned.

In particular, each logical message (collection group) is uniquely identified by the Initiating Party/Originator from the combination of two tags:

- <MsgId> (Message ID)
- <CreDtTm> (Creation date)

When generating the logical message, each Initiating Party/Originator must respect the requirement for the Message ID to be unique for the same creation date.

It follows that, at System level during the same working day, each logical message is identified by the union of three values:

- Message ID
- Creation date

- CUC of the Initiating Party/Originator

The Initiating Party/Originator reconciles the individual payment requests with the related progress reports via the following fields:

- Message ID
- Creation date of the group
- Instruction Identification, unique for the entire logical message
- End to End Identification

A unique identifier managed by the Initiating Party/Originator at Payment Information block level (possibly multiple blocks), named Payment Information Identification, is also required. This makes possible (if managed by the Initiating Party/Originator) the reconciliation of individual collection request blocks that are consistent in terms of Creditor, due date and Creditor Account (also returned in type 8 progress reports).

The principal fields contained in the block concerned are identified in the following figure.

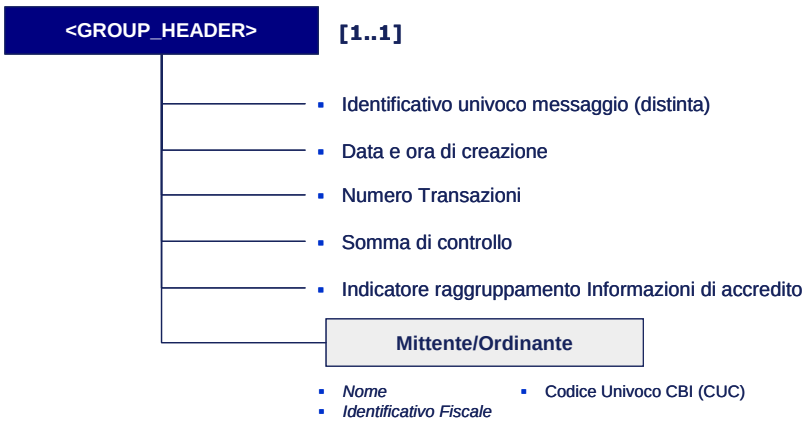


Figure 10

<PmtInf>: Payment information

The Payment Information block covers all creditor-related information relevant to each underlying collection (Direct Debit transaction). In the case of multiple occurrences, this becomes a "sub-group".

This block includes the following fields:

- Sub-group type (Core/B2B[6])
- Payment method (always Direct Debit)
- Debtor account coordinates
- Due date
- Creditor
- Creditor Agent[7]

Maximum consistency is needed for the Creditor at overall logical message level (see SDDIGs rules).

<DrctDbtTxInf>: Direct Debit Transaction Information

The Direct Debit Transaction Information block covers all debtor-related information relevant to each

[6] Consistency at logical message level assured by a specific SEPA compliant applications check.
[7] Uniqueness at logical message level assured by a specific CBI applications check.

group/sub-group collection (Direct Debit transaction).

This includes:

- Identifiers for each payment request
- Amounts
- Information about the mandate signed
- Information about the Debtor
- Information about the Debtor account
- Interbank reason or Category Purpose
- Ultimate Debtor/Creditor
- Reconciliation information (Remittance information)

In particular, the Ultimate Creditor may be present either at group level or at individual transaction level, but is only allowed if different to the Creditor. At individual transaction level, the presence of the Ultimate Debtor is optional.

2.7.2 Physical technical validation status message

The service workflow requires the Initiating Party's Executing Bank to send a progress message for each service request received. This message is based on the outcome of the formal and application checks carried out on the collection request.

CBI SDD – Technical Validation Status Message: characteristics	
<XML tag root>	<CBISDDTechValStsPhyMsg>
Message type	Status report
Type of logical message	Status report relating to the technical validation of the logical collection request messages
Compliance (logical messages)	ISO20022 as revised in accordance with the Message Implementation Guide (MIG) issued by the CBI community
Electronic signature	Possible application to all informational content of the logical messages. The service rules envisage application on an optional basis using solely the "attached in a single envelope" method
CBI Service Name	INC-SDDC, INC-SDDB
Addressing	*Return address* contained in the service request concerned
Initial sender logical messages	Executing Bank
Logical sender physical message	Executing Bank
Final recipient logical messages	Initiating Party (Sender)
Logical recipient physical message	Access Bank

Since an electronic signature can be attached to the progress messages, its structure must comply with the rules set out in document *FIRMA-MO-001.*
If an electronic signature is included, it must always be included in **attached** format in the individual progress reports contained in the status report.

The structure of the physical technical validation status messages (status reports) is shown in the following figure.

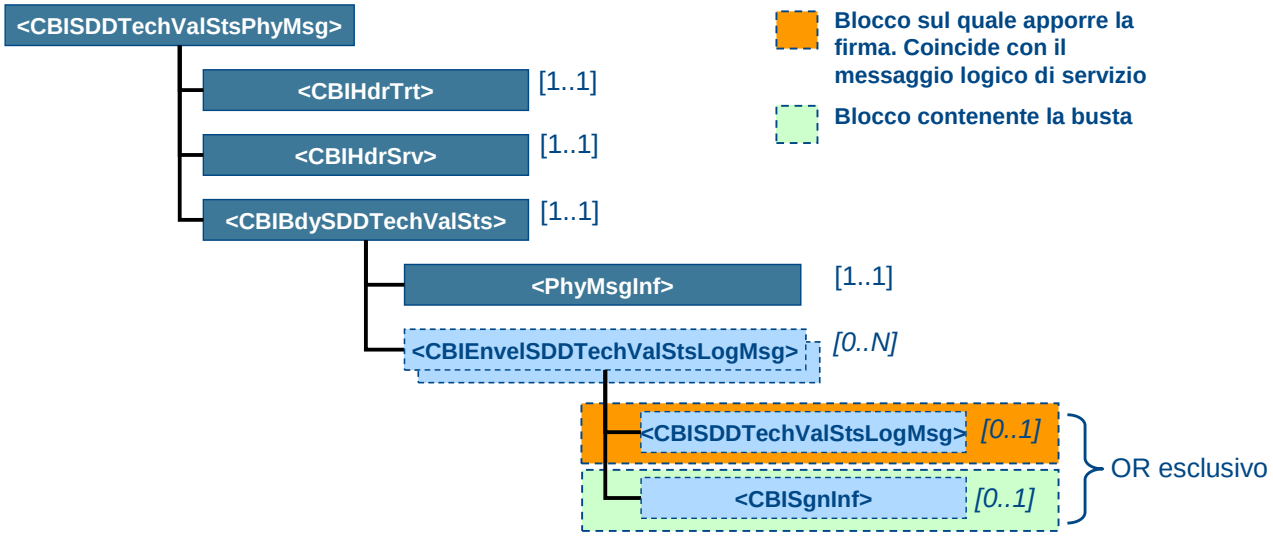


Figure 11

The body of the status report message comprises one block of general information about the physical message and, optionally, one or more logical progress messages. By contrast with the service request, the optional nature of the blocks containing the logical progress messages derives from the rules for preparing status reports contained in the document *STFW-MO-001-CBI Service Management Framework*.

2.7.2.1 Logical technical validation status message

Each logical message, represented by the <CBISDDTechValStsLogMsg> block in the above figure, is included - together with any signature information - in a block (<CBIEnvelSDDTechValStsLogMsg> in the figure) that serves as an "envelope" for the logical message.

The structure of the logical technical validation status messages is shown in the following figure:

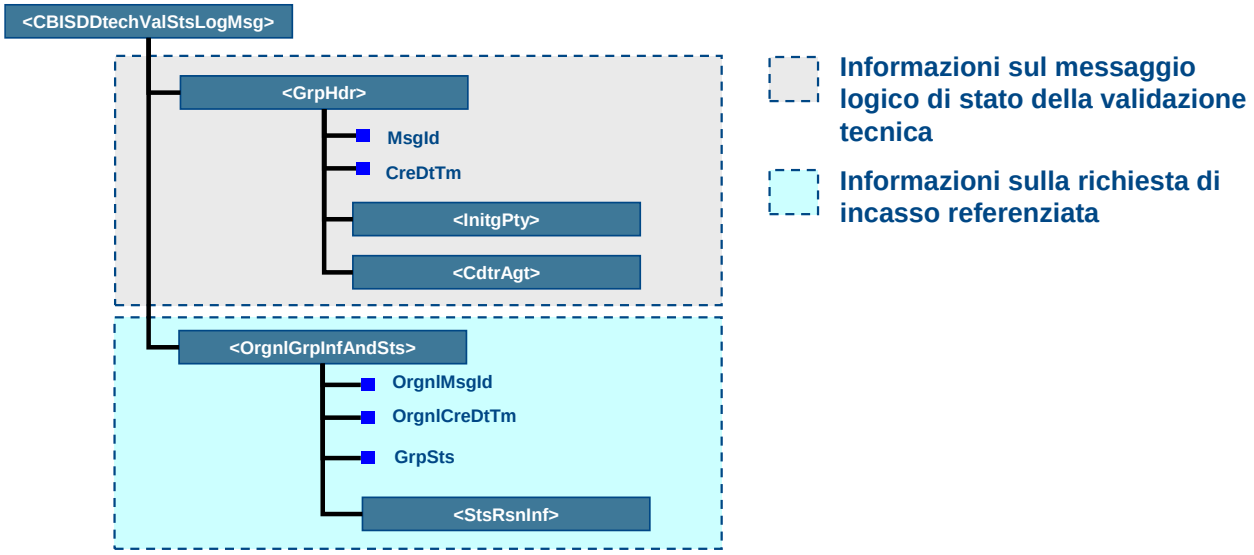


Figure 12

The local technical validation status message (consistent with the ISO 20022 Customer Direct Debit Initiation

standard) is sent by the Executing Bank to the Access Bank, which makes it available to the Initiating Party/Originator. It is used to inform the Initiating Party/Originator about the status of a request made (individual request and/or group).

<GrpHdr>: General information about the technical validation status message

The General information about progress block is required and is only included once.
This block contains elements such as Message ID, Creation date and time, Initiating Party/Originator of the collection request to which the progress report relates.

<OrgnlGrpInfAndSts>: Information about and status of the collection request concerned

The Information and status of the collection request concerned block is required and is only included once**.** This block contains elements such as Original Message ID, Creation date and time of the original message, Group Status.

2.7.3 Physical collection request status message

The following table summarises the principal characteristics of the physical collection request status message:

CBI SDD – Status Report Message: characteristics	
Message type	Related service request
Type of logical message	Unsuccessful outcome of individual collection requests (MsgQual=6) or instructions (MsgQual=8)
Compliance (logical messages)	ISO20022 as revised in accordance with the Message Implementation Guide (MIG) issued by the CBI community
CBI Service Name	STAT-RPT-INC-SDD
Electronic signature	Possible application to all informational content of the logical messages. The service rules envisage application on an optional basis using solely the "attached in a single envelope" method
Addressing	Directory, profiled services, service name STAT-RPT-INC-SDD
Initial sender logical messages	Executing Bank
Logical sender physical message	Executing Bank
Final recipient logical messages	Initiating Party
Logical recipient physical message	Access Bank

As with the service request message, this message is also structured in order to allow an electronic signature to be applied to the individual logical status messages; the principal blocks of information are shown in the following figure.

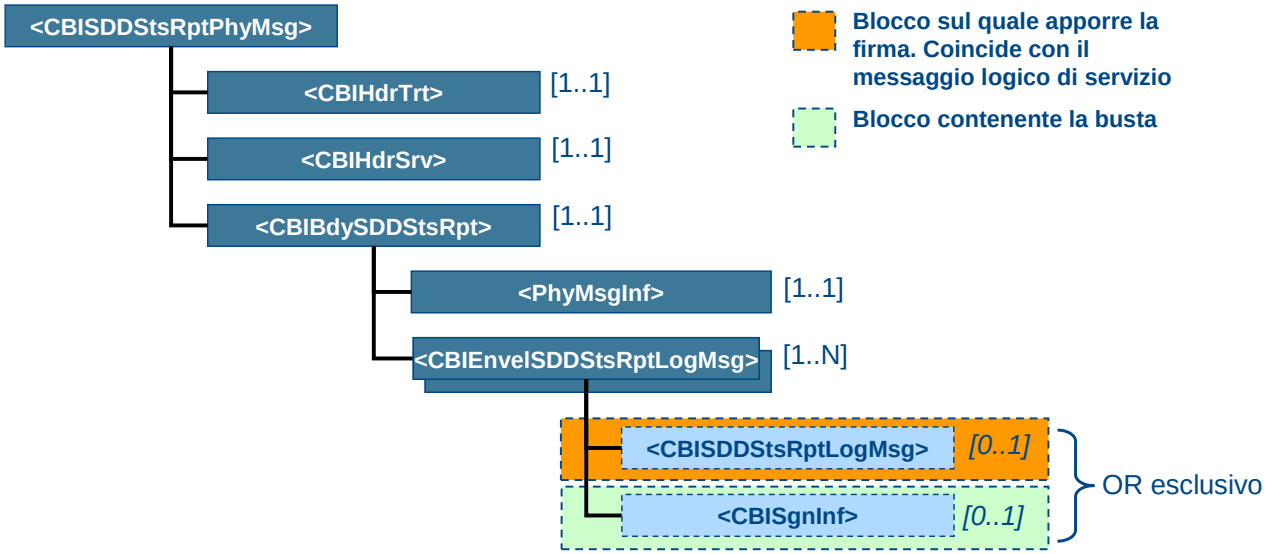


Figure 13

2.7.3.1 Logical collection request status message

The logical collection request status message is sent by the Executing Bank to the Access Bank, which makes it available to the Initiating Party. It is used to inform the Initiating Party about the unsuccessful outcome of a collection request made earlier.

The logical collection request status message comprises the following principal blocks of information:

<GrpHdr>: General information about the collection request status message
The General information about progress block is required and is only included once.
This block contains elements such as Message ID, Creation date and time, Message qualifier (type of progress report: 6 or 8), Initiating Party/Originator of the collection request to which the progress report relates.

<OrgnlGrpInfAndSts>: Information about and status of the collection request concerned
The Information and status of the collection request concerned block is required and is only included once. This block contains elements such as Original Message ID, Creation date and time of the original message, Group Status.

<OrgnlPmtInfAndSts>: Information and collection status
The Information and collection status block is optional and repeats. Block only present in type 8 messages (obligatory). Must be absent in type 6 messages (which provide overall information about a collection group).

This block contains the Original Payment Information Identification and the TxInfAndSts block, which includes elements relating to the original instruction, such as Original Instruction Identification, Original End To End Identification and elements relating to the status of individual collections (e.g. status error code), the reason for the transaction, the expenses, details on the original transactions.

The transaction information and status block may also include elements contained in the original request (e.g. Remittance information, see Original Transaction Reference block), which must take the same values as those of the corresponding fields in the original collection request.

2.7.4 Physical transmission control message

For every physical collection request status message received, the Originator's Access Bank sends the Executing Bank just one physical transmission control message covering the related logical status messages received.
This message, generated following the formal and application checks, contains information about the status of the entire physical status message received and the individual logical messages contained therein.

The principal characteristics of the message are summarised in the following table.

CBI SDD – Status Report Control Message: characteristics	
<XML tag root>	<CBISDDStsRptCtrlPhyMsg>
Message type	Status report
Type of logical message	Status report relating to the technical validation of the logical collection request status messages
Compliance (logical messages)	Message characteristic of the CBI circuit
CBI Service Name	STAT-RPT-INC-SDD
Electronic signature	Cannot be applied
Addressing	Return address contained in the service request concerned
Initial sender logical messages	Access Bank
Logical sender physical message	Access Bank
Final recipient logical messages	Executing Bank
Logical recipient physical message	Executing Bank

The following figure describes the structure of the transmission control messages:

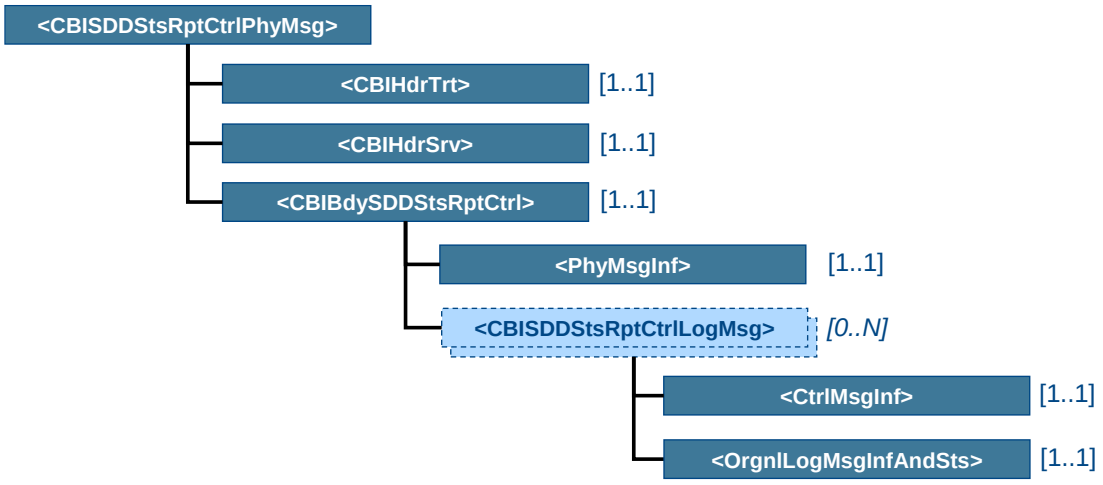


Figure 14 - Structure of the transmission control status report

By contrast with the previous messages, electronic signatures cannot be applied to individual logical messages.

2.7.4.1 Logical transmission control message

Each logical message comprises two principal blocks of information:

<CtrlMsgInf> : Information about the message
Contains information to uniquely identify the logical message, such as the identifier, the creation data and the

CUC of the sender.

<OrgnlLogMsgInfAndSts> : Information and status of the logical message concerned
Contains references to the logical (collection request status) message concerned and its status, based on the formal and application checks carried out by the Access Bank.

2.8 IDENTIFICATION AND RECONCILIATION OF LOGICAL MESSAGES

This paragraph indicates the principles and fields used to identify and reconcile the logical messages exchanged as part of a workflow.
Consistent with the content of document *STFW-MO-001 – CBI Service Management Framework*, when a service request or status report is received, the receiving bank must check the uniqueness of the logical messages contained therein.
Information about the identification and reconciliation of physical messages is provided in document *STFW-MO-001 – CBI Service Management Framework*.

Each logical message (SDD collection request, technical validation status, collection request status, transmission control) is uniquely identified by the following set of values:

- Identifier of the logical message;
- Date and time the logical message was created;
- Logical message type;
- Identifier (CUC or ABI code) of the Originator.

Each progress report or related logical message (status) must also contain the details needed to identify without ambiguity the original logical message (see doc. *STFW-MO-001 - CBI Service Management Framework*).

For international compliance purposes, the data type for the creation dates and times of logical messages is "*ISODateTime*"; therefore, in accordance with the W3C[8] specifications, these fields also contain the time when the messages were created. However, the identifier of the logical message must be unique within the same day and for the same initiating party. Accordingly, for the purpose of checking the uniqueness of the messages and their reconciliation, it is necessary to use - together with other fields - solely the year, month and day information contained in the "*ISODateTime*" fields (see doc. *STFW-MO-001 - CBI Service Management Framework*).

2.8.1 Identification of the SDD collection request

Each collection request (group) is identified at system level, without ambiguity, by four values:

- Group ID (MsgId): determined by the Initiating Party and unique within the same day;
- Group creation date (CreDtTm, considering solely year, month and day);
- Unique identifier (CUC) of the Initiating Party;
- Collection (Local Instrument/Code) Type (Core or Business to Business)

The type of logical message is found from the message's own root tag.

In addition, the individual instructions contained in the groups have a key consisting of 3 values:

[8] XML specifications validated officially by the World Wide Web Consortium.

- **PmtInfId**[9]: Unique identifier assigned by the Initiating Party to identify the collection information block within the logical message (group).
- **InstrId**: identifier assigned to the instruction by the Originator in relation to its Bank.
- **EndToEndId**: assigned by the Initiating Party, which identifies the individual collection request throughout the entire chain ending with the Debtor.

The following figures show the fields used to identify the group within the structure of the collection request message.

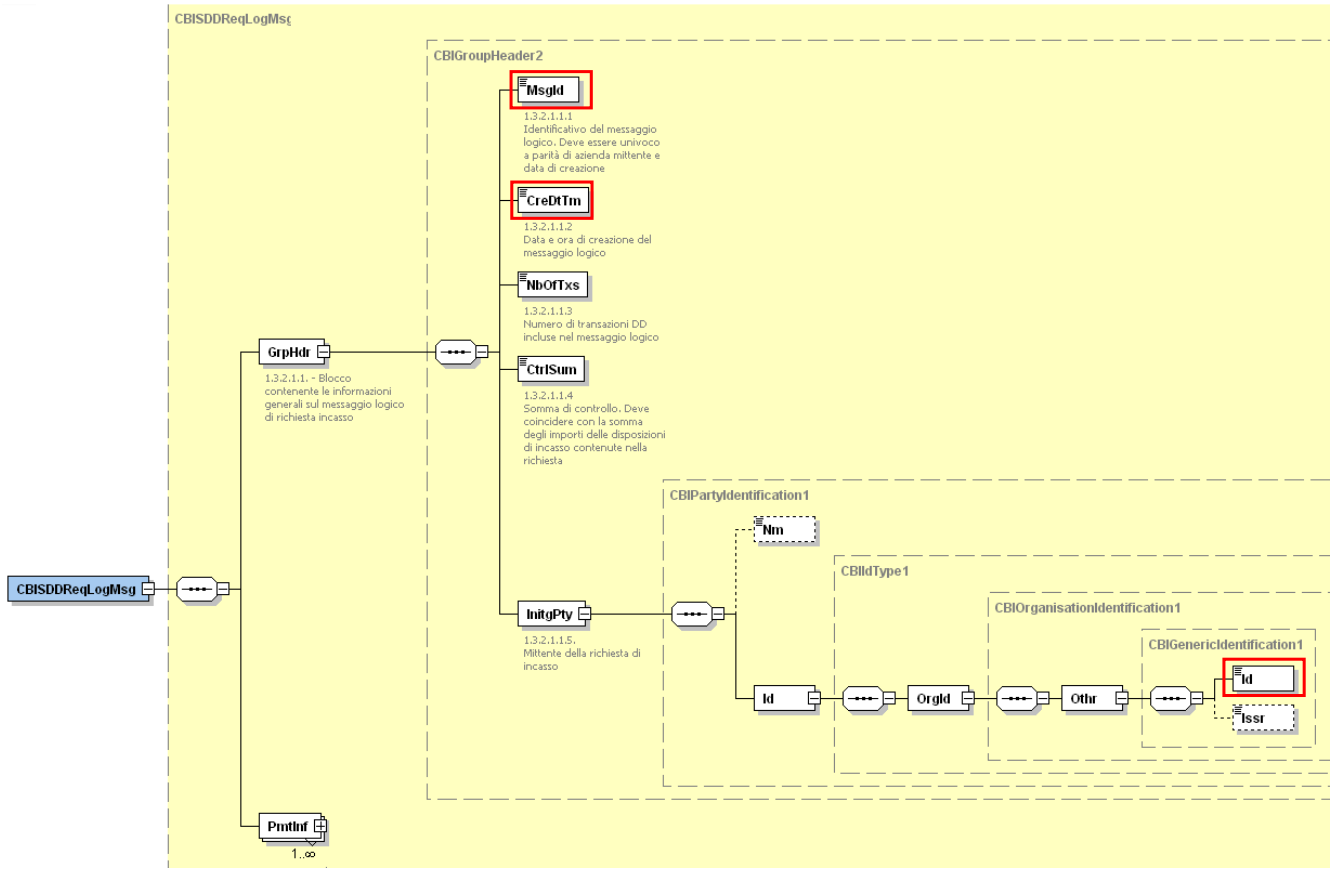


Figure 15 – Identification of the SDD collection request message

[9] The Payment Information Identification is present to allow (under SEPA rules) the management of group in "mixed" format, i.e. multi-segment (different due dates/settlement accounts).

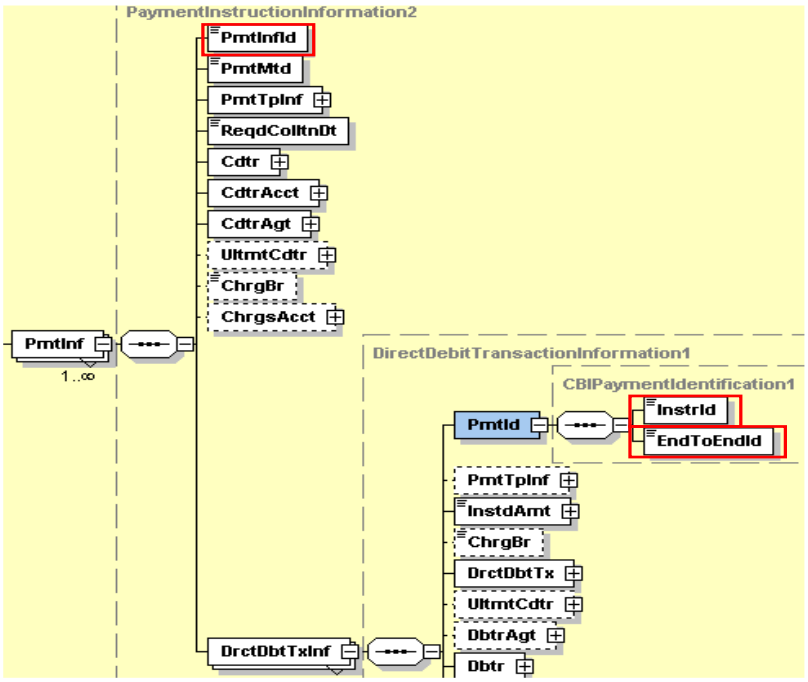


Figure 16 – Identification of individual instructions

2.8.2 Identification and correlation of technical validation status messages

When technical validation status messages are received, the Originator's Access Bank (or the Originator) must be able to identify and correlate them with the groups sent previously.

The following figure details the fields used to identify (in red) and reconcile (in blue) the progress messages.

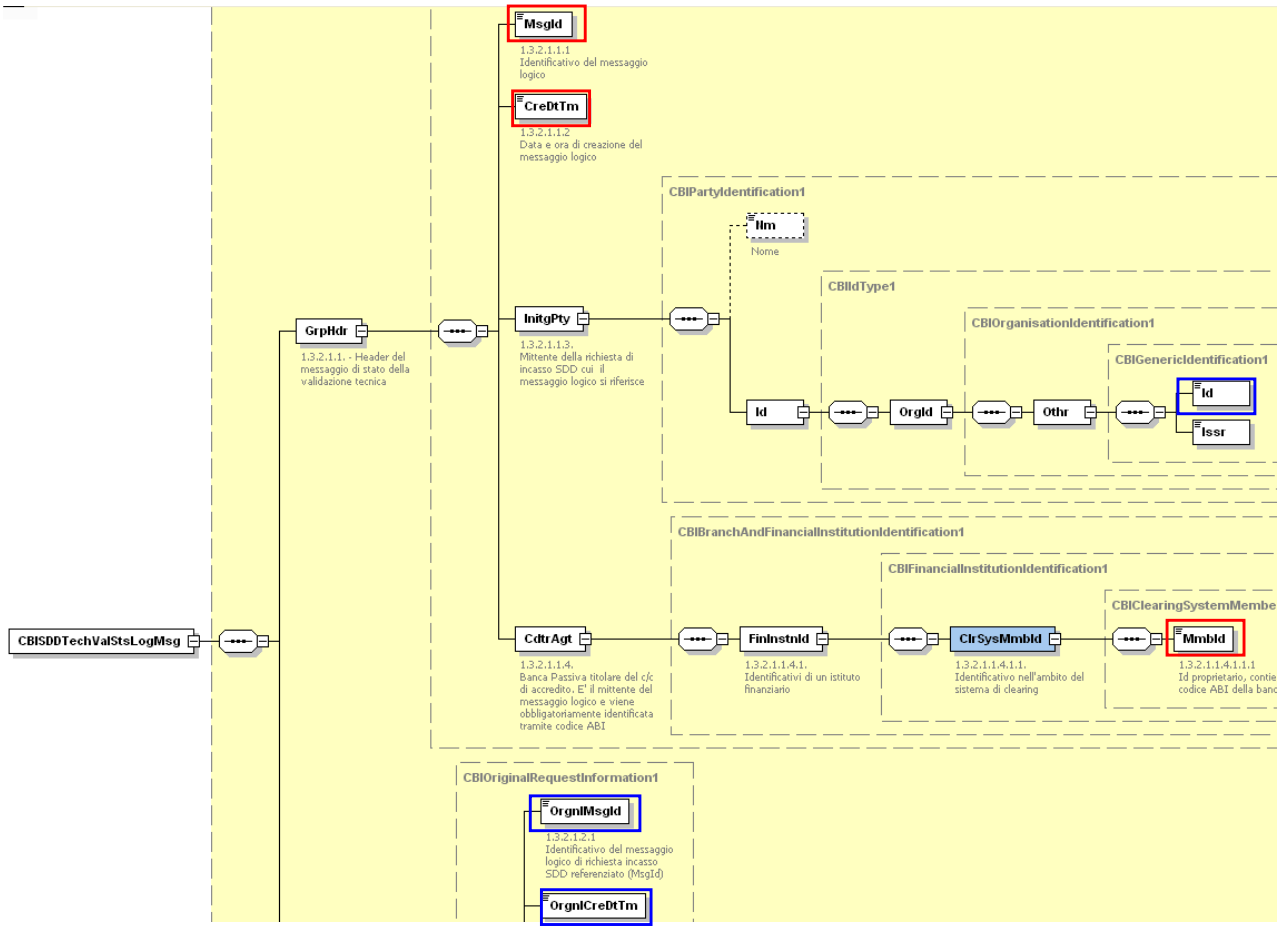


Figure 17 – Key fields contained in the technical validation status message

The progress message is uniquely identified by a key comprising three fields:

- Identifier (<MsgId>)
- Creation date (<CreDtTm>)
- CUC Executing Bank (<Id>)

The correlation key for the original group comprises the following three fields:

- Identifier of the group concerned (<OrgnlMsgId>)
- Creation date of the group concerned (<OrgnlCreDtTm>)
- CUC Originator (Requester) of the group concerned (<Id>)

Note that the progress message does not refer to the individual collection instructions, since the technical validation status message covers the entire group.

2.8.3 Identification and reconciliation of the collection request status messages

By their nature, collection request status messages (see definition of the related logical message given in the document *STFW-MO-001 – CBI Service Management Framework*) are hard to reconcile since they must reference the original groups at every available level of detail:

- details of the original group ("collection request");

- details of the individual collection instructions.

In order to do this, the keys included in the request message are replicated.
The fields used to identify the status reports (in red) and reconcile them with the collection requests (in blue) are shown in the following figure.

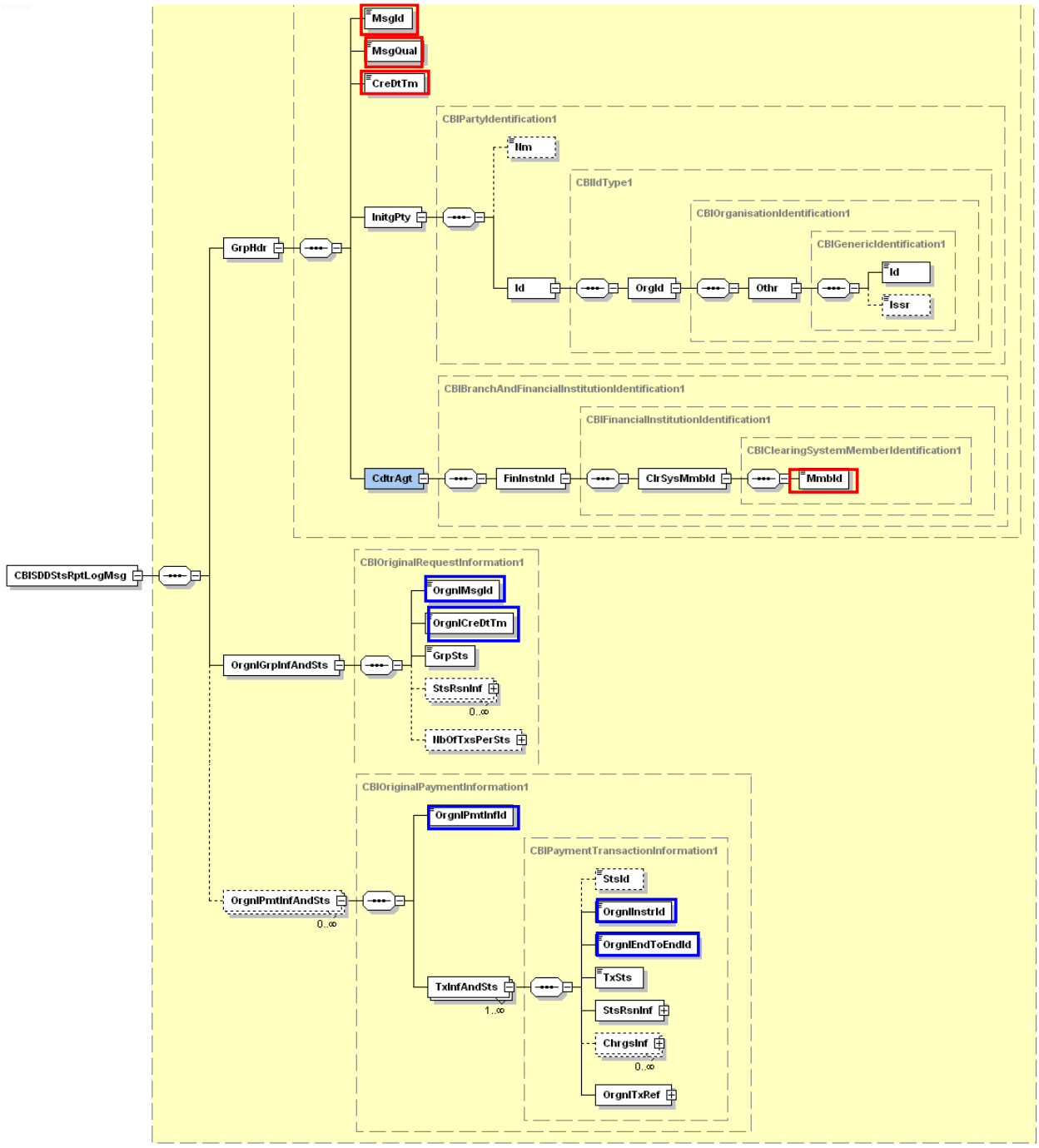


Figure 18 – Key fields contained in the collection request status message

Note that the message type (6 or 8) is included in the identification key of the collection request status message.

2.8.4 Identification and reconciliation of the transmission control messages

The transmission control message also contains sufficient information to enable the Executing Bank to fully identify and reconcile it with the collection request status messages previously sent.
The structure of this message in fact contains the following information:

- identification key of the transmission control message (Message Id, creation date, CUC of Access Bank);
- identification key of the logical message concerned (Message Id, message qualifier, creation date, ABI of Executing Bank).

The following figure shows the location of this information within the structure of the message.

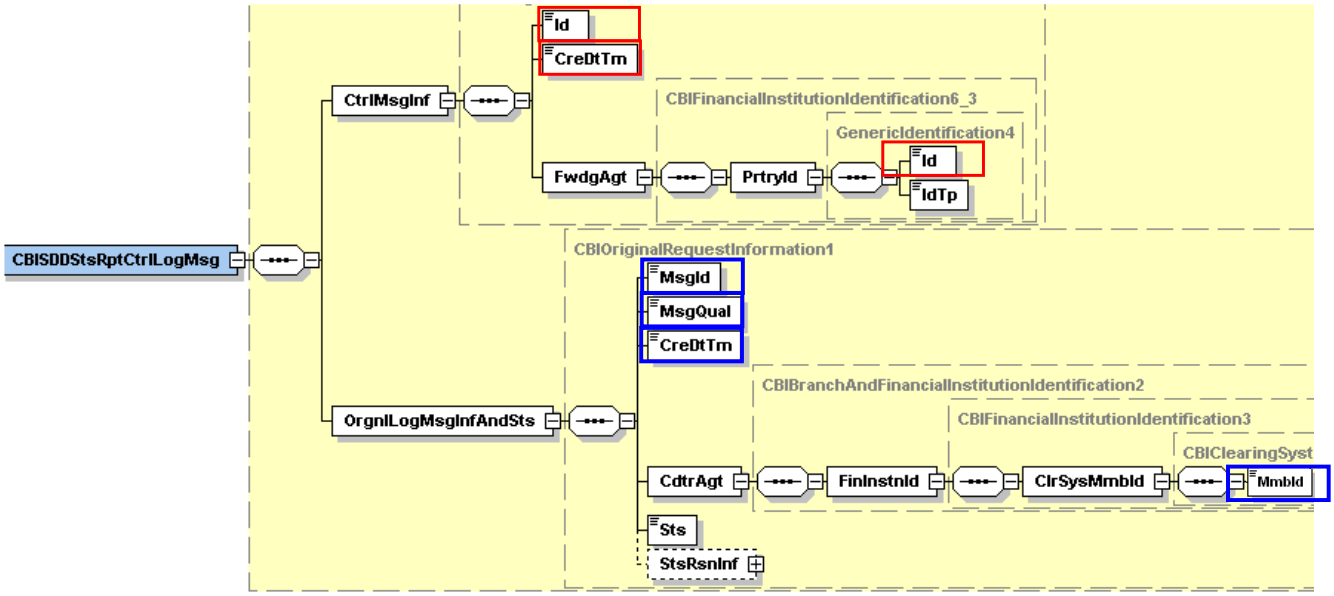


Figure 19 – Key fields contained in the logical transmission control message

2.9 INBOUND CHECKS AND METHODS OF RESPONSE

This paragraph describes the checks that Sending Bank and the Receiving Bank are required to carry out on the logical messages transmitted. The general principles regarding the management of physical messages and the methods of response are described in document *STFW-MO-001 – CBI Service Management Framework*.

2.9.1 Checks to be carried out on collection requests (groups)

The following paragraph describes the application checks, additional to the formal checks on the message's XSD schema, that the Executing Bank must carry out on each logical message before returning the related technical validation status message.

These application checks must also be carried out in advance by the Access Bank in order to avoid rejections by the Executing Bank. In particular, if the Executing Bank (Creditor Agent) contained in the logical message prepared by the customer is found not to be unique, the Access Bank must not forward the flow and must immediately notify the customer about the error.

The checks that the Executing Bank must carry out, as recipient of the logical collection request messages,

are listed below.
The error code - from among those envisaged by the ISO standard - to be returned if the outcome is negative is indicated for each check.
If the same code is used to report several instances of an error, the "Element Reference" field should be used to identify the specific tag affected by the error.

Since there is no specific code for a number of errors, these are reported using the generic code "NARR" and a descriptive string is included in the first occurrence of the repeated "AddtlStsRsnInf" text field.
If the "NARR" code is used, the method for preparing the required descriptive string represents a suggestion intended to clarify the nature of the error encountered. Accordingly, each Bank is free to use different strings to report the error, and the "Additional Status Reason Information" field can be used for this purpose too.

The Executing Bank must carry out the following checks:

1. The group's identification key must comply with the uniqueness criterion (*see para. 2.8*). If the Executing Bank receives a group that has already been processed, it must be rejected with a KO technical validation status report[10]. If a service request contains two or more collection requests with the same key, the Executing Bank must reject all the groups affected by the duplication. (**AM05**)

2. The Number of Transactions identified by the value set for the <NbOfTxs> tag (included in <GrpHdr>) must agree with the actual number of instructions (number of occurrences of block <DrctDbtTxInf>) included in the logical message (group). ("**NARR**", "**Unexpected number of requests**")

3. The control total <CtrlSum> must agree with the sum of the <InstdAmt> amounts of the individual collection instructions contained in the group. (**AM10**)

4. The first occurrence of the <Id> identifier of the <InitgPty> Initiating Party/Originator must contain a valid CUC, associated with the logical initiating party of the flow, indicated in the Service Header. (**BE05**)

5. The first occurrence of the <Issr> Issuer field in the <InitgPty> block must contain the value "CBI". ("**NARR**", "**Issuer Id Initiating Party invalid**")

6. There may be two or more occurrences of the <Id> block of the <InitgPty> Initiating Party/Originator. Commencing from the second occurrence, if the Issuer is known and takes the value "ADE", the ID is assumed to be an Italian fiscal reference and therefore the only acceptable formats are 11 numeric characters or 13 alphanumeric characters of which the first two take the value "IT" (VAT numbers) or 16 alphanumeric characters (personal Tax Codes). In all cases, no validity check is performed on the CIN. (**BE15**)

7. The Payment Information Identification is unique within the logical message. ("**NARR**", "**Payment Information Identification not unique**")

8. The Code field <Cd> within the Local Instrument block must be set to either "CORE" or "B2B". In addition, this value is unique within the same logical message (group). ("**NARR**", "**Local Instrument inconsistent**"). At a higher level of aggregation, the groups contained in a service request must be of the same type and consistent with the "Service Name" indicated in the service header. In particular, if the "Service Name" is "INC-SDDC" all the groups must be "CORE"; if the "Service Name" is "INC-SDDB" all the groups must be "B2B". ("**NARR**", "**Group type not consistent with the service requested**")

[10] *The identification key must only be "registered" by the Executing Bank after the generation of an OK technical validation status report. This enables the Initiating Party to reuse the same key after correcting an earlier error.*

9. The Code field in the Category Purpose field (<CtgyPurp>) must make reference to the external ISO table (see *External Code List* published on the website www.iso20022.org). ("**NARR**", "**Category Purpose invalid**").

10. In the Creditor and Ultimate Creditor blocks, if the Issuer is known and takes the value "ADE", the ID is assumed to be an Italian fiscal reference and therefore the only acceptable formats are 11 numeric characters or 13 alphanumeric characters of which the first two take the value "IT" (VAT numbers) or 16 alphanumeric characters (personal Tax Codes). (**BE17**)

11. The Postal Address (<PstlAdr>) of the Creditor (<Cdtr>) must observe the following rules:
    a. If the subfield Address Line (<AdrLine>) is used, then only the subfield Country (<Ctry>) can be used in addition to the Address Line. (**BE04**)
    b. If the subfield Address Line (<AdrLine>) is not used, then at least the subfields Town Name (<TwnNm>) and Country (<Ctry>) can be used in addition to the Address Line. (**BE04**)

~~11.~~12. The proprietary identifier of the Creditor Agent's clearing system <ClrSysMmbId> must be a valid ABI code in the form of exactly five numeric characters, consistent with the requirements of document "CBI-STD-001", associated with the logical recipient's CUC code included in the service header. ("**NARR**", "**ABI Creditor Agent incorrect**")

~~12.~~13. The proprietary identifier of the Creditor Agent's clearing system <ClrSysMmbId> (ABI code) must be unique for the entire group/logical message. ("**NARR**", "**ABI Creditor Agent not unique**")

~~13.~~14. The Ultimate Creditor may be present either at Payment Information level or at Direct Debit Transaction Information level ("**NARR**", "**Ultimate Creditor inconsistent or duplicated**")

~~14.~~15. Any IBAN identifier included in the Charges Account block (<ChgsAcct>) must be different to that of the Creditor Account (<CdtrAcct>), but relate to the same Creditor Agent (same ABI code included in the Creditor Account <CdtrAcct> for the transaction). ("**NARR**", "**IBAN Charges Account not allowed**")

~~15.~~16. The end-to-end identifier (<EndToEndId>) must be unique within the group/logical message. ("**NARR**", "**EndToEndId duplicated**")

~~16.~~17. The <InstdAmt> field must only contain the currency value "EUR" (**AM03**) and the amount must lie between 0.01 and 999999999.99 (maximum of 2 decimal places). Amounts can be stated without any decimal places (the suffix .00 is not obligatory) (**AM09**)

~~17.~~18. The <MndtId> field cannot just contain spaces and must only contain characters from the basic Latin set, as specified in the General Part STPG-MO-001. **("NARR", "Format not valid. Contains just spaces or characters not allowed."**)

~~18.~~19. The field containing the mandate amendment information details <AmdmntInfDtls> becomes obligatory if the Amendment Indicator tag <AmdmntInd> is set to "TRUE". (**MD02**)

~~19.~~20. The value of the Proprietary Type field <Prtry> contained in the Original Creditor Scheme Identification block <OrgnlCdtrSchmeId> must be set to "SEPA". ("**NARR**", "**OrgnlCdtrSchmeId identifier inconsistent**")

~~20.~~21. The proprietary code of the Original Creditor Agent's clearing system <ClrSysMmbId> must be a valid ABI code in the form of exactly five numeric characters, consistent with the requirements of document "CBI-STD-001". ("**NARR**", "**ABI Original Creditor Agent incorrect**")

~~21.~~22. The Original Debtor Agent field <OrgnlDbtrAgt> is only allowed if 'Original Debtor Account' field is not 'SMNDA'. ("**NARR**", "**Original Debtor Agent not allowed**")

~~22.~~23. The value of the Identification field <Id> contained in the Creditor Scheme Identification <CdtrSchmeId> must be compliant with the "EPC262-08 Creditor Identifier Overview" document. ("**NARR**", "**CdtrSchmeId Format inconsistent**")

~~23.~~24. The value of the Proprietary Type field <Prtry> contained in the Creditor Scheme Identification block <CdtrSchmeId> must be set to "SEPA". ("**NARR**", "CdtrSchmeId **identifier inconsistent**")

~~24. The Debtor Agent block is allowed (and obligatory) only if the Country Code of the Debtor Account's IBAN is not "IT" or "SM". ("**NARR**", "**Debtor Agent not allowed**")~~

25. In the Debtor and Ultimate Debtor blocks, if the Issuer is known and takes the value "ADE", the ID is assumed to be an Italian fiscal reference and therefore the only acceptable formats are 11 numeric characters or 13 alphanumeric characters of which the first two take the value "IT" (VAT numbers) or 16 alphanumeric characters (personal Tax Codes). (**BE16**)

26. The Postal Address (<PstlAdr>) of the Debtor (<Dbtr>) must observe the following rules:
    a. If the subfield Address Line (<AdrLine>) is used, then only the subfield Country (<Ctry>) can be used in addition to the Address Line. (**BE07**)
    ~~a.~~b. If the subfield Address Line (<AdrLine>) is not used, then at least the subfields Town Name (<TwnNm>) and Country (<Ctry>) can be used in addition to the Address Line. (**BE07**)

~~25.~~27. The IBAN of the Debtor Account must be valid, i.e. the check digit for the entire string must be correct. (**AC01**)

~~26.~~28. The <Cd> field in the Purpose block must make reference to the external ISO table (see *External Code List* published on the website www.iso20022.org) ("**NARR**", "**Purpose invalid**")

~~27.~~29. The Amount <Amt> field in the Regulatory Reporting <RgltryRptg> block (Currency and amount subject to CVS) only accepts a currency value of "EUR" (**AM03**), with amounts between 0.01 and 999999999.99 (maximum of 2 decimal places) (**AM09**)

~~28.~~30. The Unstructured block of the Remittance Information (for reconciliation purposes) can occur just once ("**NARR**", "**Reconciliation information not allowed**")

~~29.~~31. The Structured block of the Remittance Information (for reconciliation purposes) can occur just once and its total length must not exceed 140 characters[11] ("**NARR**", "**Reconciliation information not allowed**")

~~30.~~32. If the Creditor Reference Information field (relating to the instruction/document) is present, the "Creditor Reference Type" and "Creditor Reference" must also be present ("**NARR**", "**Creditor Reference Error**")

~~31.~~33. The "Code" field within the Creditor Reference Type block is always set to "SCOR" (Structured COmmunication Reference). ("**NARR**", "**Error Creditor Reference**")

~~32.~~34. If applied, the electronic signature must be checked in accordance with the criteria described in document FIRMA-MO-001. ("**NARR**", "**Error electronic signature check**")

[11] See specific paragraph for details of the checks to be carried out.

2.9.2 Rules for preparing technical validation status reports

As described earlier, the logical technical validation status messages are included in status reports that the Executing Bank prepares, based on the formal and application checks carried out on receipt of the groups.
Consistent with the contents of document *STFW-MO-001 - CBI Service Management Framework*, there are two options for preparing the status report if an error is found in the service request:

1. No reference made to any logical messages

2. 1:1 reference to logical messages with <GrpSts> set to RJCT and status reason coded as NARR and the <AddtlStsRsnInf> tag set to contain the string "Error in entire physical message"

Since they are included in the status reports, the logical technical validation messages must refer 1:1 to the groups received, but their order within the physical message may differ from that in which the corresponding groups were included in the service requests concerned (see *STFW-MO-001 - CBI Service Management Framework*).
The technical validation status message can therefore be used to selectively reject individual groups.

2.9.3 Checks to be carried out on technical validation status message

The checks that the Access Bank must carry out on the technical validation status messages are listed below. Since the logical messages contained in the status reports cannot be rejected selectively, if an error is found in just one individual logical message, the Access Bank must generate a specific "General Purpose" error message rejecting the entire physical message. This is consistent with the content of document *STFW-MO-001 - CBI Service Management Framework*.

The checks to be performed by the Access Bank are listed below:

1. If the logical message is signed, XML/XSD parsing of the entire logical message is necessary to ensure compliance with the related reference schema

2. If the logical message is signed, the electronic signature must be checked

3. The identifier of the logical message, being the <MsgId> field, must comply with the related uniqueness criterion (must be unique on the same creation date and for the same logical message type and ABI code of the Originator's Executing Bank)

4. The technical validation status messages contained in an individual status report must refer 1:1 to all the groups contained in the service request concerned. The order of the technical validation status messages included in the status report may differ from that of the corresponding collection requests. The fields used to carry out the check are described in the paragraph on the identification and reconciliation of logical messages

5. The ABI code of the Executing Bank (contained in the <CdtrAgt> block) must be associated with the CUC of the logical sender of the status report (ID query of the CBI Directory)

6. If the status of the entire service request is RJCT, the status of the logical SDD collection request message included in the <GrpSts> field must be set to RJCT

7. The <StsRsnInf> block is obligatory if the status of the group (<GrpSts> field) is set to RJCT The same block must be absent if the status of the group is set to ACTC

8. If the status of the entire service request is RJCT, the <StsRsnInf> block must be reason coded as NARR and the <AddtlStsRsnInf> tag set to contain the string "Error in entire physical message"

9. If the ISO20022 error code (<Cd> field) is NARR, the <AddtlStsRsnInf> tag must occur at least once

2.9.4 Rules for preparing collection request messages

After preparing the technical validation status report based on the outcome of the formal and application checks carried out on the service request received, the Originator's Executing Bank proceeds to carry out the substantive checks so that the requested service can be executed.

Since the substantive checks are generally associated with logic external to the CBI circuit, it is not possible to provide a complete list that covers all possible error conditions.
As stated at the definitions stage, substantive checks include by mere and incomplete way of example:

- check on the contractual availability of the service requested;
- check that the Originator and the holder of the Creditor Account are the same;
- check on compliance with the contract clauses signed by the customer;
- check on signature powers;
- …..

If the outcome of the substantive checks is negative for the entire group, the Executing Bank must generate a specific MsgQual type 6 progress report and reject the entire group for substantive reasons. In this case, it follows that the <OrgnlPmtInfAndSts> block must be absent.

Similarly, the status of the individual instructions - MsgQual type 8 - is only supplied following negative outcomes identified by the Executing Bank or subsequent parties in the collection chain (CSM, Debtor Agent, or even on the initiative of the debtor).

If the outcome must be converted into IR-EF flows, only the MsgQual type 8 progress report should be used in order to ensure that values are set for all obligatory fields (Payer's ABI code, amount, original due date, description of customer debtor/creditor) included in the IR-EF return flows, but not present in type 6 messages.

The structure of the progress messages allows for the inclusion of details at group level and in relation to individual payment requests, including the Originator in the case of negative/unpaid outcomes.

See document *STIN-ST-003* for further information about the structure of progress messages and the codes available for the various progress reports.

2.9.5 Checks to be made on the collection request status messages

The Access Bank must carry out various checks on the collection request status reports received in order to generate correctly the corresponding transmission control message. These checks are listed below:

1. The progress report's identification key must comply with the applicable uniqueness criterion. The Access Bank must reject a progress report received that has already been processed. If a payment status report contains two or more progress reports with the same key, the Access Bank must reject all progress reports affected by the duplication. (**AM05**)

2. The CUC of the Initiating Party must be valid and associated with the logical recipient of the progress report (Access Bank). (**BE05**)

3. The CUC of the logical initiator of the message (included in the service header) must correspond to the ABI code of the Creditor Agent indicated in the Group Header. This check must be carried out with reference to the information contained in the Directory. ("**NARR**", "**ABI Creditor Agent does not correspond**")

4. The <GrpSts> tag can only take the following values, depending on the value of the <MsgQual> tag: ("**NARR**", "**Group status not allowed**")
   - "RJCT" if the <MsgQual> field takes the value "6";
   - "PART" if the <MsgQual> field takes the value "8".

   NOTE: RJCT at this level refers to the entire original group, while PART refers to individual unsuccessful transactions (TxInfAndSts).

5. The Status Reason Information block relating to the Group Status <GrpSts> must be present (at least one occurrence→ 1..n) in the case of MsgQual type 6. By contrast, absence is obligatory in the case of MsgQual type 8. ("**NARR**", "**Information about the status of the group absent and/or inconsistent**")

6. The <Cd> field in the Purpose block must make reference to the external ISO table published on the website www.iso20022.org. ("**NARR**", "**Reason Code invalid**").

7. The Additional Status Reason Information field <AddtlStsRsnInf> becomes obligatory if the "Code" field of the related Status Reason is set to "NARR", both at group level and at individual transaction level. ("**NARR**", "**Descriptive information absent**")

8. The NumberOfTransactionsPerStatus field <NbOfTxsPerSts>
   - must be absent if the <MsgQual> field takes the value "6";
   - must be present if the <MsgQual> field takes the value "8".

   ("**NARR**", "**Number of instructions per status report inconsistent**")

9. The Collection information and status block <OrgnlPmtInfAndSts>:
   - must be absent if the <MsgQual> field takes the value "6";
   - must be present if the <MsgQual> field takes the value "8".

   ("**NARR**", "**Individual transaction block inconsistent with the type of progress report**")

10. The identifier "Id" contained in the Other field of the Status Originator must be a valid ABI code in the form of exactly 5 numeric characters (**"NARR", "ABI Status Originator invalid"**), and the Issuer of that Identifier must take the value "ABI". ("**NARR**", "**Issuer Id Status Originator invalid**")

11. The <Amt> field of the Charges Information block must only contain the currency value "EUR" and the amount must lie between 0.00 and 999999999.99 (maximum of 2 decimal places). Amounts can be stated without any decimal places (the suffix .00 is not obligatory) (**AM09**)

12. The proprietary Identifier field of the clearing system (ABI code of the Charges Party) must be a valid ABI code in the form of exactly 5 numeric characters coinciding with the Creditor Agent's ABI code. ("**NARR**", "**ABI Charges Party Code inconsistent**")

13. If applied by the Executing Bank, the electronic signature must be validated in accordance with the rules indicated in document FIRMA-MO-001. In addition, the only method allowed for applying electronic signatures to progress reports is "attached" mode. ("**NARR**", "**Error electronic signature check**")

14. The <Cd> field in the Purpose block must make reference to the external ISO table published on the website www.iso20022.org.

The CBI diagnostics of the Access Bank are not required to check if the information included by the Initiating Party/Originator in the original payment request has been returned identically in the related logical progress report messages, although such consistency is generally recommended.

Furthermore, if the <MsgQual> field takes the value "8", the information about the status code of the group of transactions/logical message ("PART") refers to that given at individual transaction level (in this case, always set to "RJCT"). More specifically, the PART code means: "The Status Report highlights transactions not accepted, which may represent a sub-set or the entirety of the original group".

2.9.6 Rules for preparing logical transmission control messages

As described earlier, the logical transmission control messages are included in status reports that the Access Bank prepares, based on the formal and application checks carried out on receipt of the collection request status messages.

Since they are included in the status reports, the logical transmission control messages must refer 1:1 to the status reports received, but their order within the physical message may differ from that in which the corresponding logical status messages were included in the service requests concerned (see *STFW-MO-001 - CBI Service Management Framework*).
These messages can therefore be used to selectively reject individual collection request status messages received.

As with the composition of technical validation status messages, there are two options for preparing the status report if an error is found in the entire service request:

1. No reference made to any logical messages

2. 1:1 reference to logical messages with <Sts> set to RJCT and status reason coded as NARR and the <AddtlStsRsnInf> tag set to contain the string "Error in entire physical message"

2.9.7 Checks to be made on the logical transmission control messages

The checks that the Executing Bank must carry out on the transmission control messages are listed below. Since the logical messages contained in the status reports cannot be rejected selectively, if an error is found in just one individual logical message, the Executing Bank must generate a specific "General Purpose" error message rejecting the entire physical message. This is consistent with the content of document *STFW-MO-001 - CBI Service Management Framework*.
List of checks:

1. The identifier of the logical message, being the <Id> field, must comply with the related uniqueness criterion. Accordingly, it must be unique on the same creation date and for the same logical message type and CUC code of the Originator's Access Bank (FwdgAgt)

2. The logical transmission control messages contained in an individual status report must refer 1:1 to all the collection request status reports contained in the physical message concerned. The order of the progress reports included in the status report may differ from that of the corresponding collection request status report. The fields used to carry out the check are included in the <OrgnlLogMsgInfAndSts> block (*see para. Identification and reconciliation of logical messages)*

3. The <Id> field contained in the <FwdgAgt> block must contain the CUC of the Access Bank. As such, this must be a valid CUC included in the Directory and coincide with that of the logical sender of the status report (indicated in the service header)

4. The <IdTp> fields must contain the "CBI Identifier" string

5. The <MmblId> field contained in the <CdtrAgt> block must contain the ABI code of the Executing Bank. Accordingly, it must be consistent with that of the logical recipient of the status report (indicated in the service header)

6. If the status of the entire service request is "RJCT", the status of the individual logical collection request status message included in the <Sts> field must be set to "RJCT"

7. The <StsRsnInf> block is obligatory if the status of the collection request status report (<Sts> field) is set to "RJCT". The same block must be absent if the status of the report is set to "ACTC"

8. If the ISO20022 error code (<Cd> field) is "NARR", the <AddtlStsRsnInf> tag must occur at least once

2.10 MANAGEMENT OF REMITTANCE INFORMATION USING THE CBI CHANNEL

CBI adopts the same rules as those envisaged in the relevant SEPA specifications (limit of 140 characters). There are two types of remittance information:

1) Unstructured <Unstrd>
2) Structured <Strd>

For the first, the limit of 140 characters derives structurally from the associated XSD data type (Max140Txt), while for structured remittances the following applications rule applies:

- The total length of the string must be calculated considering solely the actual content of the <Strd> tag, excluding the tag itself (shown in the next figure);
- The length of the fields and related content must be calculated with sole reference to the characters compliant with the published ISO standard, including the sub-tags. Accordingly, the calculation of the block length excludes any additional information (e.g. *namespace*) and *blank* characters.

The following example is based solely on core SEPA format fields:

```
<Strd> (block start tag, excluded from the calculation)
  <CdtrRefInf>
    <CdtrRefTp>
      <Cd>SCOR</Cd>
      <Issr>Max35Txt</Issr>
    </CdtrRefTp>
    <CdtrRef>Max35Txt</CdtrRef>
  </CdtrRefInf>
</Strd> (block end tag, excluded from the calculation)
```

In the "core" case above, the actual space available to the user is 140 characters less the length of the sub-tags i.e. 140-89=51 characters, less the 4 characters of the (obligatory) "SCOR" code = **47 characters**.

It follows that the content of (Issr + CdtrRef) cannot exceed 47 characters, which means that the full 35 characters are available for the Creditor Reference, with a further 12 for the Issr Identifier.

The type 8 Status for Originator (negative) makes available the information included in the original collection request:

- End-to-end Identification (obligatory)
- Remittance Information (obligatory if included in the collection request).

The following information provided by the Initiating Party is sent - within equivalent fields of the same name - to the interbank system (FiToFiCustomer Direct Debit):

- End-to-end Identification (obligatory)
- Remittance Information (obligatory if included in the request).

3 SEPA Direct Debit Recalls (Revocation) and Creditor initiated reimbursement requests (Reversals)

Functions not envisaged by CBI at the launch stage.

4 Appendix

4.1 APPENDIX A - CHARACTERS ALLOWED

With reference to the minimum set of characters that may be included in the fields of XML messages, banks using the CBI network are requested to support the following Latin characters for consistency with the Customer to Bank SEPA Direct Debit Implementation Guidelines (C2B SGG IGs) in force, issued by the **E**uropean **P**ayment **C**ouncil (EPC):

a b c d e f g h i j k l m n o p q r s t u v w x y z
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
0 1 2 3 4 5 6 7 8 9
/ - ? : ( ) . , ` +
Space

Note that the XML W3C standards adopted allow use of the entire UTF-8 character set; accordingly, based on bilateral or multilateral agreements between the countries, each bank may decide to receive and send messages whose fields contain characters that are not included in the above list.

In general, in the absence of agreements between the parties, if the sender of a message wishes to guarantee that it will be processed correctly - in the absence of errors unrelated to the characters used - the sender must restrict itself to using the minimum set of characters that must be supported when setting the value of each field. In particular, in order to guarantee not only the correct processing of the flow, but also the reconciliation of the transaction, the sender must only use the minimum character set when setting the value of the identifiers (such as MsgId).
The use of additional characters entitles the receiving bank to refuse the message received or to convert such characters on the basis described in document EPC217-08 SEPA Conversion Table.
In order to improve interoperability and the freedom allowed to Customers when inputting information to be transmitted via the CBI network, each bank or appointed technical partner may notify counterparts of a supported character set that extends the minimum envisaged.

Finally, it is specified that the content of the identifiers must comply with the following[12]:
- is limited to the set of Latin characters as defined above;
- must not start or end with a '/' (slash);
- it must not contain '//' (double slash).

4.2 APPENDIX B – STRUCTURING OF UNIQUE IDENTIFIERS AND MESSAGE QUALIFIERS

With regard to the rules for structuring the unique file and message identifiers sent using the CBI network (*see doc. STPG-MO-001 – New Services General Part*), the message qualifiers (QTM) to be used in relation to the CBI "SEPA Direct Debit Collection Requests" with related confirmation of receipt (level 1 status report) and Status for Originator (level 2 status report) are listed below:

SEPA Direct Debit Collection Requests and Status for Originator

Physical message type	Service name	QTM
Service request	INC-SDDC / INC-SDDB	01
Technical validation status	INC-SDDC / INC-SDDB	04
Collection status	STAT-RPT-INC-SDD	01
Transmission control	STAT-RPT-INC-SDD	04

[12] See EPC230-15 Clarification Paper on the Use of Slashes in References, Identifications and Identifiers

4.3 APPENDIX C - LIST OF COUNTRIES IN THE SEPA AREA

The list of countries and colonies recognised by EPC as part of the Single Euro Payment Area (SEPA) is contained in the document entitled "EPC409-09 List of SEPA Countries", which - at the time of writing - is available at the following link:

http://www.europeanpaymentscouncil.eu/knowledge_bank_detail.cfm?documents_id=328.

In this regard, note that CBI transmitters are not required to carry out any related applications checks: this list is presented for the sole purpose of enabling CBI customers to use the "SEPA Direct Debit collection request" function correctly.

DOCUMENT END