

**The Deutsche Bundesbank's technical specifications for
the settlement of interbank SCC collections via the
RPS SEPA-Clearer (SCL) 2023 Version 1.0
("SCC/SCL technical specifications")**

valid from 19 March 2023

Notes on the English translation

This translation has been prepared with the greatest possible care; however,
in case of doubt, the German text is the authoritative version.

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Changes/additions to the “technical specifications” compared with version 2.1

Section	Location	Changes/additions
12		Effects of TARGET2/T2S consolidation on the reporting of settlement references in credit and debit notifications and in account statements

1 Introduction

All items to be processed between the SEPA-Clearer and SEPA-Clearer participants are exchanged in the form of physical files. The formats of the individual files and bulks (logical files contained in files) are specified in the corresponding sections of this document.

If the XML format and syntax rules defined in the XSD schema files are not observed, a file rejection message is generated by the SEPA-Clearer. With regard to outgoing files, the data formats provided meet the specifications of this document.

The SCC service provided by the SEPA-Clearer caters for SCC collections in XML format in accordance with ISO 20022 and the Berlin Group's SEPA Card Clearing (SCC) Framework. Here, the familiar principles applied by the SDD service were broadly adopted for the purpose of processing SCC collections. However, since the SCC framework contains no mention of any presentment deadlines for SCC collections, the SCC and SDD facilities differ considerably inasmuch as such collections are settled directly after the relevant payment message is processed.

Validations carried out under the SCC service are confined to the elements crucial to interbank settlement activities. Checking rules that go beyond schema validations are described in the following sections.

The message type pacs.002.001.05SCLSCC used in the DVF or RSF does not form part of the SCC framework. It is a notice of rejection which the SEPA-Clearer sends to participants in the event of an error to inform them about rejected bulks or individual transactions (at the validation or settlement stage).

2 Duplication checks

2.1 Duplication checks in the SEPA-Clearer

Participants in the Bundesbank's RPS SEPA-Clearer are advised to unambiguously reference each individual transaction that occurs in the course of an operating day. Ensuring that payments are unambiguous helps to avoid duplicate payments and makes it easier to classify and trace specific payments.

The SEPA-Clearer carries out duplication checks at file, bulk and individual transaction level. These cover the following criteria, from which an unambiguous key can be derived.

- Service category (SCC)
- Reference number
- Identification of the party that allocated the reference
- Interbank settlement date

The table below shows the duplication criteria applying at file, bulk and individual transaction levels.

	Origin	Service	Reference number	BIC	Date
Files	IDF file header	SCC	File reference If a file is rejected, it must always be given a new file reference before it is resubmitted.	Sending institution	-
IDF bulks	IDF group header	SCC	Message ID It is necessary to ensure that the <Msgld> remains unique for the various pacs types (pacs.003, pacs.004 and pacs.007). (See explanatory note on <Msgld>).	Instructing agent	Interbank settlement date
Card clearing collection	pacs.003	SCC	Transaction ID	Creditor agent	Interbank settlement date
Return/refund	pacs.004	SCC	Return ID	Original debtor agent	Interbank settlement date
Reversal	pacs.007	SCC	Reversal ID	Original creditor agent	Interbank settlement date

2.2 Duplication checks in other CSMs

Explanatory notes on entering references (at bulk and individual transaction level) in order to avoid rejections by other CSMs owing to duplicate submission

The Bundesbank routes SCC collections which cannot be processed in the SEPA-Clearer via other CSMs. To avoid rejections by other CSMs on account of other duplication checks, the references entered in the following message elements should be kept unambiguous for an extended period of time (at least three months) by, for example, applying a time stamp.

- Message identification (bulk level; pacs.003, pacs.004 and pacs.007)
- Transaction ID (individual transaction level; pacs.003)
- Return ID (individual transaction level; pacs.004)
- Reversal ID (individual transaction level; pacs.007)

The individual participant is responsible for any rejections by other CSMs owing to duplicate submissions arising from that participant's non-compliance with the aforementioned rules for completing fields. Furthermore, that participant shall be liable for any resulting damages, breaches of agreed return deadlines, etc.

3 Daily reconciliation report for SEPA card clearing collections (DRR SCC)

Summary of the SCC bulks submitted to and delivered from the SEPA-Clearer, a copy of which is made available to each SEPA-Clearer participant in EBCDIC format every business day at the end of that day's SEPA-Clearer processing schedule. The DRR SCC is not structured in XML format.

The DRC SCC files delivered from the SEPA-Clearer in ASCII format using the EBICS communication structure do not incorporate any special characters for the line feed at the end of the record.

3.1 DRD header

Status	Field name	Format	Content	Item
M	Record type	4x	HDRD	0
M	Service identifier	3x	SCC	4
M	File type	3x	DRD	7
M	Sending institution	4!a2!a2!c	SEPA-Clearer's BIC (in production mode: MARKDEFF; in test mode: MARKDEF0)	10
M	Sender's file reference	16!x	SEPA-Clearer's reference	18
M	Date and time	6!n6!n	YYMMDDHHMMSS	34
M	Test code	1x	Either "T" (test) or "P" (production), depending on the processing environment	46
M	Receiving institution	4!a2!a2!c3!c	Originator's BIC/clearing institution's BIC (<u>not</u> communication partner)	47
M	Business date clearer	6!n	SEPA-Clearer business day	58

3.2 DRD (pacs.003) SEPA card clearing collection bulks sent body

Submissions of SEPA card clearing collections to the SEPA-Clearer by SEPA-Clearer participants

Status	Field name	Format	Content	Item
M	Record type	4x	DDSB	0
M	Bulk reference	35x	<MsgId> in group header	4
M	Number of card clearing collections processed	8n	Number of processed transactions in a bulk	39
M	Number of card clearing collections rejected	8n	Number of records rejected in a bulk	47
M	Value of card clearing collections processed	18d	Total value of processed transactions in a bulk. If an entire bulk is rejected: 0.00	55
M	Value of card clearing collections rejected	18d	Total value of records rejected in a bulk. If an entire bulk is rejected, total value of all transactions contained in the bulk	73
M	Processing cycle number	2n	Processing cycle <ul style="list-style-type: none"> • A “90” denotes processing after the first submission window • A “92” denotes processing after the second submission window 	91

3.3 DRD (pacs.004) return/refund bulks sent body

Submissions of returns/refunds to the SEPA-Clearer by SEPA-Clearer participants

Status	Field name	Format	Content	Item
M	Record type	4x	DFSB	0
M	Bulk reference	35x	<MsgId> in group header	4
M	Number of returns/refunds processed	8n	Number of processed transactions in a bulk	39
M	Number of returns/refunds rejected	8n	Number of records rejected in a bulk	47
M	Value of returns/refunds processed	18d	Total value of processed transactions in a bulk. If an entire bulk is rejected: 0.00	55
M	Value of returns/refunds rejected	18d	Total value of records rejected in a bulk. If an entire bulk is rejected, total value of all transactions contained in the bulk	73
M	Processing cycle number	2n	Processing cycle <ul style="list-style-type: none"> • A “90” denotes processing after the first submission window • A “92” denotes processing after the second submission window 	91

3.4 DRD (pacs.007) reversal bulks sent body

Submissions of reversals to the SEPA-Clearer by SEPA-Clearer participants

Status	Field name	Format	Content	Item
M	Record type	4x	DVSB	0
M	Bulk reference	35x	<MsgId> in group header	4
M	Number of reversals processed	8n	Number of processed transactions in a bulk	39
M	Number of reversals rejected	8n	Number of records rejected in a bulk	47
M	Value of reversals processed	18d	Total value of processed transactions in a bulk. If an entire bulk is rejected: 0.00	55
M	Value of reversals rejected	18d	Total value of records rejected in a bulk. If an entire bulk is rejected: total value of the bulk	73
M	Processing cycle number	2n	Processing cycle <ul style="list-style-type: none"> • A “90” denotes processing after the first submission window • A “92” denotes processing after the second submission window 	91

3.5 DRD (pacs.003) SEPA card clearing collection bulks received body

Deliveries of SEPA-Clearer card clearing collections to SEPA-Clearer participants

Status	Field name	Format	Content	Item
M	Record type	4x	DDRB	0
M	Bulk reference	35x	<MsgId> in group header	4
M	Number of card clearing collections received	8n	Number of delivered transactions in a bulk	39
M	Value of card clearing collections received	18d	Total value of delivered transactions in a bulk	47
M	Processing cycle number	2n	Processing cycle <ul style="list-style-type: none"> • A “90” denotes deliveries from the first delivery window • A “92” denotes deliveries from the second delivery window • A “94” denotes deliveries from the third delivery window 	65

3.6 DRD (pacs.004) return bulks received body

Deliveries of returns from the SEPA-Clearer to SEPA-Clearer participants

Status	Field name	Format	Content	Item
M	Record type	4x	DFDB	0
M	Bulk reference	35x	<MsgId> in group header	4
M	Number of returns received	8n	Number of delivered transactions in a bulk	39
M	Value of returns received	18d	Total value of delivered transactions in a bulk	47
M	Processing cycle number	2n	Processing cycle <ul style="list-style-type: none"> • A “90” denotes deliveries from the first delivery window • A “92” denotes deliveries from the second delivery window • A “94” denotes deliveries from the third delivery window 	65

3.7 DRD (pacs.007) reversal bulks received body

Deliveries of reversals from the SEPA-Clearer to SEPA-Clearer participants

Status	Field name	Format	Content	Item
M	Record type	4x	DVDB	0
M	Bulk reference	35x	<MsgId> in group header	4
M	Number of reversals received	8n	Number of delivered transactions in a bulk	39
M	Value of reversals received	18d	Total value of delivered transactions in a bulk	47
M	Processing cycle number	2n	Processing cycle <ul style="list-style-type: none"> • A “90” denotes deliveries from the first delivery window • A “92” denotes deliveries from the second delivery window • A “94” denotes deliveries from the third delivery window 	65

3.8 DRD trailer

Status	Field name	Format	Content	Item
M	Record type	4x	TDRD	0
M	Total number of records	6n	Number of DRD bodies	4

4 XML file header

4.1 SCC input debit file (SCC IDF) header

(BBkIDFBikSCC)

see annex 1

4.2 SCC debit validation file (SCC DVF) header

(BBkDVFBikSCC)

see annex 2

4.3 SCC debit notification file (SCC DNF) header

(BBkDNFBikSCC)

see annex 3

4.4 SCC settled debit file (SCC SDF) header

(BBkSDFBikSCC)

see annex 4

4.5 SCC unsettled debit file (SCC UDF) header

(BBkUDFBikSCC)

see annex 5

4.6 SCC result of settlement file (SCC RDF) header

(BBkRSFBikSCC)

see annex 6

5 XML interbank messages

5.1 SEPA card clearing – interbank card clearing collection

(pacs.003.002.04)

see annex 7

5.2 SEPA card clearing – reject card clearing collection

(pacs.002.001.05SCLSCC)

see annex 8

5.3 SEPA card clearing – interbank return/refund

(pacs.004.002.04)

see annex 9

5.4 SEPA card clearing – interbank reversal

(pacs.007.002.04)

see annex 10

5.5 SEPA card clearing – card remittance information

(supl.017.002.01)

see annex 11

6 Use of the instructing agent/instructed agent

The following section provides an overview of how the *instructing agent*, the *instructed agent* and the *receiving institution* and *sending institution* are to be specified at the different message levels (file, bulk or individual transaction level). The “InstructedAgentRule” and the “InstructingAgentRule” must be observed in accordance with the ISO 20022 standard. The latter rule encompasses an exclusion principle, which clearly states that the *instructing agent* may be specified only in the group header or at individual transaction level. This principle also applies to the *instructed agent*.

The following information is **not** intended to depict all the data elements that can or must contain a BIC in an SCC collection but rather to identify the key actors involved in payment processing using the SEPA-Clearer.

Brief overview of key individual actors

Sending institution <SndgInst> in the file header: should contain the BIC of the file sender (communication partner).

A file delivered to the SEPA-Clearer may contain bulks from one or more *instructing agents*. The BIC of the *sending institution* can deviate from that of the (respective) *instructing agent* and need not be listed in the SCL Directory. This is, for example, the case for technical service providers who themselves are not participants in the SEPA-Clearer.

A file sent by the SEPA-Clearer contains exactly one bulk. “MARKDEFF” (in the test: “MARKDEF0”) is entered as the *sending institution*.

Receiving institution <RcvgInst> in the file header: should contain the BIC of the file recipient (communication partner).

A file sent by the SEPA-Clearer contains exactly one bulk for an *instructed agent*. The BIC of the *receiving institution* can deviate from that of the *instructed agent* and need not be listed in the SCL Directory. This is, for example, the case for technical service providers who themselves are not participants in the SEPA-Clearer.

In a file delivered to the SEPA-Clearer “MARKDEFF” (in the test: “MARKDEF0” must be specified as the *receiving institution*).

Instructing agent <InstgAgt> in the group header: should contain the BIC of the submitter of a bulk submitted to the SEPA-Clearer. This BIC can, but need not necessarily, be listed in the SCL Directory. The countervalue of the submitted bulk is settled using the technical sub-account in TARGET specified by the submitter for the purpose of effecting financial settlement via the SEPA-Clearer during the corresponding SDD/SCC settlement cycle. The BIC of the *instructing agent* can deviate from that of the payment service provider at the individual transaction level.

In the files delivered by the SEPA-Clearer, the field *instructing agent* in the group header is left blank.

Instructed agent <InstdAgt> in the group header: In the files delivered by the SEPA-Clearer, the field *instructed agent* in the group header contains the BIC of the SEPA-Clearer participant whose technical sub-account in TARGET is used for the purpose of effecting financial settlement during the corresponding SDD/SCC settlement cycle. This BIC can, but need not necessarily, be listed in the SCL Directory. The BIC of the *instructed agent* can deviate from that of the *debtor/creditor agent* at the individual transaction level.

In the case of submissions to the SEPA-Clearer, this field must be left blank.

Instructing agent <InstgAgt> at the individual transaction level: should contain the BIC of the original submitter to the SEPA-Clearer of the bulk in which the transaction was contained. Upon delivery of the transaction, this BIC is entered at individual transaction level by the SEPA-Clearer and can, but need not necessarily, be listed in the SCL Directory. The BIC of the *instructing agent* can deviate from that of the *debtor/creditor agent* at the individual transaction level.

In the case of submissions to the SEPA-Clearer, this field must be left blank.

Instructed agent <InstdAgt> at the individual transaction level: This field is **not** supported at the individual transaction level.

Debtor agent BIC <DbtrAgt> at the individual transaction level: should contain the BIC of the payer's payment service provider (debtor bank). It is essential that this is contained in the SCL Directory as it is the key criterion for routing the payment in the SCC service.

Creditor agent BIC <CdtrAgt> at the individual transaction level: should contain the BIC of the payee's payment service provider (creditor bank). This BIC must be listed in the SCL Directory.

Sample entry for the maximum number of different BICs in an SCC input debit file:

File header:

```
<?xml version="1.0" encoding="UTF-8"?>
<!--Sample XML file generated by XMLSpy v2012 rel. 2 sp1 (http://www.altova.com)-->
<BBkIDF:BBkIDFBlkSCC xsi:schemaLocation="urn:BBkIDF:xsd:BBkIDFBlkSCC BBkIDFBlkSCC.xsd"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:BBkIDF="urn:BBkIDF:xsd:BBkIDFBlkSCC"
xmlns:env="urn:iso:std:iso:2002:tech:xsd:supl.017.002.01">
  <BBkIDF:SndgInst>AAAADEAAXX</BBkIDF:SndgInst>
  <BBkIDF:RcvgInst>MARKDEF0</BBkIDF:RcvgInst>
  <BBkIDF:FileRef>2018062803010112</BBkIDF:FileRef>
  <BBkIDF:SrcId>SCC</BBkIDF:SrcId>
  <BBkIDF:TstCode>T</BBkIDF:TstCode>
  <BBkIDF:FType>IDF</BBkIDF:FType>
  <BBkIDF:FDtTm>2018-06-28T09:37:47Z</BBkIDF:FDtTm>
  <BBkIDF:NumDDBIk>1</BBkIDF:NumDDBIk>
  <BBkIDF:NumRVSBk>0</BBkIDF:NumRVSBk>
  <BBkIDF:NumRFRBk>1</BBkIDF:NumRFRBk>
```

BIC of a technical service provider who is not a participant in the SEPA-Clearer itself, but has been authorised to submit by an SCL participant.

Bulk header:

```
<BBkIDF:FIToFICstmrDrctDbt xmlns="urn:iso:std:iso:2002:tech:xsd:pacs.003.002.04">
  <GrpHdr>
    <MsgId>BBBBDEBBXX2018062803010112001</MsgId>
    <CreDtTm>2018-06-28T09:37:47Z</CreDtTm>
    <NbOfTx>3</NbOfTx>
    <TtlIntrBkSttlmAmt Ccy="EUR">6.00</TtlIntrBkSttlmAmt>
    <IntrBkSttlmDt>2018-06-28</IntrBkSttlmDt>
    <SttlmInf>...</SttlmInf>
    <InstgAgt>
      <FinInstnd>
        <BICFI>BBBBDEBBXX</BICFI>
      </FinInstnd>
    </InstgAgt>
  </GrpHdr>
```

BIC of the SCL participant whose account will be used for settlement. This BIC can, but need not necessarily, be listed in the SCL Directory.

Individual transaction level:

```

<DrctDbtTxInf>
  <PmtId> ... </PmtId>
  <PmtTplnf> ... </PmtTplnf>
  <IntrBkSttlmAmt Ccy="EUR">1.00</IntrBkSttlmAmt>
  <InstdAmt Ccy="EUR">1.00</InstdAmt>
  <ChrgBr>SLEV</ChrgBr>
  <ReqdColltnDt>2018-06-28</ReqdColltnDt>
  <DrctDbtTx> ... </DrctDbtTx>
  <Cdtr> ... </Cdtr>
  <CdtrAcct> ... </CdtrAcct>
  <CdtrAgt>
    <FinInstnId>
      <BICFI>CCCCDECCXX</BICFI>
    </FinInstnId>
  </CdtrAgt>
  <UltmtCdtr> ... </UltmtCdtr>
  <Dbtr> ... </Dbtr>
  <DbtrAcct> ... </DbtrAcct>
  <DbtrAgt>
    <FinInstnId>
      <BICFI>DDDDDEDD</BICFI>
    </FinInstnId>
  </DbtrAgt>
  <UltmtDbtr> ... </UltmtDbtr>
  <Purp> ... </Purp>
  <RmtInf> ... </RmtInf>
  <SplmtryData xsi:type="SupplementaryData1BG" > ... </SplmtryData>
</DrctDbtTxInf>

```

BIC of the payee's payment service provider (creditor bank). This BIC must be listed in the SCL Directory.

BIC of the payer's payment service provider (debtor bank). This BIC must be listed in the SCL Directory.

7 Error codes/rejection reason codes

Error codes used in connection with the structural check of an SCC input debit file (SCC IDF) by the SEPA-Clearer

The errors described below result in the entire file being rejected by means of SCC DVF (exception: A01)

Error code	Nature of error
A01	IDF was partially rejected.
R02	The file name designation does not conform with the rules (code currently not in use).
R04	The sender's BIC in the file name does not conform with the rules (code currently not in use).
R07	SWIFTNet FileAct request type does not conform with the rules.
R09	IDF was completely rejected as it does not conform with the rules for other reasons (eg character set data deviate from UTF-8).
R10	IDF does not correspond to the schema and therefore cannot be processed.
R11	Sender's BIC (<SndgInst>) is incorrect.
R12	Recipient's BIC (<RcvgInst>) is incorrect.
R13	IDF is a duplicate.
R14	Error in test code (<TstCode>).
R18	Number of card clearing collection bulks contained in the IDF does not match the figure given in the file header.
R20	Number of return/refund bulks contained in the IDF does not match the figure given in the file header.
R22	Number of reversal bulks contained in the IDF does not match the figure given in the file header.
S01	IDF was rejected as maximum permissible number of bulks in a file was exceeded.

Error codes used in connection with the structural check of a bulk by the SEPA-Clearer

The errors described below result in the whole bulk being rejected by means of SCC DVF (exception: B01)

Error code	Nature of error	Type	paces.002SCL
B01	Bulk was partially rejected.	PRTRY	X
B02	Maximum permissible number of transactions contained in a bulk was exceeded.	PRTRY	X
B03	Number of transactions contained in a bulk does not match the figure given in the group header.	PRTRY	X
B05	Total amount in the field <TtlIntrBkSttlnAmt>, <TtlRtrdIntrBkSttlnAmt> or <TtlRvsdIntrBkSttlnAmt> does not match the sum of the transactions in the bulk.	PRTRY	X
B09	Entire bulk was rejected as all transactions contained in it were rejected. The specific reasons for rejecting each transaction are stated in the DVF.	PRTRY	X
B10	Entire bulk was rejected either because the instructing agent has to be included in the IDF group header or the specified instructing agent is not authorised to make submissions for the submitted payment type.	PRTRY	X
B11	Entire bulk was rejected as the instructed agent must not be included in the IDF group header.	PRTRY	X
B14	Entire bulk was rejected as the <Msgld> was duplicated.	PRTRY	X
B15	Entire bulk was rejected as the date in the field <IntrBkSttlnDt> or <OrgnlIntrBkSttlnDt> falls outside the permitted time period.	PRTRY	X
B16	Entire bulk was rejected as the data entered in the field <ClrSys> is incorrect.	PRTRY	X
B98	Entire bulk was rejected as the <Msgld> does not comply with the format rules.	PRTRY	X
B99	Bulk was rejected for other reasons.	PRTRY	X

Individual transaction-related error codes (SEPA-Clearer and other CSMs) or rejection codes (PSPs) specific to the individual transaction:

Initiating payment service provider

The last two columns contain the interbank message types in which the respective error code can be specified explaining the reason for the R-transaction.

Code	ISO 20022 designation	SEPA card clearing reason (according to BG SCC IGRelNote2014 2.0)	Initiator	Type	pacs.007	pacs.004
AC01	IncorrectAccountNumber	Clearing collection is sent to the wrong partner	Payment service provider	ISO		X
AC04	ClosedAccountNumber	Card transaction performed without payment guarantee and cardholder account does not exist	Payment service provider	ISO		X
AC06	BlockedAccount	Account blocked Account blocked for card clearing by the debtor	Payment service provider	ISO		X
AG02	InvalidBankOperation	Card transaction not allowed as per card scheme rules	Payment service provider	ISO		X
	Code	Usage rule: To be used to indicate an incorrect 'operation code / transaction code / sequence type'.				
AM04	InsufficientFunds	Card transaction performed without payment guarantee and cardholder account does not cover the transaction amount	Payment service provider	ISO		X
AM05	Duplication	Duplicate collection/entry	Payment service provider	ISO	X	X

Code	ISO 20022 designation	SEPA card clearing reason (according to BG SCC IGRelNote2014 2.0)	Initiator	Type	pacs.007	pacs.004
AM09	WrongAmount	Collection of multi-step payment without valid finalisation in the online part; amount not correct	Payment service provider			X
BE06	UnknownEndcustomer	Clearing collection sent to the wrong partner. Ultimate debtor identifier not known	Payment service provider			X
CURR	IncorrectCurrency	Conversion rate not correct	Payment service provider	ISO		X
EMVL	EMVLiabilityShift	EMV liability shift	Payment service provider	ISO		X
FF01	Note: Currently allowed in technical rejection message only	Format error in the collection	Payment service provider	ISO		X
		Note: not allowed yet by ISO for return messages, may be used as proprietary code.				
FOCR	FollowingCancellationRequest	Transaction reversed	Payment service provider	ISO		X
MD01	NoMandate	Transaction not authorised by issuer Offline Tx: Chip data for TC computation missing Offline Tx: Tc incorrect or missing Transaction above floor limit No cardholder authorisation	Payment service provider	ISO		X
MS02	Unspecified reason	Card scheme-specific reason	Payment service provider	ISO	X	X
	Customer-generated					
MS03	Unspecified reason Agent-generated	Reason not specified	Payment service provider	ISO	X	

Code	ISO 20022 designation	SEPA card clearing reason (according to BG SCC IGRelNote2014 2.0)	Initiator	Type	pacs.007	pacs.004
PINL	PINLiabilityShift	PIN liability shift	Payment service provider	ISO		X
RC01	BankIdentifierIncorrect	Clearing collection is sent to the wrong partner (ie invalid BIC)	Payment service provider	ISO		X
SVNR	ServiceNotRendered	Service not rendered	Payment service provider	ISO		X
TM01	Cut-off time	Presentment of the collection does not occur within the agreed period. Second presentment of the collection does not occur within the agreed period. Late presentment.	Payment service provider	ISO		X

Initiator: other CSMs / SEPA-Clearer

The latter three columns specify the interbank message types which can trigger a rejection on the basis of the respective error code.

Code	ISO 2002 designation	SEPA card clearing reason (according to BG SCC IGRenote2013 2.0) or nature of error	Initiator	Type	pacs.007	pacs.004	pacs.003
AM05	Duplication	Duplicate message	Other CSM / SEPA-Clearer	ISO	X	X	X
DT01	InvalidDate	The date falls outside the time period permitted by the SEPA-Clearer	SEPA-Clearer	ISO	X	X	
ED05	SettlementFailed	Unsuccessful settlement (rejected by means of RSF)	Other CSMs / SEPA-Clearer	ISO	X	X	X
PART	---	Partial rejection of a bulk	SEPA-Clearer		X	X	X
PY01	---	The transaction cannot be processed as the payer's and/or the payee's payment service provider is/are not registered as a direct or indirect participant in the STEP2 SDD service	SEPA-Clearer	PRTRY	X	X	X
RJCT	---	Rejection of entire bulk	SEPA-Clearer		X	X	X
XT13	---	The transaction contains at least one field which is not supported. At least one mandatory field is missing from the transaction. The invalid XML field is indicated by the error code (if a code exists).	SEPA-Clearer	PRTRY	X	X	X

Code	ISO 2022 designation	SEPA card clearing reason (according to BG SCC IGRelNote2013 2.0) or nature of error	Initiator	Type	pac.s.007	pac.s.004	pac.s.003
XT27	---	The transaction contains at least one element with a BIC not listed in the SCL Directory	SEPA-Clearer	PRTRY	X	X	X
XT99	---	Collection rejected for other reasons (code currently not in use)	SEPA-Clearer	PRTRY			

8 Character set

The SEPA-Clearer supports the full UTF-8 character set.

Payment service providers must be able to support the following Latin character set commonly used in international communication.

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

However, it can be agreed on a bilateral or multilateral basis to support one or more UTF-8 character sets in addition to the Latin character set (eg the Greek character set). However, this is solely permitted for message elements containing text (ie fields programmed to accept freely entered text), eg remittance information, name and address. In all other cases, only Latin characters may be used.

Unless prevented by the schema parameters, the SEPA-Clearer therefore forwards data records featuring non-Latin characters not contained in the UTF-8 character set to the recipient without making any changes to the text.

Checks by the SEPA-Clearer

(1) When files are submitted (SCC IDF), the SEPA-Clearer checks whether their prologue contains the following information in line with the usage rules applying to the UTF-8 character set.

```
<?xml version="1.0" encoding="UTF-8"?>
```

If any other character set is entered, the entire file is rejected using the error code R09.

(2) No character set checks beyond those covering compliance with the UTF-8 character set are carried out by the SEPA-Clearer.

9 Notes on format/status

9.1 Explanatory notes on the format of XML file headers and the daily reconciliation report

Format	Description
a	Alpha, capital letters
c	Alphanumeric, letters: capital letters
d	Decimal including decimal point and two decimal places
n	Numeric
x	Characters in accordance with Latin character set, in some cases restricted by XSD schema file (see also section entitled "Character set")
3!a	Precisely three alphanumeric characters
ISODate	YYYY-MM-DD
ISODateTime	YYYY-MM-DDThh:mm:ss
Status	
M	Mandatory field
O	Optional field

9.2 Completing amount fields in line with the schema

Sample entry		Processing in the SEPA-Clearer
996.5	One decimal place	996.50
997.	No decimal places	997.00
998	No decimal point and no decimal places	998.00

Submitted files containing amounts with a decimal point and/or one or more decimal places do not conform to the schema and are therefore rejected using error code R10. Amounts at the individual transaction level may not be smaller than €0.01 and must not exceed €999999999.99.

9.3 Use of filling characters in the amount fields

The XML parser accepts characters that function as "fillers" in an XML context. These may be entered in the amount fields in an XML environment, however their use may result in processing problems for the receiving/processing institution. We therefore advise against using such filling characters.

The fillers listed below are recognised by the XML parser and routed/processed as follows by the SCL.

1 Leading zeros before the decimal point¹

The SEPA-Clearer ignores the redundant zeros and delivers the amount with the first and the last significant characters to the SCL participant.

Example:

Submission to the SCL:

```
<IntrBkSttlmAmt Ccy="EUR">000000000000001.01</IntrBkSttlmAmt>
```

Delivery from the SCL:

```
<IntrBkSttlmAmt Ccy="EUR">1.01</IntrBkSttlmAmt>
```

2 Spaces in the amount field

The SEPA-Clearer ignores the redundant spaces and delivers the amount with the first and the last significant characters to the SCL participant.

Example:

Submission to the SCL:

```
<IntrBkSttlmAmt Ccy="EUR">                2.02                </IntrBkSttlmAmt>
```

Delivery from the SCL:

```
<IntrBkSttlmAmt Ccy="EUR">2.02</IntrBkSttlmAmt>
```

9.4 Use of white spaces in XML fields, in this case the “collapsing” procedure

“White spaces” form part of the standard XML environment. They are also permitted for the decimal data type, which is set as standard for the amount field.

Neither the ISO 20022 standard nor the SCC Implementation Guidelines envisage any restrictions to this arrangement. As a rule, white spaces can be processed by XML parsers. However, problems can occur, eg when customised solutions have been programmed or the XML data records have been converted to different formats for further processing.

We therefore advise against using spaces in the tags as this may result in processing problems for the receiving/processing institution.

CSMs have stipulated the following format rules for a variety of “string”-derived fields in their schema files. In the description, the white spaces facet was set to “collapse” in the schema files. Detailed information on the procedure used in XML parsing can be found in the document “W3C Recommendation 28 October 2004, XML Schema Part 2: Datatypes Second Edition”, the contents of which can be called up using the internet link provided below.

<http://www.w3.org/TR/xmlschema-2/#rf-whiteSpace>

¹ The schema validation excludes zeros after the second decimal place.

For reasons of interoperability, this “collapsing” procedure was integrated into the SEPA-Clearer’s schema files with the same level of effect, meaning that, overall, and wherever necessary both submissions to and deliveries from the SEPA-Clearer undergo the above procedure as part of the XML parsing process.

9.5 Namespace declaration

Message instances (ie messages exchanged between PSPs and the SEPA-Clearer) must contain the name space declaration at bulk level. This declaration thereafter applies to all tags contained in the message; individual tags therefore need not be identified with the prefix “sw”. SCL participants must take care to adhere to the entries/declaration. SCL delivery messages to PSPs are likewise sent without a prefix at “tag level”.

Sample message instance:

```
<BBkIDF:FIToFICstmrDrctDbt xmlns="urn:iso:std:iso:20022:tech:xsd:pacs.003.002.04">  
  <GrpHdr>  
    <MsgId>BBBBBBBBB20131211-123456</MsgId>
```

10 Compression procedures

10.1 FileAct²

Files may be transmitted in either direction in compressed or uncompressed form as desired by the customer. To this end, the following compression procedures may be used.

- FLAM³ (which uses the ADC compression mode as it offers the highest compression factor)
- ZIP
- GZIP

10.2 EBICS environment⁴

In EBICS, the ZIP compression procedure must be supported when transmitting files in either direction.

² See the Deutsche Bundesbank's “procedural rules on communication via SWIFTNet FileAct” for the Deutsche Bundesbank's Retail Payment System (RPS) and the RPS SEPA-Clearer (SCL).

³ FLAM (Frankenstein-Limes-Access-Method) is a registered trademark of limes datentechnik gmbh, Friedrichsdorf, Germany.

⁴ See “Procedural rules on communication with payment service providers with a bank sort code via EBICS”.

11 General specifications of message elements

Creditor identifier

The creditor identifier is structured as specified in the SCC Implementation Guidelines under point 2.4. Creditor identifier details are to be entered in the ISO 20022 data element “Creditor scheme identification”. The identifier can be a legal or non-legal person.

The creditor identifier must remain unchanged over time to enable the payer and his PSP to effect returns and queries vis-à-vis the payee.

Format rules

- Positions 1 and 2 contain the ISO country code.
- Positions 3 and 4 contain the check digits.
- Positions 5 to 7 contain the creditor business code which the creditor can complete with any characters it sees fit. The default characters entered for the creditor business code are “ZZZ”.
- Positions 8 to 35 contain a SEPA Creditor Scheme ID relating to the acquirer/payee, as already used in the settling of SEPA payments.
- **Note:** the following preparatory steps are required in order to calculate the check digits:
 - Positions 5 to 7 are not included.
 - All non-alphanumeric characters must be deleted from the country-specific element (positions 8 to 35).
 - The ISO country code and “00” must be added at the right-hand end.
 - Letters should be converted into figures as shown in the table below.

A = 10	G = 16	M = 22	S = 28	Y = 34
B = 11	H = 17	N = 23	T = 29	Z = 35
C = 12	I = 18	O = 24	U = 30	
D = 13	J = 19	P = 25	V = 31	
E = 14	K = 20	Q = 26	W = 32	
F = 15	L = 21	R = 27	X = 33	

- The check digit procedure MOD 97-10 should be used to calculate the check digit (see also ISO 7064).

12 TARGET referencing

TARGET issues settlement information (camt.054) and electronic account statements (camt.053) for all accounts held under its auspices. The aforementioned message types contain settlement references which serve to identify the SEPA direct debits that are exchanged with the SEPA-Clearer. The BIC of the SEPA Clearer "MARKDEFFSCL" is shown in the element <DbtrAgt> under <TxDtIs> <RltdAgt>.

1 Liquidity transfer order automatically generated by the SEPA-Clearer from the RTGS DCA to the relevant sub-account in the amount of the settlement sum total of submitted or delivered SEPA direct debit and SCC collections resulting in debit entries

Structure of the reference in the <EndtoEndId> of the camt-message under <TxDtIs><Refs>:

SCL	Format	Content
System	1-character, alphanumeric	"S" (SCL)
AS action	2-character, alphanumeric	"C" + No of cycles
Date	2-character, numeric	"TT" (processing day)
Constant	2-character, numeric	"00"
Serial number	9-character, numeric	Unambiguous serial number within the preceding reference information

In addition, the following information is provided in the unstructured remittance information (element <RmtInf><Ustrd> under <TxDtIs>) of the camt.054:

SCL	Format	Content
<u>Liquidity transfer</u>	3-character, constant	"CUO"
Processing cycle	2-character, numeric	Phase 90 to 99
Settlement cycle	2-character, alphabetical	<p>First character: "I", "O" or "X" I = Input (settlement of bulks submitted to the SCL) O = Output (settlement of bulks delivered from the SCL) X = Error (settlement of rejected transactions)</p> <p>Second character: A, B or C⁵ A = SCT service B = SDD service C = SCC service</p>

Furthermore, the code "LIAS" (Immediate LT – intra-service AS on behalf) in the element <LclInstrm><Prtry> indicates that this is a liquidity transfer initiated by the ancillary system.

⁵ If a current order refers to settlements from several services, only one character is given (depending on the order in which the bulks to be settled are processed).

2 Settlement of submitted and delivered SCC bulks on the sub-account during the relevant SDD/SCC settlement cycles of a settlement procedure

Structure of the reference in the <EndtoEndId> of the camt-message under <TxDtIs><Refs>:

SCL	Format	Content
System	1-character, alphanumeric	"S" (SCL)
AS action	2-character, alphabetical	First character: "I", "O" or "X" I = Input (settlement of bulks submitted to the SCL) O = Output (settlement of bulks delivered from the SCL) X = Error (settlement of rejected transactions) Second character: A, B or C A = SCT service B = SDD service C = SCC service
Current date	2-character, numeric	Day of the current month
File ID	6-character, numeric	Internal file ID
Bulk ID	3-character, numeric	Bulk within the file
Serial number	2-character, numeric	Serial number

In addition, the following information is provided in the unstructured remittance information (element <RmtInf><Ustrd> under <TxDtIs>) of the camt.054:

SCL	Format	Content
Bulk ID	35-character, alphanumeric	Message identification (<MsgID>) in the group header of the settled SCC bulk
Settlement date	6-character, numeric	DDMMYY
Instructing or instructed agent	11-character, alphanumeric	From the group header of the settled SCC bulk Submitted bulks: Instructing agent Delivered bulks: Instructed agent
Indicates a partial settlement within a bulk	1-character, alphabetical	F (= Full) P (= partial settlement)

Furthermore, the code "ASTI" (AS Transfer) in the element <LclInstrm><Prtry> indicates that this is a settlement initiated by the ancillary system.

3 Return transfer of entire funds from the sub-account to the corresponding RTGS DCA after completion of all settlements in a settlement procedure (SCT and SDD/SCC settlement cycles) automatically initiated by the SEPA-Clearer

When retransferring the (entire amount of) liquidity from the sub-account to the RTGS DCA, references are likewise assigned (provided in the <EndtoEndId> of the camt-messages under <TxDtIs><Refs>). This is an internal reference that always starts with the constant "SCP". Together with the BIC of the SEPA Clearer and the entry "LIIA" in the element <LclInstrm><Prtry>, the debits on the sub-account or the credits on the RTGS DCA can be unambiguously assigned to this business case.

13 Automated e-mail notification

13.1 Repeated settlement attempts

The account holders involved will be informed via automated e-mail notification about repeated settlement attempts. The account holder on the debit side will be asked to promptly arrange for sufficient funds on its account, while the account holder on the credit side will be alerted to the delayed settlement.

It is mandatory for direct participants to register the relevant contact details. These will be used in both instances.

Up to five different sets of contact details can be provided. To prevent instances where contact persons are absent or out of the office, or have left your institution altogether, we advise participants to register functional e-mail addresses.

13.1.1 Debit side

Notifications will be sent from the e-mail address “EMZ-Disposition@bundesbank.de”.

The subject line of these e-mails clearly identifies the service or scheme in question and the matter in hand.

“SCL Fehlende Deckung / Insufficient funds [BIC]”

The notification comprises a standardised e-mail message.

“Sehr geehrte Damen und Herren, /Dear Sir or Madam

auf Ihrem PM-Konto konnten SEPA-Clearer-Zahlungen in Höhe von EUR [...] nicht belastet werden. Bitte sorgen Sie bis [...] Uhr für ausreichende Liquidität.

SCL payments amounting to EUR [...] could not be debited to your PM account. Please ensure that sufficient liquidity is available by [...] Central European Time.

Mit freundlichen Grüßen / Yours sincerely

DEUTSCHE BUNDESBANK”

13.1.2 Credit side

Notifications will be sent from the e-mail address “EMZ-Disposition@bundesbank.de”.

The subject line of these e-mails clearly identifies the service or scheme in question and the matter in hand.

“SCL Settlement Verzögerung / Delay [BIC]”

The information comprises a standardised message.

“Sehr geehrte Damen und Herren, /Dear Sir or Madam

Bitte beachten Sie, dass einzelne Gutschriften aus dem SEPA-Clearer nicht durchgeführt werden konnten. Eine Wiederholung des Buchungsversuchs erfolgt in Kürze.

Please note that a number of credit positions from the SEPA-Clearer could not be settled. The booking attempt will be repeated shortly.

Mit freundlichen Grüßen / Yours sincerely

DEUTSCHE BUNDESBANK”

13.2 Advance information

Advance information will automatically be sent out roughly 20 minutes before operations are booked. It is mandatory for direct participants to register the relevant contact details. Up to five different sets of contact details can be provided.

The advance information states the total funds needed to cover upcoming debit bookings on the delivery side, ie for SCC collections (pacs.003) and R-transactions (pacs.004) to be delivered. If SEPA direct debits are also to be booked in the upcoming procedure, any funds needed from the SEPA-Clearer’s SDD services are also stated. Any incoming liquidity or debit amounts on the submission side will not be shown in the advance information.

Notifications will be sent from the e-mail address “EMZ-Disposition@bundesbank.de”.

The subject line of these mails clearly identifies the service or scheme in question and the matter in hand.

“SVV Vorabinformation/Settlement notification [BIC]”

The advance information comprises a standardised e-mail message and a PDF attachment.

Message

“Sehr geehrte Damen und Herren, /Dear Sir or Madam

anbei senden wir Ihnen die Vorabinformation zu dem um ca. [...] Uhr anstehenden Buchungsgeschäft des Scheckabwicklungsdienstes.

Please find attached advance information on the upcoming booking operations of the Cheque Processing Service at around [...] Central European Time.

Mit freundlichen Grüßen / Yours sincerely

DEUTSCHE BUNDESBANK”

The following pages show the structure of the attachment.

The file name of the attachment is structured as follows:

“SVV_Vorabinfo_Settlement notice_[BIC].PDF”

Vorabinformation aus dem SEPA-Clearer der Deutschen Bundesbank - EMZ-Betrieb
Advance information from the SEPA-Clearer of the Deutsche Bundesbank - RPS Operations
Nächster Buchungszeitpunkt / Next booking time: 08:30

Instrd Agt	MsgId	BulkId int.	SVC	PACS	Amount Bulk in EUR	
AAADEAAXXX	12345678901234567890123456789012345	12345678901234567	COR	003	111,11	
AAADEAAXXX	12345678901234567890123456789012345	12345678901234567	B2B	002	111,11	
AAADEAAXXX	12345678901234567890123456789012345	12345678901234567	SCC	004	111,11	
						333,33
DEBIT SUBACC	DEMARKSAAAADAEAAXXXEMZD10123456789	TOTAL AMOUNT EUR				333,33
BBBDEAAXXX	12345678901234567890123456789012345	12345678901234567	COR	002	222,22	
BBBDEAAXXX	12345678901234567890123456789012345	12345678901234567	B2B	004	222,22	
BBBDEAAXXX	12345678901234567890123456789012345	12345678901234567	SCC	003	222,22	
						666,66
CCCCDEAAXXX	12345678901234567890123456789012345	12345678901234567	COR	002	444,44	
CCCCDEAAXXX	12345678901234567890123456789012345	12345678901234567	B2B	004	444,44	
CCCCDEAAXXX	12345678901234567890123456789012345	12345678901234567	SCC	003	444,44	
						1.333,32
DEBIT SUBACC	DEMARKSAAAADAEAAXXXEMZD201234567890	TOTAL AMOUNT EUR				1.999,98
BIC SETTLEMENT AGENT	ZAHLSTELLE AAADEAAXXX	PM ACCOUNT	TOTAL AMOUNT EUR			2.333,31

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