

**Bilateral and Multilateral Processing of Card
Transactions in Europe
Clearing and Settlement
Interface Specification**

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1 Introduction

The Berlin Group standard is a standard for the European area for bilateral/multilateral processing of card transactions.

The Berlin Group standard considers for this processing an exchange of authorisation and clearing data between gateways, where the role of an acquirer gateway and the role of an issuer gateway are distinguished. The acquirer gateway receives clearing data from acquirers that process card based transactions originating from ATMs, POS terminals, MoTo or the internet. The acquirer gateway communicates with the issuer gateway sending and receiving batch files containing transaction messages like presentments, reversals and charge backs for defining the reconciliation amount to be settled between issuer and acquirer for a fixed clearing period.

An overview on this infrastructure is given in the following diagram.

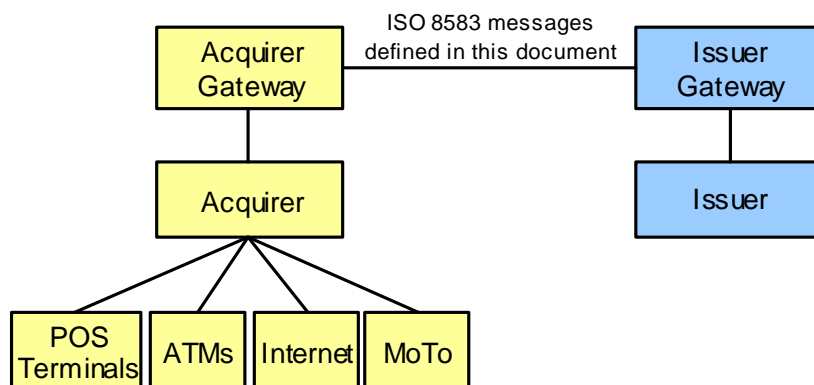


Figure 1: Infrastructure for bilateral and multilateral processing of card transactions

The focus of this document is on the specification of the transaction messages basing on the ISO 8583:1993 norm exchanged between acquirer gateways and issuer gateways. Here, the message flow and the file and message definitions are given.

The relevant currency for clearing and settlement as defined in this document always is euro. Nevertheless, the transaction can be processed locally in other currencies.

2 Message Types and Message Flows

This chapter defines, which message types and message flows must be supported by acquirer and issuer gateways for clearing and settlement.

2.1 Message Types

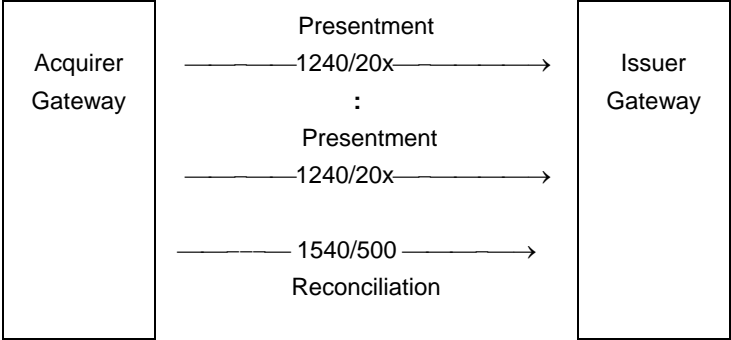
The following list contains the supported messages, their message type identifier (MTID) according to [ISO 8583:1993] and the party that is supposed to send the respective message type.

MTID	Function Code	Message Type	Sender
1240	200	First Presentment, Reversals	Acquirer
1240	205	Second Presentment, Reversals	Acquirer
1644	603	Retrieval Requests	Issuer
1442	450	Charge Backs (Full CB only)	Issuer
1740	700	Fee Collection	Acquirer
1742	700	Fee Collection	Issuer
1540	500	Reconciliation	Issuer and Acquirer
1550	500	Reconciliation Acknowledgment	Issuer and Acquirer
1644	652	Rejection of a Message	Acquirer and Issuer
1644	653	Rejection of a File	Acquirer and Issuer
1644	670	Header	Acquirer and Issuer
1644	671	Trailer	Acquirer and Issuer

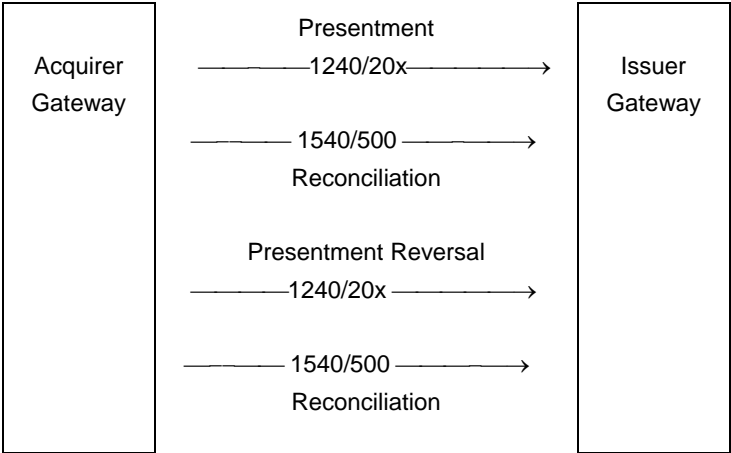
2.2 Clearing Message Flow

In the following, the flows of messages used for clearing is described in a schematic way. The structure of files to be used is not considered here.

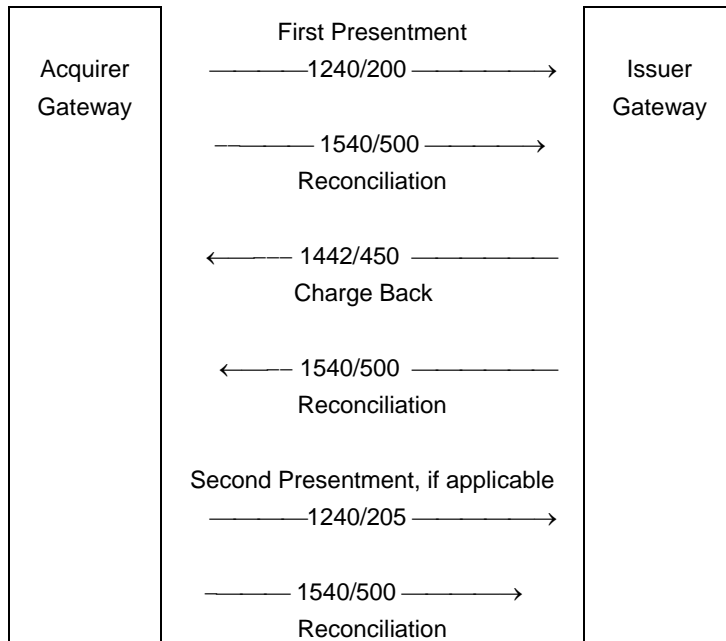
Presentment



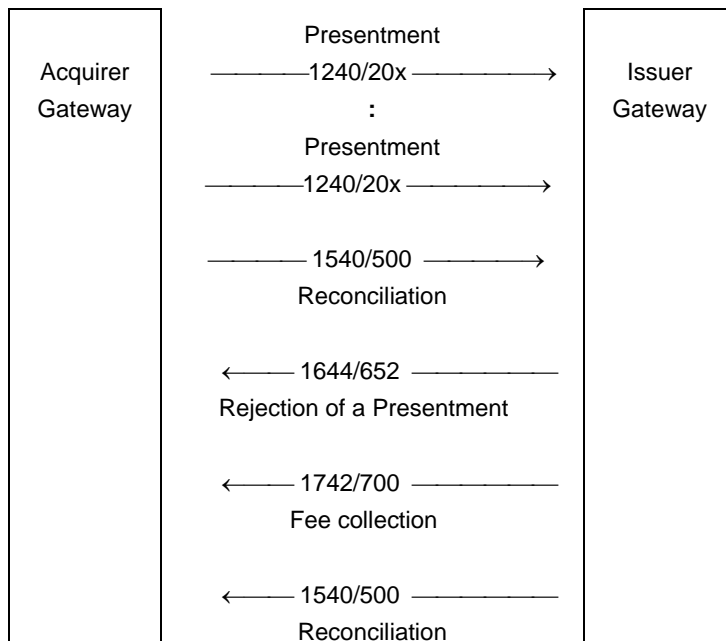
Reversed Presentment



Charge back of a Presentment

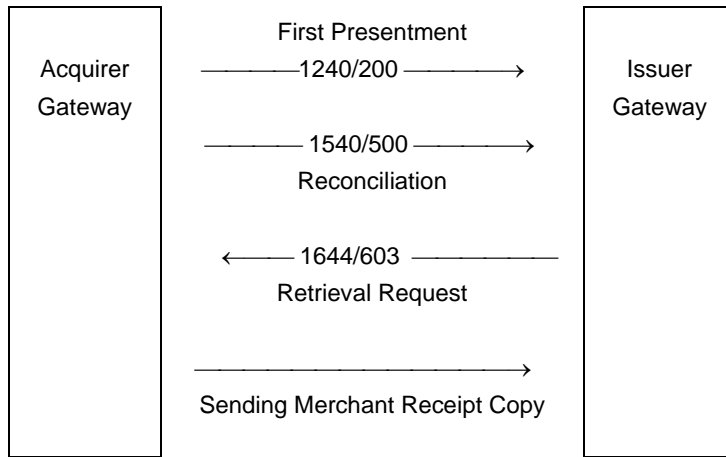


Rejection of a Presentment



The picture shows the flow of the rejection of a presentment. The same is valid for the rejection of a reversal. If a charge back is rejected, acquirer gateway and issuer gateway are swapped. The message type of the fee collection then is 1740.

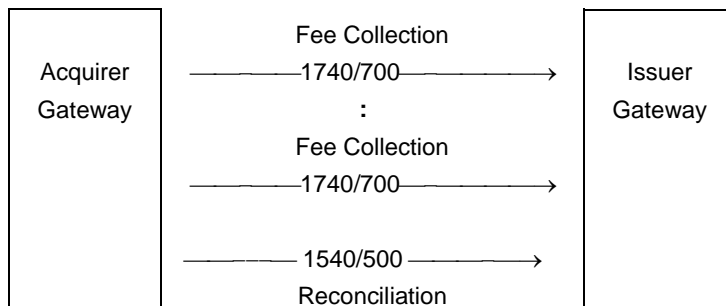
Retrieval of a Presentment



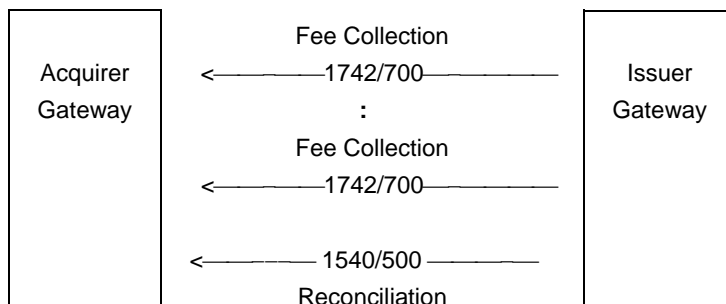
A charge back of the transaction might follow, for the flow then see above.

Fee Collection for Services

In the following, a fee collection by the acquirer gateway for services of the acquirer like balance inquiry is shown.



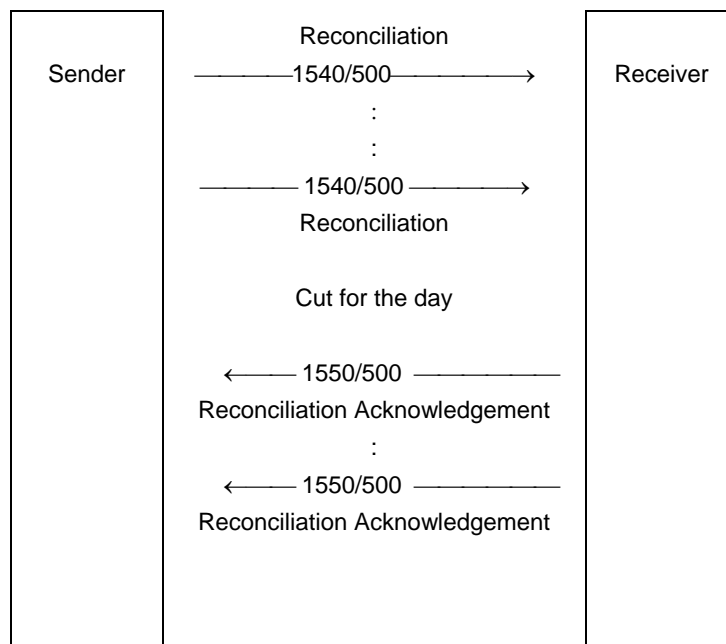
In the following, a fee collection by the issuer gateway for services of the issuer like card validity check is shown.



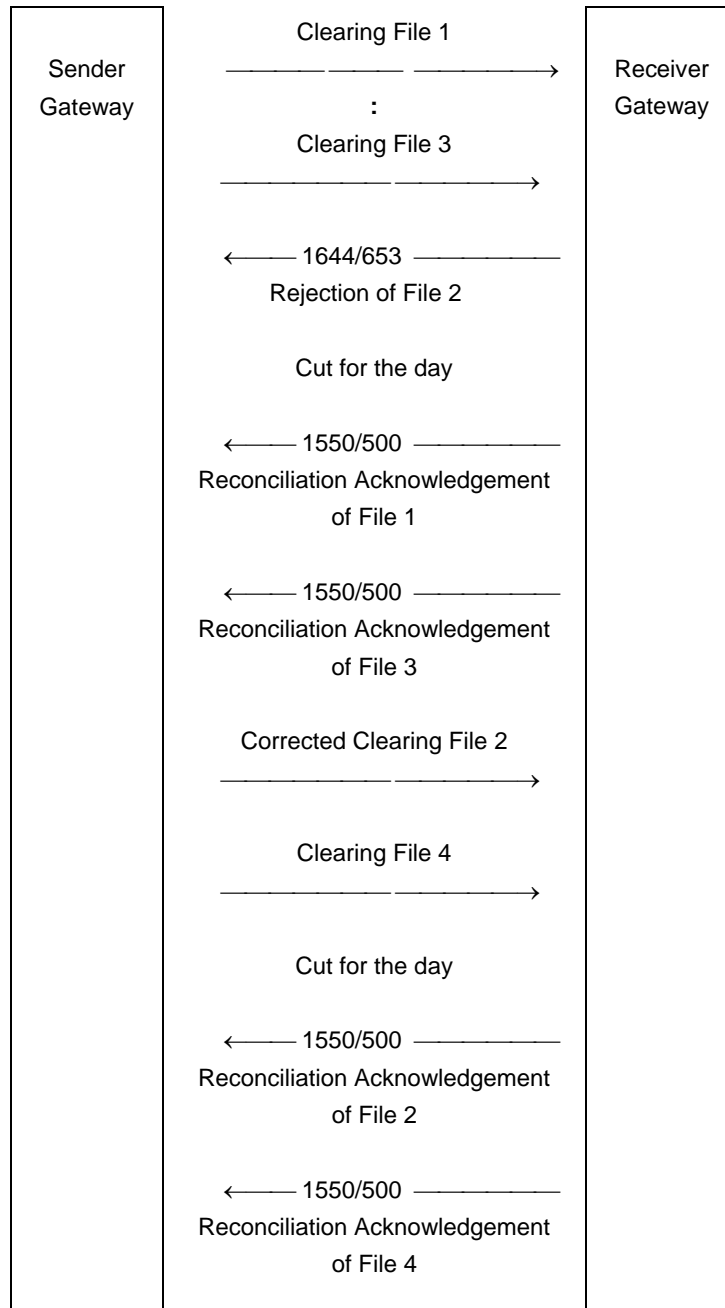
Fee collections for services might be rejected by the receiving gateways. The rejection of a fee collection for services is analogous to the rejection of a presentment.

Reconciliation Acknowledgement

The receiver of reconciliation messages used for presentments, reversals, charge backs, and fee collections, is using the defined cut off time for clearing. The receiver is collecting all reconciliation messages of the sender since the last cut off. This collection of reconciliation messages is defining the settlement for this period. The receiver sends for each reconciliation message a reconciliation acknowledgement to the sender as a notification of the settlement amount. This notification contains the file ID of the clearing file to be settled for the last clearing period.



Rejection of a File



The picture shows the flow of the rejection of a whole file. The file rejection should be performed before the reconciliation acknowledgement process is started by the receiver.

3 Clearing File Structure

In [BG CSR] an overview on message types and message flows to be used are described. In this chapter, an overview on the clearing files is given.

The structure of clearing files is the following:

- One ISO message header (first message)
- At least one ISO message presentment, charge back, reversal, rejection, fee collection, retrieval, or reconciliation acknowledgement
- One ISO message reconciliation (second last message) (is not present, if retrieval requests or reconciliation acknowledgements are the only transaction messages in the file)
- One ISO message trailer (last message)

Every ISO message in the file is preceded by a length field of 4 bytes, coding the length of the corresponding ISO message, excluding the length field itself. The length field is coded binary. No linefeed character is inserted after the ISO message.

One and only one reconciliation message shall be present in the file if at least one presentment, one reversal, one fee collection, or one charge back is present. The trailer message must directly follow the reconciliation message, if present.

A fee collection message for a message rejection must follow directly the corresponding rejection message.

All reconciliation acknowledgements of one clearing day are sent in an own file of the defined structure header/ reconciliation acknowledgements/ trailer.

Reconciliation acknowledgments must refer to all files received in the last clearing cycle except the rejected files.

No logical files are admitted, but more than one file per day is allowed.

The sequence number of the messages in the files starts with 1 for the header and is used consecutively for the messages in the file, not leaving out any number.

4 Clearing Message Definitions

In this chapter, the ISO 8583 Messages are defined in detail.

4.1 Notations for Formats

The attribute and format of message data elements are defined according to [ISO 8583:1993] using the following abbreviations:

Abbreviation	Description
n	numeric digits
b	binary representation of data
a	alphabetical characters
p	pad character, space
an	alphabetical and numeric characters
ans	alphabetical, numeric and special characters
anp	alphabetical, numeric and space (pad) characters
LL	length of variable field that follows, coded in two numeric digits
LLL	length of variable field that follows, coded in three numeric digits
VAR	variable length field
3	fixed length of three characters (n, a, an, ans) or bytes (b)
..17	variable length up to maximum 17 characters (n, a, an, ans, z) or bytes (b)
x + n8	x stands for the character "D" or "C", n8 is the format of an amount of 8 characters, D stands for Debit, C for Credit <u>Remark: The debiting and crediting is defined from the sender's point of view. For example for "D", the sender is debiting the recipient with the corresponding amount.</u>

All fixed length numeric data elements are assumed to be right justified with leading zeros. All fixed length binary coded data elements are assumed to be left justified with trailing binary zeroes. All other fixed length data elements are left justified with trailing blanks.

ASCII is used for coding numeric digits, alphabetical characters and special characters. Here only the common character set is used with the range of hex20 up to hex7E.

The rules for the presence of a data element in a message are defined using the following abbreviations:

Abbreviation	Description
x	mandatory: data element must be present in a message and is set by the originator of the message
c	conditional: data element must be present in a message, if certain conditions are satisfied, and is set by the originator of the message

Abbreviation	Description
o	optional: data element is present at the discretion of the originator of the message; if present, the receiver of the message will process the data element
=	mirrored: data element must be present in a response message and must be set to the same value as contained in the respective request message; if the data element to be mirrored is optional or conditional in the respective request message, and if the respective request message does not contain the data element, the data element will not be contained in the response message
-	data element is not present in a message

BMP is used as abbreviation for "bit map position".

BMP x is used as abbreviation for "data element at BMP x".

4.2 Data elements used by several message types

In the following, data elements which are shared by most of the clearing messages are described.

4.2.1 Overview

BMP	Name	Format	Attribute
	Primary Bit Map		b 8
1	Bit Map, Extended		b 8
32	Acquirer Institution Identification Code	LLVAR	n..11
33	Forwarding Institution Identification Code	LLVAR	n..11
48	Private Data	LLLVAR	
71	Message Number		n 8
100	Receiving Institution ID	LLVAR	n..11

4.2.2 Data Element Description

Primary Bit Map

The Primary Bit Map is a series of 64 bits (8 bytes) used to identify the presence (denoted by 1) or the absence (denoted by 0) of the first 64 data elements, defined for a message in ISO 8583.

BMP 1: Bit Map, Extended

The Bit Map, Extended is a series of 64 bits (8 bytes) used to identify the presence (denoted by 1) or the absence (denoted by 0) of the data elements 65 through 128, defined for a message in ISO 8583.

BMP 32: Acquiring Institution Identification Code

Code identifying the acquiring institution or its agent.

For the purposes of this specification the Acquiring Institution Identification Code is a numeric value of variable length structured as follows:

# of Digits	Description
3	Numeric country code according to ISO 3166 identifying the country of the acquirer gateway
2	2-digits number identifying the acquirer gateway, assigned to the acquirer gateway by the community of the gateways in the country identified by digits 1-3
1-6	Number of variable length (1-6 digits) identifying the acquirer, assigned to the acquirer by the acquirer gateway identified by digits 1-5

BMP 33: Forwarding Institution Identification Code

Code identifying the sending gateway.

For the purposes of this specification the Sending Institution Identification Code is a numeric value of variable length structured as follows:

# of Digits	Description
3	Numeric country code according to ISO 3166 identifying the country of the acquirer gateway
2	2-digits number identifying the sending gateway, assigned to the gateway by the community of the gateways in the country identified by digits 1-3
6	"000000", defining the sending institution as a gateway

This value shall be equal to the value used for the sending gateway in the file ID (cp. BMP 48 of the header message.)

BMP 48: Private Data

BMP 48 will contain one or more message specific subfields. The subfields are concatenated. Subfields are always coded following the next table, having a four digit tag and a 3 digit length coding:

Byte	Source, Value	Name	Attribute
1-4	nnnn	Tag number	n 4
5-7	lll	Data length	n 3
8 – (8+lll-1)	xx ---... xx	Data	ans lll

BMP 71: Message Number

This message number is the sequence number of the message in the clearing file.

BMP 100: Receiving Institution Identification Code

The processor ID of the receiver is defined as follows:

# of Digits	Description
3	Numeric country code according to ISO 3166 identifying the country of the receiving gateway
2	2-digits number identifying the receiving gateway, assigned to the gateway by the community of the gateways in the country identified by digits 1-3
6	“000000”, defining the receiving institution as a gateway

This value shall be equal to the value used for the receiving gateway in the file ID (cp. BMP 48 of the header message.)

4.3 Administrative messages

4.3.1 Overview

The following table gives an overview of the message structure of file header (MTID 1644) and file trailer (MTID 1644) messages which are used in files exchanged between acquirer gateway and issuer gateway.

BMP	1 6 4 4	Name	Format	Attribute
	x	Message Type Identifier		n 4
	x	Primary Bit Map		b 8
1	x	Secondary Bit Map		b 8
24	x	Function Code		n 3
33	x	Forwarding Institution Identification Code	LLVAR	n..11
48	x	Additional Data – Private	LLLVAR	ans..999
53	c	Security Related Control Information	LLVAR	b..48
71	x	Message Number		n 8
100	x	Receiving Institution ID	LLVAR	n..11
128	c	Message Authentication Code (MAC) Field		b 8

4.3.2 Data Element Description

BMP 24: Function Code

This field contains the function code:

Message Type	Function code
Header	670
Trailer	671

BMP 48 Private Data

The following subfields are contained and are filled in the following sequence:

Subfields	H.	Tr.	Name	Format	Attribute
P2105	x	x	File ID		n 36
P2122	X	-	Processing Mode		an 1
P2901	X	-	Specification Version		Ans 4

These definitions yield the following values for BMP 48:

Values for File Headers:

Byte	Source, Value	Name	Attribute
1-4	2105	Tag number	n 4
5-7	036	Data length	n 3
8 – 10	000 (bilateral processing)	File Type	n 3
11 – 16	YYMMDD (Clearing date)	File Reference Date	n 6
17 – 27	Processor ID (Sender)	Processor ID	n 11
28 – 38	Processor ID (Receiver)	Processor ID	n 11
39 – 43	nnnnn	File Sequence Number	n 5
44-47	2122	Tag Number	n 4
48-50	001	Data Length	n 3
51	"P" for Production or "T" for Test	Processing Mode	a 1
52-55	2901	Tag Number	N4
56-58	004	Data length	N3
59-62	03.0 right justified with leading zeroes	Version Number	Ans 4

Note that for example the attribute "n36" of subfield 2105 is related to the value field of this subfield and the corresponding length coding is contained in byte 5-7.

Values for File Trailers:

Byte	Source, Value	Name	Attribute
1-4	2105	Tag number	n 4
5-7	036	Data length	n 3
8 – 10	000 (bilateral processing)	File Type	n 3
11 - 16	YYMMDD (Clearing date)	File Reference Date	n 6
17 – 27	Processor ID Sender	Processor ID	n 11
28 - 38	Processor ID (Receiver)	Processor ID	n 11
39 – 43	nnnnn	File Sequence Number	n 5

The Processor ID of the sender is coded as in BMP 33 of all messages in the file, if contained, the values shall be equal.

The Processor ID of the receiver is coded as in BMP 100 of all messages in the file, if contained, the values shall be equal.

The file sequence number is used uniquely between each (sender, receiver) pair. It starts with the value 1, numbering up to 99999, then go back again to 1.

If clearing files are sent from a backup system, the Processor ID of the sender must be equal to the value used in the main system.

BMP 53: Security Related Control Information

This field is only contained if the message is a trailer message. It identifies security management information used in the current transaction. BMP 53 has the following structure:

position	length in bytes	contents	Value(s) (hexadecimal)	Remarks
1	1	PIN block format	FF	PIN blocks not used in clearing
2	1	Algorithm identifier	02 or 00	02: identifies MAC calculation for clearing files by using double length key and the algorithm according to ISO 9797-1, algorithm 3 with SHA-256 as hash-function; ,derivation of session keys according to chapter 3.2 of [BG SEC] 00 is used, if no MAC is present; 01 not used for clearing files; 03...FF: RFU
3	1	Key ID of the Master Key(s)	00 - FF	Binary coded; Key ID is used to identify and distinguish the communication pairs.
4	1	Key Version of Master Key(s)	3x or 4x or 5x	3x: test key clearing 4x: production key clearing 5x: disaster backup key clearing 0x – 2x, 6x – Fx: RFU x denotes the last digit of the year, in which the key is introduced.
5	16	RND _{MAC}		16 byte Binary Random number (cf. Section 3.2 of [BG SEC])

Subfields 3,4 and 5 are present if and only if a BMP128 with a MAC is present in the message.

The rules how to compute the fields 3,4,5 are defined in [BG SEC].

BMP 128: Message Authentication Code (MAC)

This field is only contained if the message is a trailer message and if the value of subfield 2 of BMP53 of the trailer message does not equal 00. It is used to validate the source and the

contents of the whole clearing file between the sender and receiver. The MAC is computed following the definitions in [BG SEC].

4.4 Transaction Messages

4.4.1 Overview

The following table gives an overview of the message structure of first presentment (MTID 1240), charge back (MTID1442), second presentment (MTID1240), reversal (MTID 1240), and retrieval (MTID 1644) messages exchanged between acquirer gateway and issuer gateway. The columns of the following table are ordered in this sequence. Second presentments, charge backs and retrieval messages always refer to a first presentment, reversals to a first or a second presentment. The following table indicates by the “=” sign, in which fields the values of the corresponding presentment must be used in these messages.

BMP	1	1	1	1	1	Name	Format	Attribute
	2	4	2	2	6			
	4	4	4	4	4			
	0	2	0	0	4			
	x	x	x	x	x	Message Type Identifier		n 4
	x	x	x	x	x	Primary Bit Map		b 8
1	x	x	x	x	x	Bit Map, extended		b 8
2	x	=	=	=	=	Primary Account Number (PAN)	LLVAR	n..19
3	x	=	=	=	=	Processing Code		n 6
4	x	=	x	=	=	Amount, Transaction (local currency)		n 12
5	x	=	x	=	=	Amount, Reconciliation (always euro)		n 12
6	c	=	x	=	-	Amount, Cardholder Billing (euro) =BMP 4 after conversion at the authorisation date, only for matching		n 12
9	c	=	=	=	=	Conversion Rate, reconciliation		n 8
10	c	=	=	=	-	Conversion Rate, Cardholder Billing		n 8
11	x	=	=	=	=	System Trace Audit Number (STAN)		n 6
12	x	=	=	=	=	Date and Time, Local Transaction	YYMMDDhhmmss	n 12
14	x	=	=	=	=	Date, Expiration	YYMM	n 4
22	x	=	=	=	=	POS Data Code		an 12
23	x	=	=	=	=	Card Sequence Number		n 3
24	x	x	x	=	x	Function Code		n 3
25	-	x	x	=	x	Message Reason Code		n 4
26	x	=	=	=	=	Card Acceptor Business Code		n 4
30	c	=	c	=	=	Amounts, Original (for partial reversals)		n 24
31	x	=	=	=	=	Acquirer Reference Data	LLVAR	an..99
32	x	=	=	=	=	Acquirer Institution Identification Code	LLVAR	n..11
33	x	x	=	=	x	Forwarding Institution Identification Code	LLVAR	n..11
37	x	=	=	=	=	Retrieval Reference Number		anp 12
38	c	=	=	=	=	Approval Code		anp 6
41	x	=	=	=	=	Card Acceptor Terminal Identification		ans 8
42	x	=	=	=	=	Card Acceptor Identification Code		ans 15
43	x	=	=	=	=	Card Acceptor Name/Location	LLVAR	ans..99
46	x	x	x	x	-	Amount fees	LLLVAR	ans..204
48	c	x	=	x	-	Additional Data – Private	LLLVAR	ans..999
49	x	=	=	=	=	Currency Code, Transaction		n 3
50	x	=	=	=	=	Currency Code, Reconciliation		n 3
51	c	=	=	=	=	Currency Code, Cardholder Billing		n 3
54	c	=	c	=	=	Amounts, Additional	LLLVAR	ans..120
55	c	-	c	-	-	Integrated Circuit Card (ICC) System Related Data	LLLVAR	b..255
71	x	x	x	x	x	Message Number		n 8
95	c	x	=	=	x	Card Issuer Reference Data	LLVAR	ans..99
100	x	x	=	=	x	Receiving Institution ID	LLVAR	n..11

Remark: The “=” sign in the column of the second presentment, BMP 95 is related to the corresponding entry in the charge back message.

4.4.2 Data Element Description

In this chapter data elements contained in transaction messages are described in more detail where necessary.

In general, the values for the presentment messages shall be taken from the corresponding authorisation request messages, if not specified differently. Especially the following fields are used by the gateways to match online authorisation requests with presentment messages:

- System Trace Audit Number (STAN) in BMP 11,
- Date and Time, Local Transaction in BMP 12,
- Acquiring Institution Identification Code in BMP 32.

Furthermore, the following fields of first presentment and the corresponding authorisation request shall be equal:

- BMP 2: PAN
- BMP 3: Processing Code, only first two digits
- BMP 4: Amount Transaction, with the following exceptions:
 - BMP30 is included in the clearing message or
 - BMP 54 with a subfield indicating Increased Amount is included in the clearing message

If BMP 30 is included in the clearing message, and if a partial reversal was processed successfully by the receiving gateway, then BMP 4 of the clearing message must be less or equal to the difference (BMP 30 – BMP 4) of the partial reversal of the corresponding authorisation transaction.

If a Completion Advice was submitted by the sending gateway in the online interface, then BMP 4 of the clearing message shall be equal to the BMP 4 of the Completion Advice.

If no partial reversal or completion advice was submitted by the sending gateway, then the value in BMP4 of the clearing message must be less or equal to the value of BMP30 of the clearing message.

If BMP 54 is contained in the clearing message, indicating an "Increased Amount", then the BMP 4 of the clearing message may be higher than the BMP 4 of the

corresponding Authorisation Request where the increased amount is added after the authorisation process.

Note 1 – the value of both fields, BMP4 and BMP54, shall be the same in both, authorisation and clearing, if a BMP54 with a subfield indicating "Increased Amount" is present in the authorisation message.

Note 2 – the value of the difference (BMP4 – BMP54) of clearing shall be the same as BMP4 in authorisation if no BMP 54 with subfield indication "Increased Amount" is present in the authorisation message.

Remark: Card scheme rules may define limits on the value that BMP 4 in clearing can exceed the BMP 4 in authorisation in the Increased Amount scenario.

- BMP 14: Date Expiration, if present in both messages
- BMP 22: POS Data Code, if present in both messages
- BMP 23: Card Sequence Number, if present in both messages
- BMP 30: Amounts, Original, if present in clearing message; must then equal BMP4 of the authorisation request. In the case of a Multistep Payment, this is the BMP 4 of the last in a series of Update Pre-Authorisation Responses.
- BMP 38: Approval Code from the Authorisation Response. In the case of a Multistep Payment, this is the Approval Code of the last in a series of Update Pre-Authorisation Responses.
- BMP 49: Currency Code Transaction
- BMP 54: Amounts, Additional:
 - Cashback: if the cashback amount was authorised by the issuer, this subfield must be equal to the value in authorisation. Note: If the cashback amount was not authorised, the cashback amount must be set to zero.
 - Gratuity (see above, conditions on field 4)
 - Surcharge: the surcharge amount in clearing must be less or equal to the surcharge amount in authorisation.

BMP 2: Primary Account Number (PAN)

The Primary Account Number (PAN) is a series of digits used to identify a customer account or relationship.

BMP 3: Processing Code

The following processing Codes are used:

Message Type	Processing Code
Purchase of goods and services (Payments)	00 00 00
Cash disbursement (ATM Cash Withdrawal and Cash Advance)	01 00 00
Purchase of goods and services (Payment) with Cashback	09 00 00
Quasi Cash	11 00 00
Refund	20 00 00
Original Credit	28 00 00

BMP 4: Transaction Amount

BMP 4 contains the transaction amount in the (local) transaction currency (indicated by the value of BMP 49).

If the transaction is a Payment with Cashback, BMP 4 contains the total amount including the purchase amount and the Cashback amount. The Cashback amount is contained in BMP 54.

If the transaction includes a Surcharge, BMP 4 contains the total amount including the transaction amount and the Surcharge amount. The Surcharge amount may be contained in BMP 54, depending on scheme rules.

If the transaction is a Payment with Increased Amount (i.e. gratuity), BMP 4 contains the total amount including the Payment amount and the additional amount (i.e. gratuity).

This field can deviate from the same field in the related authorisation response,

- if the amount was partially reversed in the authorisation interface, or
- if a completion advice was sent following the authorisation request, defining a new amount of the transaction. The transaction amount of the completion advice then coincides with the transaction amount of the clearing message.

The original amount of the authorisation response in both cases is contained in BMP 30.

Note: The transaction amount in the authorisation response may differ from the transaction amount within the authorisation request for Deferred and Multistep Payments.

BMP 5: Amount, Reconciliation

This field contains the amount of the transaction which is used for reconciliation. If the transaction was processed in euro (i.e. currency code in BMP49 equals "978"), the value in BMP5 shall be the same value as in BMP 4. If the transaction was not processed in euro, the conversion rate is contained in BMP 9.

BMP 6: Amount, Cardholder Billing

BMP 6 is present in Presentments, Charge backs, Reversals, if and only if the transaction currency is different from euro. This amount is for information of the issuer only.

The conversion rate used to compute Amount, Cardholder Billing from Amount, Transaction is the conversion rate of the transaction day. This conversion rate is then contained in BMP 10.

BMP 9: Conversion Rate, Reconciliation

BMP 9 is present in Presentment, Reversals, Charge Backs and Retrievals if and only if the transaction currency is different from euro. This field contains the conversion rate of the clearing day.

The Amount, Transaction (BMP 4) is multiplied by Conversion Rate, Reconciliation (BMP 9) to determine Amount, Reconciliation (BMP 5).

The leftmost digit of BMP 9 denotes the number of positions the decimal separator shall be moved from the right. Digits 2-8 of BMP 9 define the conversion rate without decimal separator. If digit 1 of BMP 9 has a value ≥ 7 , it is assumed that the digit to the left of the decimal separator has the value 0. If digit 1 of BMP 9 has a value ≥ 8 , it is assumed that the first (two) digit(s) to the right of the decimal separator has (have) the value 0.

BMP 10: Conversion Rate, Cardholder Billing

BMP 10 is present in Presentment, Reversals, Charge Backs if and only if the transaction currency is different from euro. This field contains the conversion rate of the authorisation day.

The Amount, Transaction (BMP 4) is multiplied by Conversion Rate, Cardholder Billing (BMP 10) to determine Amount, Cardholder Billing (BMP 6).

The leftmost digit of BMP 10 denotes the number of positions the decimal separator shall be moved from the right. Digits 2-8 of BMP 10 define the conversion rate without decimal separator. If digit 1 of BMP 10 has a value ≥ 7 , it is assumed that the digit to the left of the decimal separator has the value 0. If digit 1 of BMP 10 has a value ≥ 8 , it is assumed that the first (two) digit(s) to the right of the decimal separator has (have) the value 0.

BMP 11: System Trace Audit Number (STAN)

The STAN is a number assigned by the acquirer (identified by the value of BMP 32) to assist in identifying a transaction uniquely between the gateways. The STAN for the presentment is taken from the online authorisation request. If the transaction was processed offline, the acquirer must fill this field. It may then be filled with "000000".

BMP 12: Date and Time, Local Transaction

The local date and time at which the transaction takes place at the card acceptor location. For e-Payment or card not present transactions this is the card acceptor's date and time.

In the case of a Deferred or Multi Step Payment, this field contains the date and time of the completion advice or the partial reversal of the authorisation interface, if applicable. If no completion advice or partial reversal was used, the date and time of the last Pre-Authorisation message is used.

In the case of a "no show" transaction which was not pre-authorized, this field contains the date and time on which the cardholder failed to use the reserved service.

BMP 14: Date, Expiration

The year and month after which the card expires.

BMP 22: POS Data Code

A series of 12 codes intended to identify terminal capability, terminal environment and presentation security data.

	Name	Description	Format
1	Card data input capability	Indicates the primary means of getting the information on the card into the terminal. 1 – Manual, no terminal 2 – Magnetic stripe read 5 – ICC 6 – Key entered 7 – Contactless	an1
2	Cardholder authentication capability	Indicates the primary means of verifying the cardholder at this terminal. 0 – No electronic identification 1 – PIN U – Secure e-Payment	an 1
3	Card capture capability	Indicates whether or not the terminal has the ability to capture a card. 0 – None 1 – Can capture	an 1
4	Operating environment	Indicates if the terminal is attended by the card acceptor and its location. 0 – No terminal used (electronic commerce) 1 – On premises of card acceptor – attended 2 – On premises of card acceptor – unattended 3 – Off premises of card acceptor – attended 4 – Off premises of card acceptor – unattended 5 – On premises of cardholder – unattended	an 1
5	Cardholder present	Indicates if the cardholder is present at the point of service. 0 – Cardholder present 2 – Cardholder not present, mail order 3 – Cardholder not present, telephone order 4 – Cardholder not present, standing authorisation 9 – Cardholder not present, e-Payment	an 1
6	Card present	Indicates if the card is present at the point of service or not. 0 – Card not present 1 – Card present	an 1
7	Card data input mode	Indicates method used to input the information from the card to the terminal. 1 – Manual, no terminal) 2 – Magnetic stripe read 5 – ICC 6 – Key entered 7 – Contactless S – Magnetic stripe, fallback T – e-Payment U – MoTo	an1
8	Cardholder authentication method	Indicates the method for verifying the cardholder. 0 – Not authenticated 1 – PIN 5 – Manual Signature verification 6 – Other manual verification (e.g. driver's license) U – Secure e-Payment	an 1

	Name	Description	Format
9	Cardholder authentication entity	Indicates the entity verifying the cardholder identity. 0 – Not authenticated 1 – ICC (for Offline-PIN) 3 – Authorising agent (for Online-PIN or e-Payment) 4 – By merchant (for signature)	an 1
10	Card data output capability	Indicates the ability of the terminal to update the card. 1 – None (for non EMV terminals) 3 – ICC (for EMV terminals)	an 1
11	Terminal output capability	Indicates the ability of the terminal to print/display messages. 0 – Unknown 1 – None 2 – Printing 3 – Display 4 – Printing and display	an 1
12	PIN capture capability	Indicates the length of PIN which the terminal is capable of capturing. 0 – No PIN capture capability 4-C – Four thru twelve digits	an 1

BMP 23: Card Sequence Number

A number distinguishing between separate cards with the same primary account number.

BMP 24: Function Code

This field contains the function code:

Message Type	Function code
First Presentment	200
First Presentment Reversal	200
Second Presentment	205
Second Presentment Reversal	205
Charge Back	450
Retrieval Request	603

BMP 25: Reason codes

The reason codes are taken from ISO 8583:1993. Other reason codes than the codes listed in this paragraph may be used after a bilateral agreement between sender and receiver.

The reason codes for charge backs are taken from the following table:

Charge back reason	Reason code	ISO meaning
Service not rendered	4555	services not rendered
Transaction not authorised	4542	transaction not received
Duplicate processing	4512	duplicate processing of transaction
EMV liability shift	4998	private use
PIN liability shift	4999	private use
Late presentment	4536	late presentment
No cardholder authorisation	4537	No cardholder authorisation
Validity period expired	4594	Cancelled guaranteed reservation

Reason codes for Second Presentments:

- If the charge back reason was “Service not rendered”, but the receipt is present: 2012 (“original transaction was valid”) is used.
- If the charge back reason was “transaction not authorised” or “duplicate processing”, but the transaction was already reversed by the acquirer: 2011 (“credit previously issued”) is used.
- If the charge back reason was “EMV liability shift”, then 2998 is used as reason code in a second presentment.
- If the charge back reason was “PIN liability shift”, then 2999 is used as reason code in a second presentment.
- If the charge back reason was “cardholder not authorised”, but the origin of the transaction was proved: 2012 (“original transaction was valid”) is used as reason code in a second presentment.

Retrieval Request:

- As reason code the value 6001 is used (ISO value for “Cardholder Request or dispute”).

BMP 26: Card Acceptor Business Code

Code classifying the type of business being done by the card acceptor for this transaction according to ISO 18245:2003.

If the transaction is a cash disbursement, the following Card Acceptor Business Codes are to be used:

6011: Financial institution – Automated cash disbursements (ATM Cash Withdrawal)

6010: Financial institution – Manual cash disbursements (Cash Advance)

For POS transactions at petrol stations the following Card Acceptor Business Codes shall be used:

5541: Service stations

5542: Automated gasoline dispensers

BMP 30: Amounts, Original

The Amounts, Original data element consists of two data elements in fixed length format totaling 24 digits:

- a) Original Amount, Transaction n 12
- b) Original Amount, Reconciliation n 12

This data element is contained in the message if the online authorised amount was subsequently amended by a partial reversal or a completion advice or if the reconciliation amount is less or equal to the authorised transaction amount for other reasons. In this case the first 12 digits of BMP 30 of the presentment contain the original transaction amount contained in BMP 4 of the corresponding Authorisation Response. In the case of a Multi Step Payment, it is referred to the last one in a series of Update Pre-Authorisation Requests. The last 12 digits of BMP 30 are set to 0.

Remark: This field enables the acquirer to submit clearing transaction, where the issuer may not have received the partial reversal or completion advice due to technical problems in the online interface.

BMP 31: Acquirer Reference Data

This field is defined by the acquirer or acquirer gateway. The field must contain 23 digits. The last of these digits here must be a Luhn check digit over the first 22 digits.

The value of this field must be unique for a first presentment per processor defined in BMP48 of the header of the file.

BMP 37: Retrieval Reference Number

A reference supplied by the system retaining the original transaction information (usually the card acceptor) and used to assist in locating that information or a copy thereof.

BMP 38: Approval Code

This data field is contained in the message if and only if the transaction was authorised online. Then the content of BMP 38 of the corresponding most recent approved authorisation request response message is used.

In case of a referral, this field will contain the referral code provided by the issuer or its agent.

BMP 41: Card Acceptor Terminal Identification

Unique code, left adjusted with trailing blanks,

- either assigned by the card acceptor (field 42), identifying a terminal at the card acceptor's location
- or assigned by the acquirer (field 32), identifying a terminal in the acquirer network.

BMP 42: Card Acceptor Identification Code

Code identifying the card acceptor, left adjusted with trailing blanks, assigned by the acquirer (field 32). If the Card Acceptor Terminal Identification is assigned by the acquirer and identifies the terminal uniquely in the acquirer network, this field may be filled with blanks.

BMP 43: Card Acceptor Name/Location

The card acceptor name/location shall consist of six data elements totaling not more than 56 characters as follows:

Description	Format
Card Acceptor Name	ans..40
"\	
Street	
"\	
City	ans 10
"\	
Postal Code	ans 3
Region	a 3
Alpha Country Code according to ISO 3166	

For the purposes of this specification BMP 43 is in line with the definition in section 4.4.1 of ISO 8583:1993 without using all possibilities defined:

- While ISO 8583:1993 allows a variable length of up to 83 characters for the first three data elements including the separators "\", according to this specification the length shall not exceed 40 characters.

The length can be derived from the length of BMP 43.

- Until otherwise defined, according to this specification the data element "Street" is not used. Thus BMP 43 will be structured as follows:

Description	Format
Card Acceptor Name	ans..40
"\"	
City	
"\	ans 10
Postal Code	
Region	ans 3
Alpha Country Code according to ISO 3166	a 3

- A postal code with less than 10 characters is left adjusted with trailing blanks. It is allowed to fill the complete data element with blanks.
- If no region is used, the data element is filled with blanks.

BMP 46: Amount, Fees

A set of values for fees is defined as following with a fixed length of 34 characters

- Fee Type Code: n2
- Currency code, fee: n3
- Amount, fee: x +n8
- Conversion rate, fee: n8 (must be the same as conversion rate in BMP 9, if present; if not present, the transaction currency is euro and this conversion rate equals one)
- Amount, fee, Reconciliation: x + n8 (same as the Amount, fee in this subfield if fee is in euro)
- Currency code, fee, Reconciliation: n3 (978)

This set of values may be contained up to six times in the BMP 46.

The following Fee Type Codes are used:

Fee Type	Name
70	POS (fee for transaction amount without the cash back amount, if cash back was performed)
71	cash back (fee of the cash back amount)
72-79	POS for bilateral use
80	ATM
81-89	ATM for bilateral use
90	e-Payment
91	MoTo
92-98	e-Payment or MoTo for bilateral use

Values have to be defined bilaterally. If no special definitions are given, 70,71,80, 90 and 91 are used for the corresponding transaction processing.

Remark: The debiting and crediting is defined from the sender's point of view. For example for "D", the sender is debiting the recipient with the corresponding amount.

BMP 48: Additional Data

The general coding of this field follows the definitions made in Section 4.2.2 for BMP 48. In the specific message type of this section, the following subfields can be contained and are filled in the following sequence:

Subfields		Name	Format	Attribute
P2148	c	Currency Exponent		n4
P2002	x	Accepting Brand		An..8
P2022	c	Recurring Payment Indicator		n1
P2690	C	No Show Indicator		An1
P2025	c	Reversal Indicator		An7
P2175	o	Card Acceptor URL		ans255

Subfield p2148 Currency Exponents: present if and only if transaction amount was not euro

- Currency code n3
- Currency exponent n1

Subfield p2002 Accepting Brand: Always Present, containing a value from the following list:

- “EAPS”: Euro Alliance of Payment Schemes
- “VPAY”: V PAY
- “PLUS”: Plus
- “VISA”: Visa
- “MSI”: Maestro
- “MCC”: MasterCard
- “DMC”: Debit MasterCard
- “CIR”: Cirrus
- “JCB”: JCB
- Additional values may be defined as required.

Subfield p2022 Recurring Payment Indicator: present if and only if the transaction is a recurrent one: The value for a recurring payment is 1.

Subfield p2690 No Show Indicator: present only if the transaction is a No-Show transaction where the amount is due. The value for a no show transaction is 1.

Subfield p2025 Reversal Indicator: present if and only if transaction is a reversal, valid only for presentment reversals

- Message Reversal Indicator an 1: “R” for reversal
- Central Site Processing Date of Original Message n6 YYMMDD

Subfield p2175 Card Acceptor URL: ans 255, optional usage for e-commerce transactions.

BMP 49: Currency Code, Transaction

Code indicating the local currency of the acquirer or the currency used at the source location of the transaction. This currency is used in Amount, Transaction (BMP 4).

BMP 50: Currency Code Reconciliation

Code indicating the reconciliation currency. This code is always 978 for euro.

BMP 51: Currency Code, Cardholder Billing

BMP 51 is present if and only if the transaction currency is different from euro. In this case BMP 51 must have the value 978 for euro.

BMP 54: Amounts, Additional

BMP 54 conditionally contains amount information for

- Payments with cashback (Processing Code 09 00 00, see BMP 3),
- Transactions that are surcharged (i.e. charge to be paid by the cardholder),
- Payments with Increased Amount (i.e. gratuity)

This field shall be used,

- For cashback.
- if used in the corresponding authorisation request.
- for Payments with Increased Amounts even if not present in the corresponding authorisation request, where the gratuity is typically added on the receipt after the authorisation.

Remark: The entries in this field are only given in the transaction currency. If the transaction currency is not euro, the additional amounts can be converted to euro using the cardholder billing (BMP51) or reconciliation conversion rate (BMP50).

Cashback Amount Information

For a payment with cashback BMP 54 contains one set of values to indicate the cashback with a length of 20 characters as shown in the following table:

Name	Description	Value	Attribute
Account Type	As defined in positions 3 and 4 or 5 and 6 of BMP 3	00	n 2
Amount Type	Amount Cash	40	n 2
Currency Code	Currency code of the transaction currency	as in BMP 49	n 3
Debit-/Credit-Indicator	Debit-Indicator	"D"	a 1
Amount, Cashback	Cash back amount in transaction currency		n 12

Surcharge Amount Information:

For a transaction with Surcharge BMP 54 may contain one set of values to indicate the surcharge with a length of 20 characters as shown in the following table:

Name	Description	Value	Attribute
Account Type	As defined in positions 3 and 4 or 5 and 6 of BMP 3	00	n 2
Amount Type	Amount Type "Surcharge"	42	n 2
Currency Code	Currency code of the transaction currency	as in BMP 49	n 3
Debit-/Credit-Indicator	Debit-Indicator	"D"	a 1
Amount, Surcharge	Surcharge amount in transaction currency		n 12

Increased Amount:

For a Payment with Increased Amount (i.e. gratuity) contains one set of values to indicate the gratuity with a length of 20 characters as shown in the following table:

Name	Description	Value	Attribute
Account Type	As defined in positions 3 and 4 or 5 and 6 of BMP 3	00	n 2
Amount Type	Amount Type "Gratuity"	60	n 2
Currency Code	Currency code of the transaction currency	as in BMP 49	n 3
Debit-/Credit-Indicator	Debit-Indicator	"D"	a 1
Amount, Additional	Additional amount in transaction currency		n 12

BMP 55: ICC System Related Data

BMP 55 must be present in the Presentment, if the transaction is a chip based transaction. The BMP 55 is not present in Presentment Reversals, Refunds and Original Credits. For chip based transactions the following data objects may be carried in BMP 55:

Data Object	Tag	Length (in Byte)	Format	Usage
AIP	'82'	'02'	b 2	M
DF-Name	'84'	up to '10'	b..16	O
TVR	'95'	'05'	b 5	M
Transaction Date	'9A'	'03'	n 6 YYMMDD	M
Transaction Type	'9C'	'01'	n 2	M
Transaction Currency Code	'5F2A'	'02'	n 3	M
Amount, Authorised	'9F02'	'06'	n 12	M
Amount, Other	'9F03'	'06'	n 12	C ²⁾
Terminal Application Version Number	'9F09'	'02'	b 2	O
Issuer Application Data	'9F10'	up to '20'	b..32	C ¹⁾
Terminal Country Code	'9F1A'	'02'	n 3	M
IFD Serial Number	'9F1E'	'08'	an 8	O
Application Cryptogram (AC)	'9F26'	'08'	b 8	M

Data Object	Tag	Length (in Byte)	Format	Usage
Cryptogram Information Data (CID)	'9F27'	'01'	b 1	M
Terminal Capabilities	'9F33'	'03'	b 3	O
CVM Results	'9F34'	'03'	b 3	O
Terminal Type	'9F35'	'01'	n 2	O
ATC	'9F36'	'02'	b 2	M
Unpredictable Number	'9F37'	'04'	b 4	M
Transaction Sequence Counter	'9F41'	'02' - '04'	n..8	O

- 1) Mandatory, when provided by the ICC
- 2) Mandatory for cashback transactions, when provided by the terminal

BMP 95: Card Issuer Reference Data

Usage in First Presentments:

Present, if and only if present in the corresponding Authorisation Response.

Usage in Charge Backs, Retrieval Request or Second Presentments:

This reference data is originated by the issuer in retrieval requests or charge backs. The format is defined by the issuer. This code then must be used by the acquirer while presenting a receipt as indicated by the retrieval request or in second presentments in case of a charge back.

4.5 Reconciliation Messages

4.5.1 Overview

The following table gives an overview on the formats of reconciliation (MTID 1540) and reconciliation acknowledgement (MTID 1550) messages.

BMP	1 5 4 0	1 5 5 0	Name	Format	Attribute
	x	x	Message Type Identifier		n 4
	x	x	Primary Bit Map		b 8
1	x	x	Bit map extended		b 8
15	-	x	Settlement Date	YYMMDD	n 6
24	x	x	Function code		n 3
33	x	x	Forwarding Institution	LLVAR	n..11
48	x	=	Additional Data	LLLVAR	ans..999
50	x	=	Currency code reconciliation		n 3
71	x	x	Message Number		n 8
74	x	=	Credits, number		n 10
76	x	=	Debits, number		n 10
86	x	=	Credits, amount		n 16
88	x	=	Debits, amount		n 16
97	x	=	Amount, net reconciliation		x + n16
100	x	x	Receiving Institution Id. Code	LLVAR	n..11
109	x	=	Credits fee, amount	LLVAR	ans..84
110	x	=	Debits fee, amount	LLVAR	ans..84

4.5.2 Data Element Description

BMP 15: Settlement Date

This data element contains the actual settlement date of the receiving gateway.

BMP 24: Function Code

The following function codes are used:

Reconciliation : 500

Reconciliation Acknowledgement: 500

BMP 48 Additional Data

This field only contains one subfield:

Subfields	Name	Format	Attribute
P2105	File ID		N36

The value of the field is defined as follows:

Byte	Value
1-4	2105
5-7	036
8 – 10	000 (bilateral processing)
11 - 16	YYMMDD (Clearing date)
17 – 27	Processor ID (Sender)
28 - 38	Processor ID (Receiver)
39 - 43	nnnnn (File Sequence Number)

If the message is a reconciliation message, the file-ID must coincide with the file-ID of BMP48 of the header message in this file.

If the message is a reconciliation acknowledgement message, the file-ID must coincide with the file ID of BMP48 of the header of the accepted file.

BMP 50 Currency Code, Reconciliation

This field always contains “978” for euro.

BMP 74 : Credits, number

Number of refunds, reversals of presentments, fee collections for card validity checks and fee collections corresponding to a rejection of a refund or a reversal of a presentment contained in the file.

“Credits” here stands for “crediting” from the point of view of the sender.

Note that reversal of refunds are not admitted following the rules.

BMP 76 : Debits, number

Number of presentments (without refunds), charge backs, fee collections for balance inquiries and fee collections corresponding to a rejection of a presentment (without refunds) or charge back contained in the file.

“Debits” here stands for “debiting” from the point of view of the sender.

BMP 86 : Credits, amount

This field contains the sum amount of all messages referred to in BMP 74. The sum is built over the reconciliation amounts of the transactions.

BMP 88 : Debits, amount

This field contains the sum amount of all messages referred to in BMP 76. The sum is built over the reconciliation amounts of the transactions.

BMP 97 : Amount net reconciliation

The net value of all values in BMP 86, 88, 109 and 110. This is computed as the sum of BMP 88 and BMP 110 minus the sum of BMP 86 and BMP 109. If this value is greater than or equal to zero, the sign “D” is put into this field. If not, the sign “C” is put into this field.

BMP 109 : Credits, fee amount

The sum amount of amounts, fees (BMP46) in all transactions where the amount fee indicated a credit “C”.

BMP 110 : Debits, fee amount

The sum amount of amounts, fees (BMP46) in all transactions where the amount fee indicated a debit “D”.

4.6 Error Messages

4.6.1 Overview

The following table gives an overview on rejection messages of messages and files.

BMP	1 6 4 4	Name	Format	Attribute
	x	Message Type Identifier		n 4
	x	Primary Bit Map		b 8
1	x	Bit Map, extended		b 8
24	x	Function Code		n 3
33	x	Forwarding Institution Identification Code		n..11
48	x	Additional Data – Private	LLVAR	ans..999
71	x	Message Number		n 8
100	x	Receiving Institution ID code (gateway)	LLVAR	n..11

4.6.2 Data Element Description

BMP 24: Function Code

This field contains the function code:

Message Type	Function code
Message Rejection	652
File Rejection	653

BMP 48 Additional Data

The following sub elements are contained:

Subfields	File Rej.	Message Rej.	Name	Format	Attribute
P2005	x	x	Message Error Indicator		ANS...14 0
P2138	o	c	Source Message Number ID (Format N8); It contains the sequence number of		N8

			the rejected message from BMP 71 of the original message. Must be present, if it is a message rejection and if the message is parseable		
P2280	x	x	Source File ID The value is taken from the Header of the rejected file or of the file which contains the rejected message.		N36

The subelement P2005 (Message Error Indicator) contains the following mandatory subfields for every error indicated. The sub element P2005 may contain 1 up to 10 indicated errors, repeating the 4 following subfields for every error. Thus the length of the data sub element is $n*14$, $1 \leq n \leq 10$. The structure of the subfields is as follows:

Subfield	Value	Formats
Data Element ID	Field Identification for the error for message rejection The data element in BMP nnn is coded by D0nnn. A private data sub element with tag 2nnn (typically contained in BMP48 of the message received) is coded by P2nnn. Spaces if not related to any specific field.	AN 5
Error Severity code	00	N 2
Error Message Code	Generic errors, where mr denotes usage in a message rejection, fr denotes usage in a file rejection: <ul style="list-style-type: none"> • 0000 - Unparsable message (mr) • 0001 - Out-of-sequence error (fr) • 0002 - Field format error (followed by field indicator) 	AN 4

	<p>(mr)</p> <ul style="list-style-type: none">• 0003 - Mandatory field absent (followed by field indicator) (mr)• 0004 - Conditional field absent (followed by field indicator) (mr)• 0005 - Duplicate field presence (followed by field indicator) (mr)• 0006- 0009 - RFU• 0010 - File header must be first message in a physical transmission (fr)• 0011- Message reversal indicator not allowed in file trailer (fr)• 0012- File trailer message must be the last message in a physical transmission (fr)• 0013 - File trailer missing (fr)• 0014 - File trailer rejected because all details in file rejected (fr)• 0015 - No details present in the logical file, only header and trailer (fr)• 0016 – messages with unknown function code/message type in the clearing file (fr)• 0017 – unparseable message in clearing file (fr)• 0018-0019 - RFU• 0020 - File ID in header and trailer of file are not equal (fr)• 0021 - Sender ID in header and trailer of file are not equal (fr)• 0022 - Receiver ID in header and trailer of one file are not equal (fr)• 0023 - Amount of the reconciliation is not matching	
--	---	--

	<p>the amounts of the messages of the file (fr)</p> <ul style="list-style-type: none"> • 0024 - Duplicate file submission, already processed (fr) • 0025 - Wrong routing of file (fr) • 0026 - Conversion Rate is not correct (mr) • 0027 - Corresponding transaction message of a retrieval was not processed signature based at an attended POS (mr) • 0028 - Too many messages in the file are rejected (fr) • 0029 - Not all transaction amounts are correctly coded (fr) • 0030 - Header, trailer or reconciliation messages are rejected (fr) • 0031 - Allowed maximum period expired (mr) • 0032 – fee wrong (mr) • 0033 – life cycle error (mr) • 0034 – wrong BIN in message (mr) • 0035 – approval code missing (mr) • 0036 – card expired at local date and time (mr) • 0037 – no matching transaction for a service fee collection (mr) • 0038 – fee collection submitted too late (mr) • 0039 – presentment of a multi-step payment without finalizing the pre-authorisation by partial reversal or completion advice (mr) <p>0040 – 9999 RFU</p>	
Subfield ID	Subfield Identification for the error message rejection, giving the number of the subfield in the data element D0nnn or in the private data sub element P2nnn, denoted	N 3

	by the first subfield.	
	Filled with zeros, if not related to any specific subfield	

The value of this field is thus as follows, if subfield 2138 is present, and if one error is indicated:

Byte	Value
1-4	2005
5-7	014
8 – 12	Data element ID
13 – 14	Error Severity Code
15 – 18	Error Message Code
19 – 21	Subfield ID
22 – 25	2138
26 – 28	008
29 – 36	Source Message Number ID
37 – 40	2280
41 – 43	036
44 – 46	000 (bilateral processing)
47 – 52	YYMMDD (Clearing date) (Source File)
53 – 63	Processor ID (Sender) (Source File)
64 – 74	Processor ID (Receiver) (Source File)
75 – 79	nnnnn (File Sequence Number) (Source File)

4.7 Fee Collection Messages

4.7.1 Overview

The following table gives an overview on fee collection generated by acquirer gateways (MTID 1740) and issuer gateways (MTID 1742).

BMP	11 77 44 02	Name	Format	Attribute
	x x	Message Type Identifier		n 4
	x x	Primary Bit Map		b 8
1	x x	Bit Map, extended		b 8
3	x x	Processing Code		n 6
5	x x	Amount, Reconciliation (always euro)		n 12
12	x x	Date and Time	YYMMDDhhmmss	n 12
24	x x	Function Code		n 3
33	x x	Forwarding Institution Identification Code	LLVAR	n..11
46	x x	Amounts, fees	LLLVAR	ans..204
48	x x	Additional Data – Private	LLLVAR	ans..999
71	x x	Message Number		n 8
100	x x	Receiving Institution Identification Code	LLVAR	n..11

4.7.2 Data Element Description

BMP 3: Processing Code

The following processing Codes are used:

Message Type	Processing Code
Amount is debited from the receiving gateway Is used for rejections of <ul style="list-style-type: none"> • Presentments • Charge backs • Card validity check fee collection 	19 00 00
Amount is credited to the receiving gateway Is used for rejections of <ul style="list-style-type: none"> • Reversals • Refunds • Balance Inquiry fee collection 	29 00 00
Amount is debited from the receiving gateway Fee Collection for Services like <ul style="list-style-type: none"> • Balance inquiry 	90 00 00
Amount is credited to the receiving gateway Fee Collection for Services like <ul style="list-style-type: none"> • Card validity check 	91 00 00

BMP 5: Amount, Reconciliation

Fee Collection following rejected messages:

This field contains the reconciliation amount in BMP 5 of the rejected transaction.

Fee Collection for services:

This field contains the amount of the fee given in BMP46 in euro.

BMP 12: Date and Time

Here, the date and time of the generation of the fee collection message is put in.

BMP 24: Function Code

This field contains the function code:

Message type	Function Code
1740	700
1742	700

BMP 46: Amount, Fees

Fee Collection following rejected messages:

This field contains the sub fields as defined in Section 4.4.2. The fee type here is "16" with ISO meaning special handling fee. The notification "D" or "C" has the same value as in the rejected message.

The amount here is the amount of the fee of the corresponding rejected message.

Fee Collection for services:

The same format as in BMP46 in Section 4.4.2 is used. For services one generic fee type "99" is used.

BMP 48 Additional Data

Fee collections for rejected messages:

This field contains the following subfields

- P2138: Source Message Number ID

This field contains the sequence number of the rejected message from BMP 71 of the original message. Only present if parsable.

- P2280: Source File ID

The value is taken from the Header of the file which contains the rejected message.

The value of this field is thus as follows if the rejected message is parsable:

Byte	Value
1 – 4	2138
5 – 7	008
8 – 15	Source Message Number ID
16 – 19	2280
20 – 22	036
23 – 25	000 (bilateral processing)
26 – 31	YYMMDD (Clearing date) (Source File)
32 – 42	Processor ID (Sender) (Source File)
43 – 54	Processor ID (Receiver) (Source File)
55 – 59	nnnnn (File Sequence Number) (Source File)

Fee collection for services:

The field consist of one subfield p2902, containing the following data of the related transaction:

- Transaction Type (First two digits of Processing Code)
- STAN
- Date and Time Local Transaction
- Acquiring Institution Identification Code

The value of this field is thus as follows:

Byte	Value
1 – 4	2902
5 – 7	026 up to 031
8 – 9	31 for Balance Inquiry, 36 for Card Validity Check
10 – 15	nnnnnn (STAN)
16 – 27	YYMMDDhhmmss
28 – ..38	Acquiring Institution ID (6 up to 11 digits)

5 References

[BG SEC] Bilateral and Multilateral Processing of Card Transactions in Europe, Security Features, Version 1.12, 25/02/2008