



**Deutsche Bundesbank
Specifications
for electronic access
in cash payment operations**

CashEDI specifications

Version: 2.2

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Versions

Ver-	Date	Author	Status	Description of the modification
1.0	February 2008	Harry Grauer	Final	First issue
1.1	May 2009	Harry Grauer		a) Expanded range of functions: <ul style="list-style-type: none"> • Confirmation of receipt • Finality report (final receipt) b) Accommodation of updated GS1 numeric identification system designations c) Update of test centre data
1.2	October 2009	Petra Birkle	Final	
2.0	October 2011	Kerstin Hammer		Comprehensive modification owing to an expansion of the range of functions
2.1	September 2012	Petra Birkle	Final	Change of the internet links after revision of the homepage
2.2	April 2013	Kerstin Hammer	Final	Update of the internet links
2.2	March 2019	Lisa Römer	Final	Update of the internet links

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About this document

1 Objectives

1.1 Contents

This document provides an overview of the Deutsche Bundesbank's CashEDI procedure for cash payments.

1.2 Sections

Section I – General information

This section provides a brief overview of the procedure and the GS1 standards used.

Section II – The Deutsche Bundesbank's range of services

This section outlines the technical details and the interfaces that exist between a participant and the Deutsche Bundesbank.

Section III – Application for participation

This section covers the application process that must be completed in order to participate in the CashEDI procedure.

Section IV – Authorisation tests in the file transfer procedure

The technical authorisation process must be completed successfully before participating in the CashEDI procedure. This section describes the pursued objectives and the test procedure.

Section V – Troubleshooting

This section contains information about the troubleshooting measures employed, and the backup procedures that are used.

2 Information on use

2.1 Electronic version

The Deutsche Bundesbank has an electronic version of this document on its website.

2.2 Version numbers

The document's version number is shown in the page footer. It is a two-digit number separated by a decimal point. Only complete versions are made available. To reflect each amendment, the number after the decimal point is increased (eg from version 1.0 to 1.1). For major changes, the number before the decimal point is increased by 1 and the number after it is reset to 0 (eg from version 1.2 to 2.0).

2.3 Identifying changes

Changes are shown in red and marked by red change bars in the left-hand margin. New sections are not shown in red but are marked by red change bars. Changes made as a matter of course (eg the version numbers in the page footer) are not marked.

Any markers from previous versions are removed. Changes contained in the new version are listed in a dedicated section. This section does not generally list any rephrasing or rewording which has no bearing on the content.

2.4 Explanation of symbols

Hyperlinks are shown in blue. Glossary entries are shown in italics.

3 Modifications

The changes in version 2.1 compared with version 2.0 are solely related to internet links. Therefore the changes have not been marked.

I General information

1 Range of CashEDI services

1.1 Components currently on offer

The Deutsche Bundesbank's CashEDI procedure is subdivided into the following components according to technical and organisational aspects

- **Electronic submission of notifications of inpayment**
 - Confirmation of receipt
 - Arrival notice (customer copy)
 - Final receipt
 - Additional final receipt (customer copy)
- **Electronic cash orders**
 - Notification of delivery
 - Additional notification of delivery (customer copy)
 - Confirmation of delivery
 - Additional confirmation of delivery (customer copy)
- **Returns**
- **Service message**

1.2 Electronic submission of notifications of inpayment

The Deutsche Bundesbank provides the means to electronically confirm inpayments using the "Electronic submission of notifications of inpayment" component. The customer is informed of the receipt of the cash by the Bundesbank by means of a confirmation of receipt and, where necessary, by an arrival notice. The outcome of the cash processing is communicated by means of a final receipt and, where necessary, an additional final receipt.

1.3 Electronic cash orders

The Deutsche Bundesbank provides the means to electronically transfer cash orders using the "Electronic cash order" component. Information about the provision of the ordered cash (notification of delivery and possibly also an additional notification of delivery) and the transfer of funds at the counter (confirmation of delivery and possibly also an additional confirmation of delivery) is transmitted on the basis of these data.

1.4 Returns

The return function enables the customer to retract messages which have already been transmitted (provided that this is still technically possible). The implementation of this component must be performed by the customer in his / her own system.

1.5 Service message

The service message informs the party transmitting the data of any technical warning and error messages and whether the return was successful or not.

2 Electronic access

2.1 CashEDI standards

The CashEDI procedure standards used are based on the GS1 standards, which are global standards for data exchange and trade in goods. The GS1 standards entail a system of standardised, non-overlapping numbers for the global identification of places, products/services and packaging units, standardised barcodes and RFID technology for the purpose of simple identification and standardised message types for the electronic exchange of data. (see Section I (3)).

The Deutsche Bundesbank, in cooperation with the GS1 Germany, developed user recommendations based on the GS1 standards for the message types, which are to be used as reference documents for the data exchange, the latest versions of which are published on the Bundesbank's website at

<https://www.bundesbank.de/en/tasks/cash-management/cashedi/downloads>

To carry out the CashEDI procedure, the Deutsche Bundesbank offers participants two general communication standards (EANCOM® und GS1 XML). Furthermore, in the GS1 XML communication standard, two different versions (GS1 XML 2.1 and GS1 XML 2.5) are supported.

2.2 Basic services

The Deutsche Bundesbank's ExtraNet is used to access the CashEDI procedure. The message exchange takes place via the internet. As the internet is a public communications network, the Bundesbank has no influence over its availability.

The Deutsche Bundesbank's CashEDI procedure for cash payments is available in two technically different variants

- as a file transfer procedure, offering the complete range of CashEDI functions, and
- as WebEDI, a web-based online data entry portal offering basic CashEDI functions.

2.3 Acknowledgement procedure

In the file transfer procedure, the technical receipt of the data-transmitting party's ExtraNet confirms receipt of the file in the Bundesbank's processing system. The successful incoming message check in the Bundesbank's Cash Management System (BMS) is not explicitly confirmed. In the event of a negative incoming message check, the data-transmitting party is informed of any identified errors by means of a service message.

The status is updated in the WebEDI system.

2.4 Security procedures

To participate in the CashEDI procedure, the user must make use of the Deutsche Bundesbank's ExtraNet. Access takes place via internet browser. Up-to-date and reliable encryption technology (https and SSL) is used for transmitting data during the file transfer process, thereby ensuring the confidentiality and integrity of data. A server certificate also attests that the server is actually a Deutsche Bundesbank server.

Individual users must log in with their user ID and password before they can use ExtraNet services to ensure that no unauthorised person has access to ExtraNet.

Further information regarding security can be found in the ExtraNet documentation <https://www.bundesbank.de/en/service/extranet/documentation/extranet-documentation-618992>.

2.5 Cost distribution

The Deutsche Bundesbank does not reimburse any participant's costs. This applies especially to costs the participant incurs while using the CashEDI procedure for their own or an external system, for running costs (costs for using and operating an internet connection), as well as for possible licensing fees from each participant for using the GS1 numeric systems.

3 Standards

3.1 GS1 numeric system

3.1.1 GLN (Global location number)

The GLN serves as a globally unique identifier of a company, subsidiary, branch, or organisationally relevant local unit. The number is used in all applications as an access key to the core data stored under this number in the databases. In the CashEDI procedure, the cash handlers/locations are identified by the GLN (eg credit institution branches, individual ATMs, retailer branches).

3.1.2 GTIN (Global Trade Item Number)

The GTIN is a globally unique, non-overlapping identification number that indicates the specific attributes of a single article/trading unit (colour, size, packaging unit, etc). This makes GTIN one of the most important cornerstones of modern-day material management systems.

The GTINs for banknote and coin packaging units (eg banknote packets and bundles) are determined by the European Central Bank and the Deutsche Bundesbank and published in the CashEDI numeric system. The GTIN is not (mandatorily) printed on each packaging unit, but is used to identify the products (denomination, packaging, etc) during electronic data transfer. Furthermore, the cash handler's services are identified by the GTIN.

3.1.3 SSCC (Serial Shipping Container Code)

The SSCC enables shipping units to be clearly identified on their way from the sender to the recipient. The SSCC can be used by all those involved in the transport chain for passing on and tracking the shipping unit. This creates the basis for a coherent rationalisation and optimisation of the transport and communication processes in the transport chain.

In CashEDI, the SSCC is used to identify cash containers. The SSCC is also used for identifying notifications of inpayment (master SSCC). For electronic cash orders, it is recommended that an SSCC be used for identifying the data record. If the data record of the cash order carries a different unique identification number, the notification of delivery is identified using a (master) SSCC.

3.1.4 GS1-128

The GS1-128 bar code standard is a proprietary system of bar code symbols, which offers the highest level of interpretation accuracy during automatic data entry recording when used in conjunction with the GS1 data identifier concept.

The SSCC – for identifying cash containers or inpayment and outpayment processes – is displayed using the GS1-128 bar code.

3.2 GS1 communication standards

3.2.1 File type

In the CashEDI procedure, message files are exchanged between participants and the Deutsche Bundesbank. The EANCOM® / XML (version 2.1 and version 2.5) communication standards contained in the GS1 standards are to be used.

The payment information is saved in the Deutsche Bundesbank's BMS customer master data. No changes can be made to this payment information/master data using the EANCOM / XML files.

Message files are used to transfer messages

-
- from the participants to the Deutsche Bundesbank (notification of inpayment, cash order) and
 - from the Deutsche Bundesbank to the participants (confirmation of receipt, arrival notice, final receipt, notification of delivery, confirmation of delivery, service message)

3.2.2 EANCOM® 2002

The fourth EANCOM® release has been available from GS1 Germany in two languages since July 2004. EANCOM® 2002 is based on the globally accepted UN/EDIFACT communications standard.

For the message exchange in the CashEDI procedure, the latest version of the EDI application recommendations, which are available at <https://www.bundesbank.de/en/tasks/cash-management/cashedi/downloads>, are the authoritative source.

3.2.3 GS1 XML standards

The GS1 XML standards complement the traditional EDI standard EANCOM® and cover globally agreed XML message descriptions for numerous business processes. GS1 works towards harmonising the GS1 XML standards with the recommendations made by UN/CEFACT, the global inter-branch standardisation organisation. For CashEDI, the GSI XML versions 2.1 and 2.5 are used.

For the message exchange in the CashEDI procedure, the latest version of the EDI application recommendations, which are available at <https://www.bundesbank.de/en/tasks/cash-management/cashedi/downloads>, are the authoritative source.

II CashEDI procedure

1 Participation requirements

The CashEDI procedure is available to retail customers of the Bundesbank. If they are not registered already, the participants are registered in the Deutsche Bundesbank's Cash Management System (BMS). The customer details are entered on the customer data reporting form on the Deutsche Bundesbank website (<https://www.bundesbank.de/en/tasks/cash-management/cashedi/downloads> – in German only).

To participate in the CashEDI procedure, each participant must be suitably equipped to use and operate internet communications or be in a position to cooperate with partners who have these facilities. This technical equipment may be located anywhere and belong to any operator.

Moreover, in order to participate in the CashEDI procedure, the participant or an enabled third-party requires access to technical authorisation for the CashEDI and ExtraNet procedures.

In addition, participants require a GLN, which enables the cash handlers/locations to be identified in the CashEDI procedure for cash payments (eg credit institution's branches, individual ATMs, retailer's branches). GLNs are supplied by the GS1 Germany GmbH (GS1) organisation.

GS1 Germany GmbH contact details

Company address:

Maarweg 133
50825 Köln
Germany

PO box address

Postfach 30 02 51
50772 Köln
Germany

Tel: +49 221 94714 0
Fax: +49 221 94714 990
E-mail: info@gs1-germany.de
Website: www.gs1-germany.de

2 Access options

2.1 Technical procedure

Electronic access is provided via the Bundesbank's e-business platform (ExtraNet). The Deutsche Bundesbank's ExtraNet documentation forms the basis for using the ExtraNet. It contains the general rules regarding admission and usage. The ExtraNet documentation is available to download at the following link

<https://www.bundesbank.de/en/service/extranet/documentation/extranet-documentation-618992>

Use of ExtraNet is free of charge.

Users must be registered to use ExtraNet if they intend to use the system as a direct participant or receive additional messages as a copy recipient. If access occurs via a third party, it is not necessary to create any users.

CashEDI offers the following two variants for participation in the procedure.

WebEDI

CashEDI participation can take place via the WebEDI variant using a standard PC with standard software (operating system and web browser). WebEDI provides the means to enter notifications of inpayment and cash orders online in ExtraNet. Status reports detailing the processing stage of the inpayment/cash order can be accessed during the ExtraNet operating hours. It is not possible to transmit additional messages (customer copies) and service messages.

WebEDI does not feature all CashEDI functions (see (2.2)).

File transfer

This variant enables inpayment and outpayment data to be transmitted by connecting an IT system to the Deutsche Bundesbank's ExtraNet. Notifications from the Bundesbank are provided in the same manner. The transmission of data can occur

- manually from a browser, or
- automatically from a participant's system.

For using the file transfer a software certified by the Deutsche Bundesbank is required. The certification is done by the testcentre of the Deutsche Bundesbank (s. Section IV).

Access to the Deutsche Bundesbank's file transfer/ExtraNet is made via the internet. The standard web browsers can be used for access.

The same functions are available regardless of whether the participant uses a web browser or their own system.

- Upload
Transfer a file from the participant's PC to the CashEDI procedure including the display of an upload list
- Download
Transfer of a file from the CashEDI procedure to the participant including a download confirmation

The file transfer variant provides the complete range of CashEDI functions (see (2.2)).

Access to the Bundesbank's ExtraNet is also possible via a third party (service provider). In this case, only the service provider needs to register in the ExtraNet.

2.2 Range of services

The range of WebEDI and file transfer services vary as follows

Electronic submission of notifications of inpayment

	WebEDI	file transfer
Credit of the countervalue of the inpayment		
as a single amount (single inpayment)	Possible	Possible
split into several partial amounts (collective inpayment)	Not possible	Possible
Breakdown by banknotes and coins		
Banknote inpayment	Possible	Possible
Coin deposit	Possible	Possible
Mixed deposit of banknotes and coins	Not possible	Not possible
Type of inpayment		
Standard deposit (banknotes and coins)	Possible	Possible
Multi-denomination deposit (banknotes)	Possible	Possible
Packaging of inpayments		
Creation of sub-packs (eg packing safebags into a bank-note box)	Not possible	Possible
Verification options for cash containers (multi-denomination inpayment)		
Verification of the entire inpayment as a single amount	Possible	Possible
Separate verification of each cash container	Possible	Possible
Flexible verification of the cash containers	Not possible	Possible
Traceability of the inpayment/verification of the data record		
Technical incoming message check (service message)	Not possible	Data transfer (active)
Confirmation of receipt of cash inpayment	Status change (passive)	Data transfer (active)
Arrival notice of deposit	Not possible	Data transfer (active)
Finality report (final receipt) after establishing the value or following the count (only banknotes)	Status change (passive)	Data transfer (active)
Return/retraction of notifications of inpayment which have not yet been settled	Possible	Possible

	WebEDI	file transfer
Data transfers to internal IT system	Not possible	Possible

Electronic cash orders

	WebEDI	file transfer
Breakdown by banknotes and coins		
Banknote withdrawal	Possible	Possible
Coin withdrawal	Possible	Possible
Mixed withdrawal of banknotes and coins	Not possible	Not possible
Portioning		
Portioning of banknote outpayments	Possible	Possible
Traceability of the cash order/verification of the data record		
Technical incoming message check (service message)	Not possible	Possible
Notification of delivery once the containers have been prepared	Status change (passive)	Data transfer (active)
Confirmation of delivery once the cash order has been collected	Status change (passive)	Data transfer (active)
Return/retraction of cash orders which have not yet been paid out	Possible	Possible

2.3 Submission and delivery times

ExtraNet is available for use between the hours of 06.00 and 20.00 on all bank business days, with the exception of Saturdays and Sundays and those days specified in Section II (2.4).

The submission of files in the file transfer procedure is, in principle, also possible outside of this time frame, although this cannot be guaranteed as these times are also reserved for maintenance work.

WebEDI can also be accessed on Saturdays between the hours of 09.00 and 13.00. There is no IT support available on Saturdays, however.

Attempting to access the ExtraNet login page outside operating hours results in a standard error message in the browser indicating that the page is not available. Example from Microsoft Internet Explorer: "This page cannot be displayed".

Irrespective of the submission times, the settlement of inpayments and outpayments occurs during usual working hours at the branches.

2.4 Public holiday rules

The CashEDI procedure is not available on the following days

- TARGET2 holidays
- German national holidays
- Non-business days

The Governing Council of the European Central Bank has declared the following as TARGET2 holidays

- New Year's Day (1 January)
- Good Friday
- Easter Monday
- May Day (1 May)

-
- Christmas Day (25 December)
 - Boxing Day (26 December)

In addition, the following are observed as national holidays in Germany

- Ascension Day
- Whit Monday
- German Unity Day (3 October)

The Bundesbank has defined the following as non-business days

- Christmas Eve (24 December)
- New Year's Eve (31 December)

3 Electronic submission of notifications of inpayment

3.1 Notification of inpayment

3.1.1 General information

The notification of inpayment announces that an inpayment is to be made in the near future. The connection between the data record and the inpayment in the Deutsche Bundesbank's Cash Management System (BMS) is made via the delivery note supplied with the inpayment and via the Serial Shipping Container Code (SSCC) on the inpayment container ((SSCC) seal, safebag with bar code).

The GLN specified in the notification of inpayment serves to identify the participant.

The Deutsche Bundesbank can authorise the use of the BMS customer number for identification in the *collective NiKo procedure* for cash-in-transit company (CIT) customers.

3.1.2 Delivery note

The inpayments are to be passed on to the Deutsche Bundesbank with a delivery note. The inpayment documents (presentation voucher/payment form), which were previously necessary, are no longer required. A delivery note is generated by the application when using WebEDI. When using the file transfer procedure, however, the delivery note has to be generated by the participant's application or by a third-party provider.

The submission is allocated to the electronic notification of inpayment on the basis of the master SSCC specified on the delivery note.

The delivery note must contain the following information as a minimum:

Delivery note	
Delivery note number	Numeric shipping container code (master SSCC) depicted as a bar code
Date and time	Date and time the delivery note was created
Bundesbank's inpayment branch	GLN and plain text entry of the Bundesbank branch, where the inpayment is to take place
Depositor	Inpayer's GLN and plain text entry Note: "collective inpayments" must be specified as such
Transporter	Transporter's GLN and plain text entry
Total amount	Total amount of inpayment
Inpayment type	Plain text entry of the type of inpayment
Purpose of payment	
Container	Listing of every container to be handed over at the counter with serial number, SSCC/container seal number and type of packaging, GLN or plain text entry of the packager, amount of each package
Page number	Format: page X of Y, position: upper right All subsequent pages must contain the delivery note number in the header next to the page number for the purpose of clear identification and association
Signature field	Exact wording: Inpayer / on behalf of the inpayer – the cash-in-transit (CIT) company (delete as appropriate)
Free text fields on page 1 (Bundesbank data)	Transaction number Free data field for internal Bundesbank purposes Date Free data field for internal Bundesbank purposes

Annex 1 contains a specimen delivery note.

The delivery note is to be signed by the inpayer or the CIT company which prepares the inpayment. By crossing out the non-applicable parts in the signature field, it must be clear whether it is the inpayer himself/herself or the CIT who is the signatory. The inpayer is not required to stamp the delivery note provided that the inpayer is clearly stated in the "inpayer" field.

The delivery note contains no payment information for transmitting the credit. These data are located in the BMS customer master data and can only be changed using the customer data reporting form.

3.1.3 Container requirements

In the case of simplified banknote and coin inpayments, it is necessary to use the containers specifically authorised by the Bundesbank.

In addition to the previous details, these containers are to be marked with an SSCC (including barcode). If the containers are to be secured with an authorised participant's seal, the seal is to bear the SSCC. If safebags are used, these are also to be marked with a unique SSCC (including barcode).

3.1.4 Container acceptance

The Bundesbank is to check the completeness of the inpayment containers upon acceptance.

3.1.5 Acknowledgement

As confirmation of acceptance, the bearer receives an automatically produced acknowledgement from CMS.

The acknowledgement includes the following main points

Acknowledgement	
Date	Date and time of cash acceptance, the details of which must match the confirmation of receipt
Bundesbank's inpayment branch	GLN and plain text entry of the inpayment branch
Delivery note number/ master SSCC	Numeric data and depiction as a barcode
Transporter (actual)	Transporter's GLN Plain text entry
Depositor	Depositor's GLN Plain text entry "Collective inpayments" must be specified as such
Amount	Total amount of inpayment
Container	Listing of every container handed over at the counter with serial number, SSCC/container seal number and type of packaging
Signature field	Deutsche Bundesbank Branch cashier Acceptance date Acceptance time
Free text fields (participant data)	
Free text field for internal participant purposes	

Annex 1 contains a specimen acknowledgement.

3.1.6 Credit of inpayment countervalue

Depending on the instructions contained in the customer data reporting form, for Bundesbank account holders the countervalue of the inpayment is credited once the inpayment is booked. Alternatively, it is transferred as a payment transaction. If the countervalue is to be credited to an account held with the Bundesbank, this countervalue is forwarded as a payment transaction.

In all cases, the participant receives information about the inpayment countervalue booking via the account-holding credit institution, or in the case of Bundesbank current accounts, via the Electronic Account Information (EAI) facility¹ or via the online banking functions.²

¹ Prerequisite: EAI participant

² Prerequisite: online banking participant

3.2 Confirmation of receipt

For file transfers, the Bundesbank provides the data-transmitting party with an electronic confirmation of receipt on the Bundesbank's ExtraNet.

The status of the notification of inpayment is updated in WebEDI to read "accepted".

With the confirmation of receipt, the Bank confirms acceptance of the notification of inpayment. This does not entail a confirmation of the credit of the countervalue of the inpayment on the customer's account.

3.3 Arrival notice

In addition to the confirmation of receipt, the participant can request that the Bundesbank provides the confirmation of receipt information by file transfer as an acknowledgement of receipt directly to the *depositor* and/or to a third party named by the depositor without involving the data-transmitting party.

As a supplement, the recipient of the arrival notice is provided with a report matching the original confirmation of receipt, which is available for download in ExtraNet. If the notified inpayment is a collective inpayment, the arrival notice contains a shortened confirmation of receipt data record containing general information on the individual containers and the relevant data of the other inPAYERS. The arrival notice for collective inpayments therefore merely contains the general data relating to the inpayment and the relevant data of the inpayer.

This service is not offered in WebEDI.

3.4 Final receipt

Following the complete processing of an inpayment consisting of banknotes, the Bundesbank provides a final receipt in its ExtraNet for the party which transmitted the inpayment notification data. The registered and counted ACTUAL content is duly reported back.

The final receipt does not contain details of any discrepancies that may have been identified during processing (shortfalls or surplus amounts). This difference is the result of deviations between the notification and the feedback.

The Bundesbank provides the depositor and/or a third party stipulated by the depositor with a copy of the final receipt directly without involving the data-transmitting party, which is made available for download.

An electronic copy of the final receipt is not generated for collective inpayments.

The status of the notification of inpayment is updated in WebEDI to read "completed".

3.5 Returns

Should the participant not want a transmitted notification of inpayment to be processed, the data-transmitting party can arrange for the notification of inpayment to be returned in the Bank's cash management system, provided that the notification of inpayment has not yet been processed.

The acceptance or rejection of the return request is confirmed by means of a service message (see Section II (3.6)).

The status is updated in WebEDI to read "returned".

3.6 Service message

The service message provides the data-transmitting party with information about warning or error messages in the transmitted notifications of inpayment. If the notification of inpayment is marked as erroneous in the service message, it cannot be processed by the Bundesbank's branches. In order for the notification of inpayment to be successfully processed, the technical errors must be rectified by the data-transmitting party and, if required, resubmitted. If this is not possible at short notice, Section V (3.1.4) of these specifications applies. If the service message contains nothing but warning messages, the notification of inpayment can be processed. The data-transmitting party should, however, endeavour to rectify the identified errors without delay.

Furthermore, the service message also specifies whether the initiated return was accepted or rejected by the Bank.

An overview of the reports contained in the service messages can be found in annex 3 to these specifications.

The service message does not acknowledge receipt of the messages in the Bank's systems. The technical receipt of ExtraNet (file transfer) and the status update (WebEDI) continue to apply here. (see Section I (2.3)).

This service is not offered in WebEDI.

4 Electronic cash orders

4.1 Cash orders

Deutsche Bundesbank participants can transmit their cash orders electronically using the CashEDI procedure. Any requests in a cash order regarding the quality of the banknotes that are to be paid out (eg that they be newly printed) are fulfilled by the Deutsche Bundesbank branches only to the extent that this is possible.

4.2 Notification of delivery

For file transfers, the Bundesbank makes an electronic notification of delivery available to the party transmitting the cash order data in the Bundesbank's ExtraNet (via download). The cash order data are processed for the electronic notification of delivery. No special information is produced if the requests regarding the quality of the banknotes to be paid out are not taken into consideration.

At the request of the payer, the Bundesbank provides the payer and/or the third party specified by the payer with a copy of the notification of delivery directly without involving the data-transmitting party.

The cash order status is updated in WebEDI to read "delivered".

4.3 Confirmation of delivery

The Deutsche Bundesbank gives the party collecting the cash order an accompanying slip pertaining to the outpayment upon handing over the containers to said party (for cash order delivery note template, see Annex 1).

For file transfers, the Bundesbank makes an electronic confirmation of delivery available to the party transmitting the cash order data in the Bundesbank's ExtraNet.

At the request of the payer, the Bundesbank provides the payer and/or the third party specified by him with a copy of the confirmation of delivery directly without involving the data-transmitting party.

The cash order status is updated in WebEDI to read "paid out".

4.4 Returns

Should the participant not want a transmitted cash order to be processed, the data-transmitting party can arrange for the cash order to be cancelled in the Bank's cash management system, provided that the cash order has not yet been paid out.

The acceptance or rejection of the return request is confirmed by means of a service message (see Section II (3.6)).

The status is updated in WebEDI to read “returned”.

4.5 Service message

The service message provides the data-transmitting party with information about warning or error messages in the transmitted cash orders. If a cash order is marked as erroneous in the service message, it cannot be processed by the Bundesbank’s branches. In order for the cash order to be successfully processed, the technical errors must be rectified by the data-transmitting party and, if required, resubmitted. If this is not possible at short notice, Section V (3.2) of these specifications applies. If the service message contains nothing but warning messages, the cash order can be processed, however. The data-transmitting party should, however, endeavour to rectify the identified errors without delay.

Furthermore, the service message also specifies whether the initiated return was accepted or rejected by the Bank.

An overview of the reports contained in the service messages can be found in Annex 3 to these specifications.

The service message does not acknowledge receipt of the messages in the Bank’s systems. The technical receipt of ExtraNet (file transfer) and the status update (WebEDI) continue to apply here. (see Section I (2.3)).

5 CashEDI contact persons

Customers can contact the branches of the Deutsche Bundesbank branches by telephone if they have any questions regarding cash payments settlement from Monday to Friday between 9.00 and 16.00. You will find a list of all the Bundesbank branches, together with the relevant addresses and telephone numbers, on the Bundesbank website at <https://www.bundesbank.de/en/bundesbank/regional-offices-branches/regional-offices-and-branches-of-the-deutsche-bundesbank-617098>.

For any technical questions regarding the CashEDI procedure, the contact persons at the Bundesbank's central office are also available between the hours of 9.00 and 16.00. The contact details can also be viewed on the Bundesbank's website (<https://www.bundesbank.de/en/tasks/cash-management/cashedi>).

III Application procedure

1 Participants in the CashEDI procedure

Participation in the CashEDI procedure is open to anyone who is supplied with or disposes of cash via the Deutsche Bundesbank, or who renders this service for others. Applications to participate must be made using the Bundesbank's customer data reporting form and must also specify whether the participant will himself/herself transmit data to the Bundesbank via CashEDI or whether the data are to be transmitted by a third party.

2 Required forms

2.1 CashEDI application

Participation in the CashEDI procedure is to be applied for in writing using the Bundesbank's customer data reporting form. The most recent version of this form can be found on the Bundesbank's website (<https://www.bundesbank.de/en/tasks/cash-management/cashedi>).

The Deutsche Bundesbank must be informed immediately and without prior request of any change to the customer's data.

The application must be signed by the applicant for it to be legally binding.

2.2 ExtraNet user administration

User accounts have to be set up in ExtraNet in order to be able to access the Cash EDI procedure as a direct participant. The Bundesbank informs the participant as soon as the registration of users can take place. Registration for ExtraNet takes place via the Deutsche Bundesbank website at <https://www.bundesbank.de/en/tasks/cash-management/cashedi/general-information>. Under "Registration" in the CashEDI procedure, select initial registration/first-time user.

The pdf document which is generated once the registration process is complete contains the User ID which is later required to log on to the system. The corresponding password is sent separately by post. The application form is to be printed, signed, and sent to the address stated on the form. Further information on setting up, changing and deleting users can be found in section III "Basic services" of chapter 3 "User management" in the ExtraNet customer documentation.

IV Authorisation test in the file transfer procedure

1 Test concept and objectives

1.1 General information

The Deutsche Bundesbank only allows participants to use the “live” system in the file transfer procedure once they have demonstrated that their systems can be smoothly integrated into the operational system. The participant is required to prove this via a technical authorisation procedure. The Bundesbank can demand that the participant undergo the technical authorisation procedure once more if communication/processing problems occur directly after switching to the production environment.

1.2 Test objectives

During the technical authorisation procedure, the Deutsche Bundesbank checks whether the test partners are able to submit files in the file transfer access procedure, which are in line with the Bundesbank’s application recommendations and the external specifications for the CashEDI procedure, in the formats EANCOM and/or XML (version 2.1 or 2.5).

2 Requirements for beginning the testing procedure

Applications to participate in the test procedure must be made using the customer data reporting form (participation in CashEDI). The form must bear the words “test system” and be sent to the test centre directly.

Before starting the authorisation and compliance test, the software has to be tested locally where possible. Tests in the test centre are no substitute for programming tests and approval from internal quality control, ie these checks must be successfully completed before tests in the test centre can commence.

3 Test centre

The test centre address for the CashEDI procedure is

Deutsche Bundesbank
Zentralbereich IT
IT 421
Testzentrum CashEDI
Postfach 57 03 48
22772 Hamburg
Germany

Tel: +49 40 3707 6542
+49 40 3707 6563
Fax: +49 40 3707 2782
E-mail: csH-testzentrum@bundesbank.de

The tests are conducted after prior consultation with the test centre. The testing times are based around the availability times of the ExtraNet test environment (Monday to Thursday from 9.00 to 16.00).

4 CashEDI test procedure

4.1 General information

The test procedures are independent of the selected access option (section II (2)).

WebEDI

No technical authorisation procedure is necessary for the WebEDI procedure.

File transfer

In the case of file transfer, the test procedure must be carried out for each selected communication formation (EANCOM, XML 2.1 or XML 2.5). Authorisation for the CashEDI procedure is given to the tested communication format only.

The following tests are conducted depending on the communication format

Notified inpayments

- Notification of inpayment
- Confirmation of receipt
- Final receipt
- Return

Electronic cash orders

- Cash order
- Notification of delivery
- Confirmation of delivery
- Return

4.2 Test requirements

A detailed test handbook can be requested from the Deutsche Bundesbank's CashEDI test centre.

The Bundesbank checks the messages for technical errors when they arrive in the cash management system. The plausibility checks are listed in Annex 4; these are the minimum requirements that a participant's software should fulfil.

4.3 Certification

Once the tests have been concluded, the test partner is certified by the Bundesbank for the tested submission procedures and transactions. The test partner is given a software ID number, which is linked to the currently tested software version. It is left to the discretion of the software provider whether, in the case of modifications to the software, a new test should be

carried out by the Bundesbank and a new software ID number be issued. Generally speaking, software providers can have submission procedures and transactions running in parallel with different software ID numbers.

It is possible to request that the Bundesbank automatically deletes the submission of messages featuring certain software ID numbers. This can be done by sending an informal e-mail to cashedi@bundesbank.de, specifying the reasons for the requested deletion. The party submitting the file will be informed by means of a service message that the messages have been deleted.

The Bundesbank reserves the right to delete any messages containing a certain software ID number, which represent an obstacle to the continuous smooth settlement of transactions. The test partner will be informally informed in advance of any Bundesbank-initiated deletions of message types containing a certain software number. The party submitting the file will be informed by a service message that the messages have been deleted.

V Troubleshooting

1 General information

The Deutsche Bundesbank is to be immediately informed about all disruptions that occur and are relevant to the procedure. The Deutsche Bundesbank informs the participant about measures to circumvent a disruption.

2 General troubleshooting

2.1 Support section

The “CashEDI – Support/BMS – Support” support section can be reached in the following ways

“CashEDI – Support / BMS – Support”

Tel: +49 69 9566 36767

Fax: +49 69 709093 9011

E-mail: cashedi@bundesbank.de

2.2 Disruptions experienced by the participant

The participant must promptly inform the support section of all disruptions and problems relevant to the CashEDI procedure.

2.3 Disruptions experienced by the Deutsche Bundesbank

The participant’s technical communication sections will be informed by e-mail about disruptions at the Deutsche Bundesbank that affect processing by the Deutsche Bundesbank’s support section.

The participant’s expert point of contact is to be notified of any long-term disruptions by the Bundesbank branch where the inpayments/cash orders usually take place.

3 Backup procedure

3.1 Notified inpayments

3.1.1 General information

Exactly which backup procedure is to be used hinges on whether a delivery note can be generated from the participant's system or from WebEDI.

3.1.2 Disruptions where the generation of a delivery note is possible

A participant can create a delivery note during the following disruptions

- Submission by file transfer
Disruption of communications between the participant's system and the Deutsche Bundesbank's ExtraNet.
- Submission by file transfer or WebEDI
Disruption during the processing of notified inpayments by the Deutsche Bundesbank after their proper submission to the Deutsche Bundesbank's ExtraNet.

The Deutsche Bundesbank will continue to accept the notified inpayment upon presentation of the delivery note even if the communication disruption occurs between the participant's system and the Deutsche Bundesbank, or in the Deutsche Bundesbank's processing systems. The inpayment is put aside until the disruption is resolved. As no system-generated acknowledgement can be produced at the point of acceptance in this case, the deliverer receives a copy of the delivery note as an acknowledgement, which has been signed by two authorised employees for the relevant Bundesbank branch's counter.

The notification of inpayment can be transmitted/processed in the Deutsche Bundesbank's system when the systems are accessible once again. If the payments no longer can be processed on the same day after system functionality has been restored, they will be executed on the next business day.

3.1.3 Disruptions where the generation of a delivery note is not possible

A participant cannot create a delivery note during the following disruptions

- Submission by file transfer
Disruption in the participant's system
- Submission by WebEDI
Disruption of Deutsche Bundesbank's WebEDI/ExtraNet

If no delivery note can be generated because of a disruption in the participant's system or the Deutsche Bundesbank's WebEDI/ExtraNet, a submission is only possible with a payment form or presentation voucher within the stipulated acceptance times.

3.1.4 Data record error

If data processing is not possible, the containers are accepted by the Deutsche Bundesbank and assigned to a value reserve. For additional processing, the steps are those set out in (3.1.3).

3.2 Electronic cash orders

If it is not possible to submit cash orders electronically via the CashEDI procedure, the submission is made in the conventional manner. In this case, cash orders are to be transmitted to the appropriate Bundesbank branch by telephone, e-mail or fax.

Annex 1

1	Notification of inpayment – specimen delivery note
2	Notification of inpayment – specimen acknowledgement
3	Cash order – specimen delivery note

Notification of inpayment – specimen delivery note

Header

Delivery note number (master SSCC) For notified lodgement	Printing date Printing time
--	--------------------------------

Only on first page

BKK branch	ILN: 123456789012345678	Delivery note number Master SSCC bar code (2cm high, including master SSCC in plain text)
Bundesbank Hamburg branch		
Depositor	ILN: 123456789012345678	
Cash handler		

Field remains empty for collective lodgements

Field contains the entry "collective lodgement" for collective lodgements

Carrier	ILN: 23456789012345678	Total amount in euro	100,000.00
CIT Safe and well		Business type	(Multi-denomination, paper)
		Purpose of payment	Payment purpose

All designations in accordance with customer data registration form

Field remains empty for collective lodgements

On all pages

Serial number	SSCC subunit	Type of packaging, ...	Producer	Value
1	00123456789012345678	SB	Name 1 of the corresponding customer ILN	50,000.00
2	00123456789012345678	PB	Name 1 of the corresponding customer ILN	20,000.00
3	00123456789012345678	PC	Name 1 of the corresponding customer ILN	30,000.00

Only on the last page

Field for customer data

Depositor signature / for depositor - CIT company (delete as appropriate)	Transaction number	
	Date	

Footer

End of document Page 1

Only on the last page

Notification of inpayment – specimen acknowledgement

Header

Acknowledgement

Number (Master SSCC)
FOR NOTIFIED LODGEMENTS

Print date
Print time

Only on the first page

BBK branch	ILN: 123456789012345678	Delivery note number
200 000 00 Bundesbank Hamburg branch		
Voucher number	200000000356	
Master SSCC Bar code (2cm high, including master SSCC in plain text)		
Carrier	ILN / BMS customer number 123456789012345678	Depositor
CIT Safe and well		ILN: 123456789012345678
Cash handler XY Central office		
Amount in euro		321,000.00

On all pages

Serial number	SSCC subunit	Type of packaging
1	00123456789012345678	SB
2	00123456789012345678	PB
3	00123456789012345678	PC

Only on the last page

Amount received subject to accuracy	Acceptance date	21.12.2006
DEUTSCHE BUNDESBANK Branch cashier...	Acceptance time	15:05
Customer remarks		

Footer

BMS: 10204

End of document

Page 1

Cash order – specimen outpayment accompanying slip

Header

Accompanying slip for withdrawal Number (Master SSCC number)	Printing date Printing time
---	--------------------------------

Only on first page

Withdrawal data

Withdrawing bank	ILN: 123456789012345678 Bundesbank Hamburg branch	<u>Accompanying slip number</u> MASTER SSCC Bar Code (2cm high, including master SSCC in plain text)
Orderer	ILN: 123456789012345678 BMS-NR.: Cash Bank AG Zentrale Kleingroßheim	
Carrier	ILN: BMS-Nr.: 5003450700 Cash in transit Safe and well	

Total amount in euro	100,000.00
Withdrawal type	(container withdrawal, open withdrawal)
Number of portions	(Number of portions)
Purpose of withdrawal	(Withdrawal purpose)
Customer order number	(External customer order number)

On all pages

Serial no	Tour	Recipient	SSCC subunit	Packaging	Inner packages	Value
1	abc12	Name 1 of corresponding cust_ILN Name 2 of corresponding cust_ILN	00123456789012345678	SB		50,000.00
2	abc12	Name 1 of corresponding cust_ILN Name 2 of corresponding cust_ILN	00123456789012345678	PB		20,000.00
3	def34	Name 1 of corresponding cust_ILN Name 2 of corresponding cust_ILN	00123456789012345678	PC	4	30,000.00

Annex 2

The latest version of the user recommendations for the application development are available to download from <https://www.bundesbank.de/en/tasks/cash-management/cashedi/downloads> – partly in German only.

Annex 3

An overview of the structure of the text field of the service message containing the possible warning and error messages which are sent by the Bundesbank can be found at the following address: <https://www.bundesbank.de/en/tasks/cash-management/cashedi/downloads>

Annex 4

A list of the plausibility checks, which are the minimum requirements that a participant's software should fulfil, is available on the Bundesbank's website.
(<https://www.bundesbank.de/en/tasks/cash-management/cashedi/downloads>)

Annex 5

In order to facilitate the download of certain message types from ExtraNet, the file names of the messages provided by the Bundesbank have an integrated code, which indicates what type of message it is. It is available on the Bundesbank's website.

(<https://www.bundesbank.de/en/tasks/cash-management/cashedi/downloads>)

Sample message:

0000017664.CSHAB.FTSEX.17525.ILN2891800000035.SD.R_BBK_CSH_00000176640000
1622535.**SM**.xml

Glossary and list of abbreviations

BMS	The Deutsche Bundesbank's Cash Management System (BMS)
GTIN	Global Trade Item Number
EANCOM	EANCOM stands for EAN communications. An international and inter-branch subset of the EDIFACT standards for electronic data exchange
GLN	Global Location Number
NiKo procedure	For the collection of cash, the Deutsche Bundesbank accepts payments to be credited or transferred domestically from customers of CIT companies as parties making large-scale payments without current accounts.
SSCC	Serial Shipping Container Code
UN/CEFACT	United Nations Centre for Trade Facilitation and Electronic Business
UN/EDIFACT	Electronic Data Interchange for Administration, Commerce and Transport
XML	Extensible Markup Language, mark-up language used to represent hierarchically structured data in the form of text files