

The Deutsche Bundesbank's procedural rules for communicating via EBICS with deposit-taking credit institutions and other account holders with a bank sort code

(EBICS procedural rules)

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Notes on the English translation

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

Version 3.10 Page 1 of 29



IABLE	OF CONTENTS	
1	DESCRIPTION OF THE PROCEDURE	4
2	SCOPE	
3	ELIGIBILITY TO USE EBICS	5
4	ROLES OF COMMUNICATION PARTICIPANTS	е
5	DETAILED DESCRIPTION OF THE PROCEDURE	8
5.1	SECURITY PROCEDURES	8
5.1.1	GENERAL SPECIFICATIONS	8
5.1.2	OVERVIEW OF THE KEYS IN USE	9
5.1.2.1	USE OF SEPARATE CLIENT AND SERVER KEYS BY THE PAYMENT SERVICE PROVIDER	11
5.1.2.2	USE OF A COMBINED CLIENT AND SERVER KEY BY THE PAYMENT SERVICE PROVIDER	12
5.1.3	KEY MANAGEMENT	13
5.1.3.1	INITIALISATION	13
5.1.3.2	EXCHANGE OF KEYS	13
5.1.3.3	BLOCKS	14
5.1.4	TLS SERVER CERTIFICATES	15
5.1.4.1	GENERAL INFORMATION	15
5.1.4.2	FINGERPRINT COMPARISON	15
5.2	TECHNICAL DESCRIPTION OF THE PROCEDURE	15
5.2.1	EBICS PARAMETERS	15
5.2.2	ALLOCATION OF AN ORDER NUMBER	16
5.2.3	UPLOAD TRANSACTIONS	16
5.2.3.1	DIRECTION OF TRANSFER: PAYMENT SERVICE PROVIDER -> DEUTSCHE BUNDESBANK	16
5.2.3.1.1	SUBMISSIONS TO THE RPS SEPA-CLEARER	16
5.2.3.1.2	SUBMISSIONS TO CAM-INDIVIDUAL	18
5.2.3.1.3	TRANSACTION VOLUME ENQUIRIES ADDRESSED TO KTO2 / ELECTRONIC ACCOUNT INFORMATION (EAI)	18
5.2.3.1.4	RPS CHEQUE PROCESSING SERVICE	18
5.2.3.2	DIRECTION OF TRANSFER: DEUTSCHE BUNDESBANK   → PAYMENT SERVICE PROVIDER	19
5.2.3.2.1	DELIVERIES FROM THE RPS SEPA-CLEARER	20
5.2.3.2.2	DELIVERIES FROM CAM-INDIVIDUAL	22
5.2.3.2.3	DELIVERIES FROM KTO2 / ELECTRONIC ACCOUNT INFORMATION	23
5.2.3.2.4	DELIVERIES FROM THE DEUTSCHE BUNDESBANK'S RPS CHEQUE CLEARING SERVICE	23
5.2.4	DOWNLOAD TRANSACTIONS	25
5.2.5	CUSTOMER PROTOCOLS	25
5.3	BACKUP PROCEDURE	28
6	TEST REQUIREMENTS	29



# REFERENCE DOCUMENTS

	Document	Title	
1	Specifications for the EBICS connection	Annex 1 of the interface specifications for data telecommunication between the client and the credit institution in accordance with the data telecommunication agreement	
2	EBICS implementation guide	EBICS implementation guide, supplement to the current data telecommunication agreement	
3	Deutsche Bundesbank's General Terms and Conditions	General Terms and Conditions of the Deutsche Bundesbank	
4	Procedural rules for SEPA direct debit	The Deutsche Bundesbank's procedural rules for the clearing and settlement of SEPA direct debits via the RPS SEPA-Clearer	
5	Procedural rules for SEPA credit transfer	The Deutsche Bundesbank's procedural rules for the clearing and settlement of SEPA credit transfers via the RPS SEPA-Clearer	
6	Procedural rules for SCC card payments	The Deutsche Bundesbank's procedural rules for the clearing and settlement of SCC card payments via the RPS SEPA-Clearer	
7	Procedural rules for cheque	The Deutsche Bundesbank's procedural rules for the clearing and settlement of cheque via the Retail Payment System (RPS)	
8	Procedural rules for CAM-Individual	Rules of procedure of the Deutsche Bundesbank for the processing of same-day euro payments and payments in foreign currencies via the customer access mechanism-Individual (CAM-Individual)	
9	Procedural rules for accessing electronic account information	The Deutsche Bundesbank's procedural rules for accessing electronic account information	

Version 3.10 Page 3 of 29



# 1 Description of the procedure

With respect to cashless payments, the Deutsche Bundesbank makes a distinction between credit institutions within the meaning of Article 4 (1) of Directive 2013/575/EU on the business of deposit-taking credit institutions (for which the Deutsche Bundesbank maintains PM, HAM and dotation accounts, and which can be participants in the Bundesbank's payment systems) and other account holders. The term "other account holder" encompasses payment service providers within the meaning of section 1 (1) numbers 1, 2, 4 and 5 of the Payments Services Oversight Act (*Zahlungsdiensteaufsichtsgesetz* or ZAG), credit institutions with a partial banking licence and public administrations.

With its electronic access for deposit-taking credit institutions and other account holders with a bank sort code (hereinafter "payment service provider"), which is based on the Electronic Banking Internet Communication Standard (EBICS), the Deutsche Bundesbank offers a communication channel based on accepted protocols and standards which is capable of processing the exchanging of data between banks efficiently, securely and cost-effectively.

Access is based on the version (version 2.5) of the EBICS customer-bank standard (schema H004). The former versions H002 and H003 are not supported.

Therefore, for the settlement of interbank payment transactions, specifications are required which go beyond the EBICS protocol. These primarily relate to the deviations from the typical EBICS roles of customers and banks. Furthermore, for communication with payment service providers, the EBICS standard contains instruction types specified by the Deutsche Bundesbank which enable the usual data formats to be transferred between banks.

The following procedural rules define the amendments to the EBICS standard which are required for the exchange of data between banks, specifications for a fully automated processing system and the Deutsche Bundesbank's range of EBICS-based services.

# 2 Scope

These procedural rules apply solely to EBICS communication between the Deutsche Bundesbank and payment service providers and/or their computer service centres. For EBICS communication with public administrations and other account holders, the "Special terms and conditions of the Deutsche Bundesbank for account holders without a bank sort code concerning data telecommunication via EBICS (EBICS conditions)" apply.

These procedural rules apply to the following Deutsche Bundesbank specialised procedures as well as when accessing electronic account information.

- RPS SEPA-Clearer
- RPS cheque processing service
- Customer Access Mechanism-Individual (CAM-Individual)

In addition, the General Terms and Conditions of the Deutsche Bundesbank apply.

Version 3.10 Page 4 of 29



# 3 Eligibility to use EBICS

As a general rule, all payment service providers with an account at the Deutsche Bundesbank may take advantage of the EBICS communication procedure. Further details are specified in the relevant procedural rules for these specialised procedures. The current forms can be found under "Tasks/Payment systems/Servives/Forms" on the Deutsche Bundesbank's website (www.bundesbank.de). In each case, they are to be submitted to the Deutsche Bundesbank customer service team that is responsible in each case. Bank branches can apply to use the EBICS communication channel through the customer service team responsible for their head office. In this case, applications are to be signed by authorised signatories representing the institution as a whole.

The account holder is obliged to provide the following information for the payment service provider's EBICS banking system.

- Host ID of the EBICS banking system
- EBICS URL or IP of the EBICS banking system
- Initialisation letters signed by the account holder for the public bank-specific keys (INI)
- Initialisation letters signed by the account holder for the public authentication and encryption keys (HIA)
- Information about the TLS server certificate of the EBICS banking system
- Hash values of the EBICS banking system's public keys

Upon receipt of the application documents, the Deutsche Bundesbank issues the payment service provider with the access data that are needed to utilise EBICS. Said provider is required to enter the Deutsche Bundesbank in its master data as specified in the written agreement. At the same time, the payment service provider is entered in the Deutsche Bundesbank's EBICS system.

Once all system-related preparations have been completed, the account holder must submit the initialisation letters needed for activating the EBICS connection to the same customer service team to whom the application for use of EBICS as a communication channel was or will be submitted. The letters in question must bear the account-holder's signature and be accompanied by the other documents that are required in order to cross-check the data (ie information about the TLS server certificate and the hash values for the public keys of the EBICS banking system). The customer service team will then pass the documents on to the competent master data administrator. When submitting order types INI and HIA electronically, it must be borne in mind that the validity of these instructions expires after 120 hours. If the initialisation letters are not received by the Deutsche Bundesbank master data administrator by this deadline, they will have to be resubmitted.

If a computer service centre is used as a communicating office, the key material used for securing EBICS transactions is exchanged with this computer service centre. As the authorised customer and participant for the accounts of the commissioning payment service providers, this computer service centre is recorded in the master data of the Deutsche

Version 3.10 Page 5 of 29



Bundesbank's EBICS system. The computer service centre receives the customer ID and participant ID required for submitting payments via EBICS.

Communication via EBICS occurs by means of an open network (internet) using an asymmetric cryptographic procedure. The payment service provider is required to secure its IT systems against internal and external threats in accordance with the specifications laid down by the Federal Financial Supervisory Authority (BaFin). Furthermore, the recommendations of the Federal Office for Information Security (BSI), as contained in the IT Baseline Protection Manual, are to be observed. In particular, the private cryptographic keys are to be handled with the utmost care and attention.

# 4 Roles of communication participants

The EBICS protocol was developed for the clearing and settlement of electronic payment transactions between customers and payment service providers. It therefore acts as a client-server protocol, ie communication always originates from the client. The EBICS protocol is therefore based on a role scenario in which the payment service provider always assumes the passive role, ie outgoing data deliveries are provided solely for collection.

This allocation of roles cannot be used for the settlement of interbank payment transactions. The exchange of data in interbank payments assumes that the communicating partners have equal roles (peer-to-peer communication). In the case of communication between the Deutsche Bundesbank and a payment service provider, the sending communication partner always assumes the active role of the client. This means that the payment service provider always assumes the active role in the case of data transmissions to the Deutsche Bundesbank.

Conversely, the Deutsche Bundesbank always assumes the active role in the case of outgoing data submissions to payment service providers. In terms of the terminology used in the data telecommunication agreement, the Deutsche Bundesbank acts as a kind of banking system for submissions by payment service providers. In the case of deliveries, the Deutsche Bundesbank generally acts as a customer system. The role scenario therefore changes depending on the direction of transfer. How this role scenario is conceived by the payment service provider depends on how that provider implements it. A communication system depicting this role behaviour is hereinafter referred to as an EBICS system.

There are two main exceptions to the basic principle that data are always sent "actively".

- a) EBICS mechanisms are used as part of the participant initialisation with the result that the banking system's public keys are "made available for collection". There is no provision for "active" sending.
- b) "Customer protocols" are not actively sent to the recipient by the Deutsche Bundesbank. Instead, they must be collected, following their creation by the Deutsche Bundesbank's EBICS system, by the submitter of the instruction to which the customer protocol refers. In the case of deliveries, by the same token, the Deutsche Bundesbank

Version 3.10 Page 6 of 29



expects the recipient to provide a customer protocol which it will periodically collect as part of its sender's oversight activities.

In the relationship between a payment service provider and the Deutsche Bundesbank, the customer protocol performs the function of logging events which occur prior to processing in the specialised applications. Specifically, the following steps are logged in line with the data telecommunication agreement.

- The transfer of the order type to the Deutsche Bundesbank.
- The result of the electronic signature verification and the decompression procedure.
- The transmission for processing in the specialised application, provided the checks were successful at EBICS level; if not, the corresponding error code should be stated.
- A check of the hash values attached to the public bank-specific key upon first using a previous public bank key

The submitting payment service provider cannot assume that the files submitted to the Deutsche Bundesbank's specialised applications have been successfully transmitted until it has been informed via the customer protocol that the submission and the signature check have been completed successfully. The payment service provider must therefore collect the customer protocol in order to receive timely information as to whether the data transmission was successful or whether errors occurred prior to processing in the specialised applications so that counter measures can be taken if necessary.

#### Message files

The Deutsche Bundesbank informs the submitting party of technical processing errors/checks and/or processed payments in the specialised applications by means of message files

- Message type pacs.002SCL for the processing of SEPA payments using the SEPA-Clearer. In addition, at the close of every SEPA-Clearer business day each participant receives a separate end-of-day report for each service used (ie a daily reconciliation report for credit transfers [DRC], Daily Reconciliation Report for SCT Inquiry [DRQ] for Inquiry processes for SEPA credit transfers, a daily reconciliation report for direct debits [DRD] the latter being split into a report on SEPA Core direct debits and one on SEPA B2B direct debits and a daily reconciliation report for SEPA card clearing collections [DRR SCC]). Each report summarises all the bulk transactions submitted to and delivered from the SEPA-Clearer on that business day.
- For instructions to CAM-Individual, the following M messages are used. M3 message "Notification of a non-processable file", M7 message "Notification of payments which have not been executed or have been cancelled", M8 message "Notification of non-processable data records". In addition, an M9 message is created to confirm files which have been processed and delivered.

Version 3.10 Page 7 of 29



- For transaction volume enquiries relating to the collection of electronic account information, the M3 message format is used to report a request file that cannot be processed or has been transferred in duplicate.
- When issuing electronic instructions to the cheque processing service provided by the Deutsche Bundesbank's RPS, use should be made of message type pacs.002SVV. In addition, at the close of every business day, each participant receives a separate daily reconciliation report for each service used. For BSE cheques, this takes the form of a daily reconciliation report for SVV BSE (DRD BSE). In the case of ISE cheques and ISE returned cheques, this entails a daily reconciliation report for SVV ISE (DRD ISE) and a daily reconciliation report for ISR (DRD ISR) respectively. Each report constitutes a summary of all the bulk transactions submitted to and delivered from the Deutsche Bundesbank's RPS cheque clearing service in the course of the business day in question.

#### Computer service centres

If a computer service centre is used, the key material used for securing EBICS transactions is exchanged with this computer service centre (see also No 3). The computer service centre acts as an authorised customer and participant for the accounts of the originating payment service providers. It receives the customer ID and the participant ID required for submitting payments via EBICS communication. A check is carried out on the signatures of the computer service centre. Owing to this required authorisation, the computer service centre has the status of a full EBICS participant and not just that of a technical participant in accordance with the EBICS terminology (see also Specifications for the EBICS connection, No 3.7, Technical participants).

In the RPS SEPA-Clearer and the RPS cheque processing service, the 11-character BIC in the XML file header ("sending institution" field) of the submitted file is used to make the account verification check. In the case of submission via a computer service centre, this is the (technical) BIC of the computer service centre; in the case of direct submissions by the payment service provider for its own accounts, it is the account holder's BIC. For all other submissions, the authorisation check is effected on the basis of the bank sort code or the bank-sort-code-free giro account number of the payment service provider specified in the A record of the files.

# 5 Detailed description of the procedure

## 5.1 Security procedures

## 5.1.1 General specifications

The security procedures specified in the EBICS protocol are used to secure the transactions via EBICS. As with the provisions set out in the data telecommunication agreement, three RSA key pairs are provided for each participant.

Version 3.10 Page 8 of 29



- Public / private bank-specific keys
- Public / private authentication keys
- Public / private encryption keys

A single pair of keys is used for the bank-specific signature of the instructions. Only one pair of keys can be used for authenticating the participant in the banking system and for decrypting transaction keys. The Deutsche Bundesbank uses the same pair of physical keys for both the authentication keys and the encryption keys. Different key pairs are used for submissions to the Deutsche Bundesbank and deliveries by the Deutsche Bundesbank.

All active send instructions are secured with an electronic signature. This applies both to submissions to the Deutsche Bundesbank and deliveries by the Deutsche Bundesbank to payment service providers. No accompanying slips may be used as a means of authenticating transactions when data are exchanged with payment service providers; nor can the instruction code "DZHNN" be used for send instructions.

The successful verification of a payment service provider's electronic signature authorises the Deutsche Bundesbank to forward the data to the specialised application for processing. The Deutsche Bundesbank's delivery data, which are likewise secured with an electronic signature, should only be processed after the successful verification of the electronic signature. The electronic signature corresponds to a class E bank-specific electronic signature as specified in the data telecommunication agreement.

Download transactions constitute an exception to the rule of securing all data with an electronic signature. Collection data can be requested using the instruction code "DZHNN" until the electronic signature has been entered in the data telecommunication agreement. Once the electronic signature has been implemented in customer-bank business, communication with the Deutsche Bundesbank is possible only using the instruction code "OZHNN".

The security procedures of the EBICS version 2.5 listed below are permitted.

- Authentication signature in accordance with "X002"
- Encryption in accordance with "E002"
- Electronic signature in accordance with A006

The distributed electronic signature and X.509 certificates are not supported at present.

The validity period of the keys used conforms with the recommendations of the Federal Network Agency (*Bundesnetzagentur*) and the Federal Office for Information Security.

# 5.1.2 Overview of the keys in use

Depending on the role and the direction of communication, deployment of the EBICS security procedures for communication between the Deutsche Bundesbank and the payment service providers necessitates the use of various "logical" keys and key pairs for the various security procedures.

Version 3.10 Page 9 of 29



In this context, "logical" refers to the use of separate keys, depending on the type of communication relationship and the type of EBICS system implementation (separate client and server system, combined client and server system).

In physical terms, several logical keys can be identical (see No 5.1.1).

The following table shows which keys may be used for communication between the Deutsche Bundesbank and payment service providers.

BACp =	Bundesbank authentication key client public key
BACs =	Bundesbank authentication key client secret key
BASp =	Bundesbank authentication key server public key
BASs =	Bundesbank authentication key server secret key
BECp =	Bundesbank electronic signature key client public key
BECs =	Bundesbank electronic signature key client secret key
BESp =	Bundesbank electronic signature key server public key (not defined in the EBICS at present)
BESs =	Bundesbank electronic signature key server secret key (not defined in the EBICS at present)
BVCp =	Bundesbank encryption key client public key
BVCs =	Bundesbank encryption key client secret key
BVSp =	Bundesbank encryption key server public key
BVSs =	Bundesbank encryption key server secret key
KACp =	Payment service provider authentication key client public key
KACs =	Payment service provider authentication key client secret key
KAp =	Payment service provider authentication key public key
KAs =	Payment service provider authentication key secret key
KASp =	Payment service provider authentication key server public key
KASs =	Payment service provider authentication key server secret key
KECp =	Payment service provider electronic signature key client public key
KECs =	Payment service provider electronic signature key client secret key
KEp =	Payment service provider electronic signature key public key
KEs =	Payment service provider electronic signature key secret key
KESp	Payment service provider electronic signature key server public key (not defined in the EBICS at present)
KESs =	Payment service provider electronic signature key server secret key (not defined in the EBICS at present)
KVCp =	Payment service provider encryption key client public key
KVCs =	Payment service provider encryption key client secret key
KVp =	Payment service provider encryption key public key
KVs =	Payment service provider encryption key secret key
KVSp =	Payment service provider encryption key server public key
KVSs =	Payment service provider encryption key server secret key

Table 1: General overview of keys

Version 3.10 Page 10 of 29



The abbreviations used here to denote keys apply exclusively to this document and do not correspond with the terms used in the EBICS specifications.

Two different scenarios are considered.

- 1 The payment service provider uses separate client and server keys.
- 2 The payment service provider uses combined client and server keys.

# 5.1.2.1 Use of separate client and server keys by the payment service provider

The following keys are used.

	Deutsche Bundesbank		Payment service provider	
	Client	Server	Client	Server
A. Abantination	BACs	BASs	KACs	KASs
Authentication	BACp	BASp	KACp	KASp
From intion	BVCs	BVSs	KVCs	KVSs
Encryption	BVCp	BVSp	KVCp	KVSp
Electronic	BECs	(BESs)1	KECs	(KESs) <sup>1</sup>
signature	BECp	(BESp) <sup>1</sup>	KECp	(KESp) <sup>1</sup>

Table 2: Use of separate keys

These are put to use depending on the direction of transfer and the type of transfer (upload/download transaction) (see No 5.2).

The payment service provider has the following secret keys.

KACs	=	Payment service provider authentication key client
KASs	=	Payment service provider authentication key server
KVCs	=	Payment service provider encryption key client
KVSs	=	Payment service provider encryption key server
KECs	=	Payment service provider electronic signature client

These are logical keys which are used in one of the respective roles. In physical terms, KACs, KASs, KVCs and KVSs can be identical, which means that only three secret keys can be used and securely saved instead of five. The Deutsche Bundesbank uses physically identical keys for BVCs/BACs and BASs/BVSs. The secret BESs and KESs keys are only envisaged in EBICS and are not currently used in communication with the Bundesbank.

The Deutsche Bundesbank administers the following public keys of the payment service provider.

KACp	=	Payment service provider authentication key client
KASp	=	Payment service provider authentication key server
KVCp	=	Payment service provider encryption key client
KVSp	=	Payment service provider encryption key server
KECp	=	Payment service provider electronic signature client

Version 3.10 Page 11 of 29

<sup>&</sup>lt;sup>1</sup> Currently only envisaged in EBICS.



These are logical keys. The number of physical keys is dependent on the implementation by the payment service provider. It may be the case that a payment service provider uses a physical key for several logical keys (for example, KACp, KASp, KVCp and KVSp could be identical in physical terms). The Deutsche Bundesbank uses physically identical keys for BVCp/BACp and BASp/BVSp. The public BESp and KESp keys are only envisaged in EBICS and are not currently used in communication with the Deutsche Bundesbank.

# 5.1.2.2 Use of a combined client and server key by the payment service provider The following keys are used.

	Deutsche Bundesbank		Payment service provider
	Client	Server	
A. ith antication	BACs	BASs	KAs
Authentication	BACp	BASp	KAp
Coomination	BVCs	BVSs	KVs
Encryption	BVCp	BVSp	KVp
Electronic	BECs	(BESs) <sup>1</sup>	KEs
signature	BECp	(BESp) <sup>1</sup>	KEp

Table 3: Use of combined keys

These are put to use depending on the direction of transfer and the type of transfer (upload/download transaction) (see No 5.2).

The payment service provider has the following secret keys.

KAs = Payment service provider authentication keyKVs = Payment service provider encryption key

KEs = Payment service provider electronic signature key

These are logical keys which are used in one of the respective roles. In physical terms, KAs and KVs can be identical, which means that only two secret keys can be used and securely saved instead of three. The Deutsche Bundesbank uses physically identical keys for BVCs/BACs and BASs/BVSs. The secret BESs key is only envisaged in EBICS and is not currently used in communication with the Deutsche Bundesbank.

The Deutsche Bundesbank administers the following public keys of the payment service provider.

KAp = Payment service provider authentication key
KVp = Payment service provider encryption key

KEp = Payment service provider electronic signature key

These are logical keys. The number of physical keys is dependent on the implementation by the payment service provider. It may be the case that a payment service provider uses a physical key for several logical keys (KAp and KVp could be identical in physical terms). The Deutsche Bundesbank uses physically identical keys for BVCp/BACp and BASp/BVSp. The public BESp key is only envisaged in EBICS and is not currently used in communication with the Deutsche Bundesbank.

Version 3.10 Page 12 of 29



#### 5.1.3 Key management

#### 5.1.3.1 Initialisation

Once the payment service provider has received the bank parameters from the Deutsche Bundesbank, it has to initialise itself in the Deutsche Bundesbank's EBICS system. Initialisation is effected using order types "INI" and "HIA" in accordance with the specifications stated in the data telecommunication agreement.

Once the hash values delivered with the application for approval have been positively verified, the Deutsche Bundesbank changes the status of the keys that were transferred by the payment service provider to "activated". The payment service provider collects the Deutsche Bundesbank's public keys using order type "HPB". Once the Deutsche Bundesbank's public keys have been positively verified against the hash values published by the Deutsche Bundesbank via a separate channel, they are to be activated by the payment service provider. The payment service provider is sent the currently valid hash values for submission together with the bank parameters.

The Deutsche Bundesbank's public keys for the encryption and the authentication signature are delivered with the order type "HPB". The signature key will not be provided until the electronic signature for payment service providers has been incorporated into the data telecommunication agreement. Once this stage is complete, the payment service provider will be able to transmit send instructions to the Deutsche Bundesbank.

For data deliveries by the Deutsche Bundesbank to a payment service provider, the Deutsche Bundesbank initialises itself in the latter's EBICS system. This occurs in the same way that the payment service provider initialises itself on the Deutsche Bundesbank's EBICS system using order types "INI" and "HIA". For this, the Deutsche Bundesbank requires the payment service provider's banking parameters which are submitted with the application for approval. The hash values of the keys that are used by the Deutsche Bundesbank for the delivery are sent to the payment service provider in the form of an initialisation letter. The payment service provider is required to compare the values of the keys transmitted using EBICS against the values in the initialisation letters. Once the keys have been positively verified against the initialisation letters, they are to be activated by the payment service provider. The Deutsche Bundesbank collects the latter's public keys using order type "HPB" and activates these once they have been positively verified against the hash values that were communicated separately by the payment service provider.

## 5.1.3.2 Exchange of keys

The Deutsche Bundesbank's keys have a defined validity period; the Deutsche Bundesbank generates a new public key once a year. The exact time at which this changeover is made and the new hash values are communicated to the payment service providers via an e-mail sent to the address specified for this purpose as part of the EBICS customer ID data in accordance with form 4750 "Application for communication via EBICS". Information on the changeover can also be found on the Deutsche Bundesbank website at www.bundesbank.de > Tasks > Payment systems > Publications > Procedural rules. The payment service

Version 3.10 Page 13 of 29



provider is required to collect and activate the new public keys for submission using order type "HPB".

Upon introducing a new public key as at a specific reference date, the new public key and its predecessor are supported concurrently for a period of no more than three months. See point 5.2.3.1 for more information on the special circumstances associated with the first-time submission of a file using the old key (following the generation of a new key).

The Deutsche Bundesbank performs the update of the public keys on the payment service provider's EBICS system for delivery using order types "PUB" and "HCA".

The Deutsche Bundesbank is to be informed in good time if a payment service provider is planning to exchange the keys. The payment service provider is responsible for updating the keys for submission in the Deutsche Bundesbank's EBICS system using order types "PUB" and "HCA". The hash values of the new keys are to be sent to the Deutsche Bundesbank for delivery. In this case, the update of the keys is performed by the Deutsche Bundesbank using order type "HPB" and the new keys are then activated once the new hash values have been positively verified.

#### 5.1.3.3 Blocks

The Deutsche Bundesbank is to be informed immediately if a payment service provider's active keys are compromised. At the same time, the affected keys are also to be blocked. The keys can be blocked in one of two ways.

- By written instruction to the Deutsche Bundesbank, Central Office, Z 201-2 (Fax: +49 69 9566 50 8067) to have the relevant public keys blocked. This instruction must be signed by authorised representatives or signatories.
- By blocking the keys in the Deutsche Bundesbank's EBICS system using order type "SPR".

The immediate result of the instruction to initiate a block using order type "SPR" is that all deliveries secured with the blocked keys are rejected. In addition, the affected public keys are also to be blocked on the payment service provider's EBICS system, with the result that no further deliveries can be made by the Deutsche Bundesbank using the compromised keys. New pairs of keys have to be generated by the payment service provider and new initialisation letters sent to the Deutsche Bundesbank to enable communication to be reestablished.

If the Deutsche Bundesbank's keys are compromised, the Deutsche Bundesbank will immediately re-initialise itself using valid keys.

Version 3.10 Page 14 of 29



#### 5.1.4 TLS server certificates

#### 5.1.4.1 General information

At the transport level, an SSL certificate is required for the TLS-based server authentication to create an encrypted connection (standard port 443) between the Deutsche Bundesbank and the customer systems.

To simplify the certificate verification procedure for customers, the Deutsche Bundesbank supports certification by a commercial trust centre, the CA certificates of which are already integrated into most of the keystores. For customers, the authenticity of the Deutsche Bundesbank's public key can therefore be confirmed by automatically checking the digital signature of the CA.

For live operations, the Deutsche Bundesbank also requires customers to issue certificates which have been certified by a commercial trust centre.

According to a recommendation of the Federal Office for Information Security (BSI)<sup>2</sup>, only the current encryption version TLS 1.2 is supported with the "cipher suites" supported and recommended under TLS 1.2.

# 5.1.4.2 Fingerprint comparison

As an additional support service for checking the authenticity of a certificate, the currently valid fingerprint will be published on the Deutsche Bundesbank's website as a separate annex to this document.

## 5.2 Technical description of the procedure

## 5.2.1 EBICS parameters

Parameters similar to those in the data telecommunication agreement are used for communication between a payment service provider and the Deutsche Bundesbank. Here, the participant ID and the customer ID of the Deutsche Bundesbank are specified and are announced with the authorisation documents. The participant ID and customer ID for payment service providers are also issued by the Deutsche Bundesbank. The structure of the customer ID conforms with the content of the EBICS specifications. It always consists of eight characters and starts with a letter of the alphabet.

The Deutsche Bundesbank's bank parameters can be called up from the EBICS system using order type "HPD".

All submissions and deliveries are encrypted (with the exception of order types INI and HIA) and compressed. Encryption (hybrid procedure 3DES/RSA) and compression (ZIP compressed format) comply with the specifications in the data telecommunication agreement.

Version 3.10 Page 15 of 29

 $<sup>^2\,</sup>BSI\,TR-02102-2\;(https://www.bsi.bund.de/DE/Publikationen/TechnischeRichtlinien/tr02102/index\_htm.html)$ 



The parameters and the information which are relevant for transmission via EBICS are not communicated in the file name but via the EBICS XML envelope.

#### 5.2.2 Allocation of an order number

The specifications for the EBICS connection stipulate that since version 2.5 (schema H004) the order number is assigned by the bank server.

An error message will be generated whenever an order number is assigned by the customer system.

# 5.2.3 Upload transactions

# 5.2.3.1 Direction of transfer: payment service provider -> Deutsche Bundesbank

All files submitted to the Deutsche Bundesbank are EBICS upload transactions to the Deutsche Bundesbank's EBICS system.

Each time communication is established, the Deutsche Bundesbank checks the hash value of the currently valid public key. Should the result of the check prove negative during the period when the Deutsche Bundesbank is concurrently supporting two public keys (see point 5.1.3.2), the customer will receive an error code message stating the EBICS return code "EBICS\_BANK\_PUBKEY\_UPDATE\_REQUIRED" when a file is first submitted following the generation of a new key and the system registers that the old key is being used. The error message draws attention to this occurrence and the need to make a corresponding update. In addition, a one-off entry is made in the customer report to flag the outdated public key. The rejected file must then be submitted afresh using either the old or the new key.

Further orders can be sent by the payment service provider during the transition period using the old public key or the old hash value. These will be accepted without triggering another error message or requiring an additional entry in the customer report.

Subsequently, EBICS participant-specific authorisation checks are performed, eg to identify whether the participant is authorised to initiate a specific order type. The results of other technical validation procedures, eg account eligibility checks, are conveyed to the PSP at a later date as part of the customer report.

The following order types can be used for submissions to the Deutsche Bundesbank.

#### 5.2.3.1.1 Submissions to the RPS SEPA-Clearer

Order type	Text	Format
QB1	BILATERAL INPUT CREDIT FILE (BCF)	BBkBCFBlkCdtTrf
	SEPA Credit Transfer (pacs.008)	
	SEPA Payment Cancellation Request (camt.056 SCT)	
	SEPA Credit Transfer Return (pacs.004 SCT)	
	SEPA Resolution of Investigation (camt.029)	
	SEPA Request for Status Update on a Request for	
	Recall by the Originator (pacs.028)	

Version 3.10 Page 16 of 29



Order type	Text	Format
QC1	INPUT CREDIT FILE (ICF)	BBkICFBlkCdtTrf
	SEPA Credit Transfer (pacs.008)	
	SEPA Payment Cancellation Request (camt.056 SCT)	
	SEPA Credit Transfer Return (pacs.004 SCT)	
	SEPA Resolution of Investigation (camt.029)	
	SEPA Request for Status Update on a Request for	
	Recall by the Originator (pacs.028)	
QC4	INPUT INQUIRY FILE FOR SCT (IQF)	BBkIQFBlkCdtTrf
	Claim of non Receipt (camt.027)	
	Request for Value Date Correction (camt.087) Resolution of Investigation (camt.029)	
	Payment Status Request (pacs.028)	
QD5	INPUT CORE DEBIT FILE (CORE IDF)	BBkIDFBlkDirDeb
	SEPA Direct Debit (pacs.003)	
	SEPA Payment Cancellation Request (camt.056 SDD)	
	SEPA Reject (pacs.002)	
	SEPA Reversal (pacs.007)	
	SEPA Return/Refund (pacs.004 SDD)	
QD6	INPUT B2B DEBIT FILE (B2B IDF)	BBkIDFBlkDirDeb
	SEPA Direct Debit (pacs.003)	
	SEPA Payment Cancellation Request (camt.056 SDD)	
	SEPA Reject (pacs.002)	
	SEPA Reversal (pacs.007)	
	SEPA Return (pacs.004 SDD)	
QK1	SCC INPUT DEBIT FILE (SCC IDF)	BBkIDFBIkSCC
	Interbank Card Clearing Collection (pacs.003 SCC)	
	Interbank Reversal (pacs.007 SCC)	
	Interbank Return/Refund (pacs.004 SCC)	
	Supplementary Data Field (supl.017)	

Table 4: Order types for submissions to the RPS SEPA-Clearer

Version 3.10 Page 17 of 29

## 5.2.3.1.2 Submissions to CAM-Individual

Order type	Text	Format
QG2	GT file; same-day euro credit	BBk SWIFT pursuant to the annex of
	transfers from payment service	the procedural rules for CAM-
	providers	Individual <sup>3</sup> ,
		No 1.8.1
		> EBCDIC/unpacked
		> Record length field: 6Bn <sup>4</sup>
QWT	WT file; foreign payment transfers	BBk-SWIFT pursuant to the annex of
	(in foreign currency) from payment	the procedural rules for CAM-
	service providers	Individual system,3 No 1.8.2
		> EBCDIC/unpacked
		> Record length field: 6Bn4

Table 5: Order types for submissions to CAM-Individual

# 5.2.3.1.3 Transaction volume enquiries addressed to KTO2 / electronic account information (EAI)

Order type	Text	Format
QMA	MA file containing interim transaction BBk SWIFT pursuant to the anne	
	volume and balance enquiries the procedural rules for EAI, No 1.5	
		> A and E record EBCDIC/unpacked
		> Record length field: 6Bn <sup>4</sup>

Table 6: Order type for transaction enquiries addressed to KTO2 / EAI

# 5.2.3.1.4 RPS cheque processing service

Order type	Text	Format
QS1	SVV BSE INPUT DEBIT FILE	BBkIDFBlkSVV
	BSE cheque (pacs.003 SVV)	
	BSE return account of cheques (pacs.004 SVV)	
QS2	SVV ISE INPUT DEBIT FILE	BBkIDFBlkSVV
	ISE cheque (pacs.003 SVV)	
QS3	SVV ISR INPUT DEBIT FILE	BBkIDFBlkSVV
	ISE return account of cheques (pacs.004 SVV)	

Table 7: Order type for submissions to the Bundesbank's RPS cheque clearing service

Transaction initialisation occurs in accordance with the EBICS standard. As the Deutsche Bundesbank does not currently provide any public signature keys for submissions with the

Version 3.10 Page 18 of 29

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<sup>&</sup>lt;sup>3</sup> The Deutsche Bundesbank's procedural rules for accessing electronic account information



order type "HPB", the maximum frequency (maxOccurs) for the element BankPubKeyDigests/Signature is to be set at 0. The usage data are transmitted in accordance with the EBICS standard.

The submitted data are to be kept for at least ten business days in case they have to be resent.

For the above-mentioned order types, only the instruction attribute "OZHNN" is permitted. The following keys are used.

Scenario 1: payment service provider uses separate keys

	Deutsche	Deutsche Bundesbank		service provider
	Signing,	Check,	Signing,	Check,
	encryption	decryption	encryption	decryption
Authentication	BASs	KACp	KACs	BASp
Encryption	-	BVSs	BVSp	-
Electronic	-	KECp	KECs	-
signature				

Table 8: Separate keys for submission

## Scenario 2: payment service provider uses combined keys

	Deutsche Bundesbank		Payment service provider	
	Signing, encryption	Check, decryption	Signing, encryption	Check, decryption
Authentication	BASs	КАр	KAs	BASp
Encryption	-	BVSs	BVSp	-
Electronic	-	KEp	KEs	-
signature				

Table 9: Combined keys for submission

# 5.2.3.2 Direction of transfer: Deutsche Bundesbank ⇒ payment service provider

All files delivered by the Deutsche Bundesbank are EBICS upload transactions to the payment service provider's EBICS system. The following order types are used for deliveries by the Deutsche Bundesbank.

Version 3.10 Page 19 of 29



# 5.2.3.2.1 Deliveries from the RPS SEPA-Clearer

Order type	Text	Format
QB2	BILATERAL SETTLED CREDIT FILE (BCF)	BBkBCFBlkCdtTrf
	SEPA Credit Transfer (pacs.008)	
	SEPA Payment Cancellation Request (camt.056 SCT)	
	SEPA Credit Transfer Return (pacs.004 SCT)	
	SEPA Resolution of Investigation (camt.029)	
	SEPA Request for Status Update on a Request for	
	Recall by the Originator (pacs.028)	
QC2	CREDIT VALIDATION FILE (CVF)	BBkCVFBlkCdtTrf
	SEPA Reject Credit Transfer via the SEPA-Clearer (pacs.002 SCLSCT)	
QC3	SETTLED CREDIT FILE (SCF)	BBkSCFBlkCdtTrf
	SEPA Credit Transfer (pacs.008)	
	SEPA Return (pacs.004 SCT)	
	SEPA Payment Cancellation Request (camt.056 SCT)	
	SEPA Resolution of Investigation (camt.029)	
QC5	INQUIRY VALIDATION FILE FOR SCT (QVF)	BBkQVFBlkCdtTrf
	SEPA Reject Credit Transfer durch den SEPA-Clearer (pacs.002 SCLSCT)	
QC6	OUTPUT INQUIRY FILE FOR SCT (OQF)	BBkOQFBlkCdtTrf
	Claim of non Receipt (camt.027)	
	Request for Value Date Correction (camt.087)	
	Resolution of Investigation (camt.029) Payment Status Request (pacs.028)	
QK2	SCC DEBIT VALIDATION FILE (SCC DVF)	BBkDVFBlkSCC
G. L.	SCC Reject Card Clearing Collection via the SEPA-	DDKD VI DIKOGO
	Clearer (pacs.002SCLSCC)	
QK3	SCC DEBIT NOTIFICATION FILE (SCC DNF)	BBkDNFBlkSCC
	Interbank Card Clearing Collection (pacs.003 SCC)	
	Supplementary Data Field (supl.017)	
QK4	SCC SETTLED DEBIT FILE (SCC SDF)	BBkSDFBlkSCC
	Interbank Reversal (pacs.007 SCC)	
	Interbank Return/Refund (pacs.004 SCC)	
	Supplementary Data Field (supl.017)	
QK5	SCC UNSETTLED DEBIT FILE (UDF)	BBkUDFBlkSCC
	SEPA Direct Debit (pacs.003)	
	SEPA Return/Refund (pacs.004)	
QK6	SCC RESULT OF SETTLEMENT FILE (RSF)	BBkRSFBlkSCC
	SEPA Reject (pacs.002SCLSCC)	

Version 3.10 Page 20 of 29



Order type	Text	Format
QR1	DAILY RECONCILIATION REPORT FOR CREDIT TRANSFERS (DRC) – no XML structure –	EBCDIC
QR5	DAILY RECONCILIATION REPORT FOR SCC (DRR SCC)  – no XML structure –	EBCDIC
QR9	DAILY RECONCILIATION REPORT FOR SCT INQUIRY (DRQ) - keine XML Struktur -	EBCDIC
QD7	DEBIT CORE VALIDATION FILE (DVF) SEPA Reject Direct Debit via the SEPA-Clearer (pacs.002 SCLSDD)	BBkDVFBlkDirDeb
QD8	DEBIT CORE NOTIFICATION FILE (DNF) SEPA Direct Debit (pacs.003) SEPA Payment Cancellation Request (camt.056 SDD) SEPA Reject (pacs.002)	BBkDNFBlkDirDeb
QD9	SETTLED CORE DEBIT FILE (SDF) SEPA Return/Refund (pacs.004 SDD) SEPA Reversal (pacs.007)	BBkSDFBlkDirDeb
QDA	DEBIT B2B VALIDATION FILE (DVF) SEPA Reject Direct Debit via the SEPA-Clearer (pacs.002 SCLSDD)	BBkDVFBlkDirDeb
QDB	DEBIT B2B NOTIFICATION FILE (DNF) SEPA Direct Debit (pacs.003) SEPA Payment Cancellation Request (camt.056 SDD) SEPA Reject (pacs.002)	BBkDNFBlkDirDeb
QDC	SETTLED B2B DEBIT FILE (SDF) SEPA Return (pacs.004 SDD) SEPA Reversal (pacs.007)	BBkSDFBlkDirDeb
QDD	UNSETTLED DEBIT CORE FILE (UDF) SEPA Reject (pacs.002SDD) SEPA Direct Debit (pacs.003) SEPA Return/Refund (pacs.004SDD)	BBkUDFBlkDirDeb
QDE	UNSETTLED DEBIT B2B FILE (UDF) SEPA Reject (pacs.002SDD) SEPA Direct Debit (pacs.003) SEPA Return/Refund (pacs.004 SDD)	BBkUDFBlkDirDeb

Version 3.10 Page 21 of 29



Order type	Text	Format
QDF	RESULT OF SETTLEMENT CORE FILE (RSF)	BBkRSFBlkDirDeb
	SEPA Reject (pacs.002 SCLSDD)	
QDG	RESULT OF SETTLEMENT B2B FILE (RSF)	BBkRSFBlkDirDeb
	SEPA Reject (pacs.002 SCLSDD)	
QR3	DAILY RECONCILIATION REPORT FOR	EBCDIC
	CORE DIRECT DEBITS (DRD CORE)	
	- no XML structure -	
QR4	DAILY RECONCILIATION REPORT FOR	EBCDIC
	B2B DIRECT DEBITS (DRD B2B)	
	<ul><li>no XML structure –</li></ul>	
QSD	SEPA-Clearer Directory	According to XML
	Conveyed in the rocs data record format of the	schema:
	European Automated Clearing House Association	Rocs.001.001.06
	(EACHA)	

Table 10: Order types for deliveries from the RPS SEPA-Clearer

# 5.2.3.2.2 Deliveries from CAM-Individual

Order type	Text	Format
QG4	GT file; same-day euro credit	BBk SWIFT pursuant to the annex to
	transfers to payment service	the CAM-Individual procedural rules <sup>3</sup> ,
	providers	No 1.8.1
		> A and E record EBCDIC/unpacked
		> Record length field: 6Bn <sup>4</sup>
QWA	Settlement of foreign payment	BBk SWIFT pursuant to the annex to
	transfer orders (WA files)	the CAM-Individual procedural rules <sup>3</sup> ,
		No 1.8.2
		> A and E record EBCDIC/unpacked
		> Record length field: 6Bn <sup>4</sup>
QM3	M3 message: Notification of a non-	
	processable file	
QMH	M6 message: Free text message	M messages pursuant to annex to the
QM7	M7 message: Notification of	CAM procedural rules <sup>3</sup> , No 1.9
	payments which have not been	> EBCDIC/unpacked
	executed or have been cancelled	> Record length field: 4Bn <sup>4</sup>
	owing to a lack of cover	
QM8	M8 message: Notification of non-	
	processable data records	
QM9	M9 message: Notification of	
	processed payments and delivered	
	files	

Table 11: Order types for deliveries from CAM-Individual

Version 3.10 Page 22 of 29



# 5.2.3.2.3 Deliveries from KTO2 / electronic account information

Order type	Text	Format
QMU	Interim transaction and balance	BBk SWIFT pursuant to the annex to
	reports	the procedural rules for accessing
QMK	MK file, end-of-day statement	electronic account information <sup>5</sup> , No 1.5
QMN	M3 file: notification that an MA file	> A and E record EBCDIC/unpacked
	could not be processed	> Record length field: 6Bn <sup>4</sup>

Table 12: Order types for deliveries from KTO2 /electronic account information

# 5.2.3.2.4 Deliveries from the Deutsche Bundesbank's RPS cheque clearing service

Order type	Text	Format
QS4	SVV BSE DEBIT VALIDATION FILE	BBkDVFBlkSVV
	BSE reject by the Deutsche Bundesbank (pacs.002 SVV)	
QS5	SVV BSE DEBIT NOTIFICATION FILE	BBkDNFBlkSVV
	BSE cheque (pacs.003 SVV)	
QS6	SVV BSE SETTLED DEBIT FILE	BBkSDFBlkSVV
	BSE return account of cheques (pacs.004 SVV)	
QS7	SVV ISE DEBIT VALIDATION FILE	BBkDVFBlkSVV
	ISE reject by the Deutsche Bundesbank (pacs.002 SVV)	
QS8	SVV ISE DEBIT NOTIFICATION FILE	BBkDNFBlkSVV
	ISE cheque (üacs.003 SVV)	
QS9	SVV ISR SETTLED DEBIT FILE	BBkSDFBlkSVV
	ISE return account of cheques (pacs.004.SVV)	
QSA	SVV ISR DEBIT VALIDATION FILE	BBkDVFBlkSVV
	ISE return account of cheques reject by Deutsche	
	Bundesbank (pacs.002 SVV)	
QSB	SVV BSE UNSETTLED DEBIT FILE (UDF)	BBkUDFBlkSVV
	BSE cheque (pacs.003SVV)	
	BSE return account (pacs.004SVV)	
QSC	SVV ISE UNSETTLED DEBIT FILE (UDF)	BBkUDFBlkSVV
	ISE cheque (pacs.003SVV)	
QSE	SVV ISR UNSETTLED DEBIT FILE (UDF)	BBkUDFBlkSVV
	ISE return account (pacs.004SVV)	
QSF	SVV BSE RESULT OF SETTLEMENT FILE (RSF)	BBkRSFBlkSVV
	BSE reject by Deutsche Bundesbank (pacs.002SVV)	
QSG	SVV ISE RESULT OF SETTLEMENT FILE (RSF)	BBkRSFBlkSVV
	ISE reject by Deutsche Bundesbank (pacs.002SVV)	

Version 3.10 Page 23 of 29



Order type	Text	Format
QSH	SVV ISR RESULT OF SETTLEMENT FILE (RSF)	BBkRSFBlkSVV
	ISE return account reject by Deutsche Bundesbank	
	(pacs.002SVV)	
QR6	DAILY RECONCILIATION REPORT FOR SVV BSE	EBCDIC
	(DRD ISE)	
QR7	DAILY RECONCILIATION REPORT FOR SVV ISE	EBCDIC
	(DRD ISE)	
QR8	DAILY RECONCILIATION REPORT FOR SVV ISR	EBCDIC
	(DRD ISR)	

Table 13: Order types for deliveries from the cheque clearing service

The transaction initialisation occurs in accordance with the EBICS standard. As no payment service provider public signature keys with the order type HPB are issued for deliveries, the maximum frequency (maxOccurs) for the element BankPubKeyDigests/Signature is set at 0. The usage data are transmitted in accordance with the EBICS standard.

On request, a second data delivery is possible up to a maximum of ten business days after the first successful delivery.

The above-mentioned order types are delivered with the instruction attribute "OZHNN" only. The following keys are used.

Scenario 1: payment service provider uses separate keys

	Deutsch	Deutsche Bundesbank		service provider
	Signing, encryption	Check, decryption	Signing, encryption	Check, decryption
Authentication	BACs	KASp	KASs	ВАСр
Encryption	KVSp	-	-	KVSs
Electronic	BECs	-	-	BECp
signature				

Table 14: Separate keys for deliveries

## Scenario 2: payment service provider uses combined keys

	Deutsche Bundesbank		Payment service provider	
	Signing, encryption	Check, decryption	Signing, encryption	Check, decryption
Authentication	BACs	KAp	KAs	ВАСр
Encryption	KVp	-	-	KVs
Electronic	BECs	-	-	BECp
signature				

Table 15: Combined keys for deliveries

Version 3.10 Page 24 of 29



#### 5.2.4 Download transactions

Download transactions represent an exception in terms of EBICS communication with the Deutsche Bundesbank. The following order types are realised as download transactions.

Order identification	Description
НРВ	Collect the Deutsche Bundesbank's or payment service provider's public keys
HPD	Collect bank parameters
HAC	Download customer protocol (XML-format)
PTK	Download customer protocol (DTAUS0-Format)
HKD	Collect customer and participant information
HTD	Call up customer and participant information

Table 16: Order types for retrievals from the EBICS system

The payment service provider's EBICS system must offer order types "HPB", "HPD" and "PTK"/"HAC" to enable the Deutsche Bundesbank to call up data.

The Deutsche Bundesbank uses order type "HPD" to provide its current bank parameter data for communication via EBICS. Customer protocols are provided using order type "HAC" or "PTK".

# 5.2.5 Customer protocols

Customer protocols are made available for download using order type "HAC". During a transitional period customer protocols are also provided by using order type "PTK".

The download of customer protocols with order type "HAC" or order type "PTK", if used during the transitional period, has to be requested with form 4750 "Application for communication via EBICS – payment service providers with a bank sort code".

#### Note:

Payment service providers which have already established an EBICS connection with the Deutsche Bundesbank need to successfully complete appropriate tests in order to extend the range of services currently used in the live environment, ie through the addition of the order type "HAC".

The Deutsche Bundesbank's customer protocol is EBICS-compliant according to section 10 of the Specifications for the EBICS connection (applying to order type "HAC") and section 4.2 of the Common Integrative Implementation Guide to Supplement the EBICS Specification (applying to order type "PTK").

The error codes defined in the customer-bank standard are used in the customer protocol, with the result that automated processing is possible (error codes for "HAC" are shown in section 10.3 of the EBICS specifications). If a payment service provider is not authorised to

Version 3.10 Page 25 of 29



submit instructions for the BIC specified in the tag <SndgInst> of the file header, the instruction is rejected with the participant-related EBICS error code [27] "unauthorised signatory" (for order type "PTK") and error code DS0H "NotAllowedAccount" (unauthorised signatory) for order type "HAC". The customer protocols can be called up for a maximum of ten business days.

In exchange for the data delivered by the Deutsche Bundesbank, the receiving payment service provider has to create an EBICS customer protocol in accordance with the data telecommunication agreement. It must likewise ensure that a customer protocol file notification is created for each order. The file notification should be structured as described in the descriptions of the Deutsche Bundesbank customer protocol (tables 17 to 20).

For the order types shown in tables 4 to 7, a file notification is displayed in the customer protocol.

# The file notification for order types QB1, QC1, QC4, QD5, QD6, QK1, QS1, QS2 and QS3 includes the following SEPA payment file header information.

Description	Field name	XML element file header
Type of payment	File type	FType
Sender's 11-character BIC	Sending institution	SndgInst 4
Creation date	File date and time	FDtTm
Number of payment records (total number of bulks)	Total number of bulks	For FType = "CORE IDF": NumDDBlk + NumPCRBlk + NumREJBlk + NumRVSBlk + NumRFRBlk For FType = "B2B IDF": NumDDBlk + NumPCRBlk + NumREJBlk + NumRVSBlk + NumRFRBlk For FType = "SCC IDF": NumDDBlk + NumPCRBlk + NumREJBlk + NumPCRBlk + NumREJBlk + NumRVSBlk + NumREJBlk + NumRVSBlk + NumRFRBlk For FType = "ICF": NumCTBlk + NumRFRBlk + NumPCRBlk + NumROIBlk For FType = "BCF": NumCTBlk + NumPCRBlk + NumROIBlk + NumPCRBlk + NumROIBlk + NumRFRBlk For FType = "IQF": NumCNRBlk + NumRMPBlk + NumROQBlk + NumSRBlk
Sender's file reference	File reference	FileRef

Table 17: Structure of the customer protocol file notification for submissions to the RPS SEPA-Clearer and the RPS cheque processing service

Version 3.10 Page 26 of 29

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<sup>&</sup>lt;sup>4</sup> The BIC of the SEPA-Clearer is entered here as the sending institution (in production mode: MARKDEFF).



### Sample content of a QC1 file:

. . .

<AddtlInf>======</AddtlInf>

<AddtlInf>ICF</AddtlInf>

<AddtlInf>Sender's BIC : BANKDEFF500</AddtlInf> <AddtlInf>Creation date :2012-04-03T10:11:35</AddtlInf>

<AddtlInf>Number of payment records :397</AddtlInf>

<AddtlInf>Sender's file reference :1234567890123456</AddtlInf><AddtlInf>======</AddtlInf>

</StsRsnInf>

. . .

# For order type QG2 the file notification is structured as follows.

Description	Field name	Item
Type of payment	File designation/file type	A2
Bank sort code	Bank sort code of the file recipient;	A3
	in the case of submissions, the	
	bank sort code of the account-	
	holding Bundesbank branch.	
Account number	Bank sort code of the file sender	For submissions by
		payment service
		providers with a bank
		sort code: A4. For
		submissions by PSPs
		without a bank sort
		code: A9.
Customer	File sender's identifier	A5
Creation date	File creation date	A6
File number	Unique number of the file	A7
Number of payment	Number of data records	E3
records		
Sum total of the amounts	Sum of the amounts in euro	E9a

Table 18: Structure of the customer protocol file notification (for euro-denominated payment orders) in EA format

# For order type QWT, the file notification is structured as follows.

Description	Field name	Item
Type of payment	File designation/file type	A2
Bank sort code	Bank sort code of the file recipient; in the case of submissions, the bank sort code of the account-holding Bundesbank branch.	A3
Account number	Bank sort code of the file sender	For submissions by payment service providers with a bank sort code: A4. For submissions by payment service

Version 3.10 Page 27 of 29



		providers without a bank sort code: A9.
Customer	File sender's identifier/bank name	A5
Creation date	File creation date	A6
File number	Unique number of the file	A7
Number of payment records	Number of data records	E3
Sum total of the amounts	Sum total of the amount fields	E5

Table 19 Structure of the customer protocol file notification for foreign currency payments

# For order type QMA, the file notification is structured as follows.

Description	Field name	Item
Type of payment	File designation/file type	A2
Bank sort code	Bank sort code of the file	A3
	recipient; in the case of	
	submissions, the bank sort code	
	of the account-holding	
	Bundesbank branch.	
Account number	Bank sort code of the file sender	For submissions by
		payment service
		providers with a bank
		sort code: A4.
		For submissions by
		payment service
		providers without a bank
		sort code: A9.
Submitting party	File sender's identifier	A5
Creation date	Date	A6
	Business day	
File number	Unique number of the file	A7
Number of data records	Number of data records	E3

Table 20: Structure of the customer protocol file notification for transaction volume enquiries

The protocols are to be kept for at least ten business days so that they can be called up by the Deutsche Bundesbank.

Key management and the other order types inherent in the system must be logged in accordance with the EBICS specifications. These protocols are likewise to be made available by the Deutsche Bundesbank and by the payment service provider for ten business days.

## 5.3 Backup procedure

For EBICS communication with payment service providers, the backup procedure is to send the messages by data telecommunication on the next business day.

Version 3.10 Page 28 of 29



# 6 Test requirements

Please consult the "Annex on testing the procedural rules for communicating via EBICS with deposit-taking credit institutions and other account holders with a bank sort code" for further information on the testing procedure.

Version 3.10 Page 29 of 29