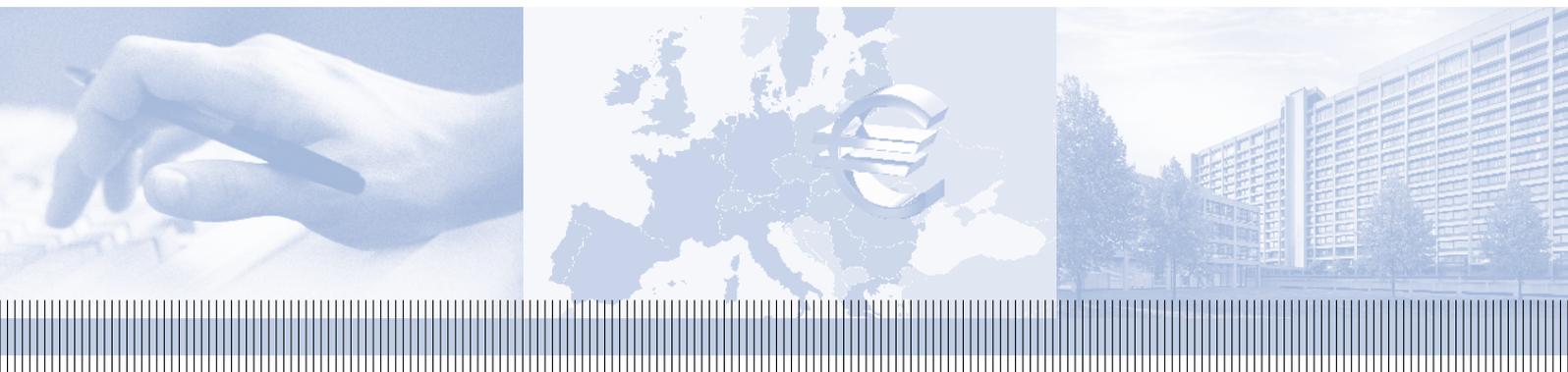


PROCESSING OF RETAIL PAYMENTS: SERVICES OFFERED BY THE DEUTSCHE BUNDESBANK



Department Payments and Settlement Systems

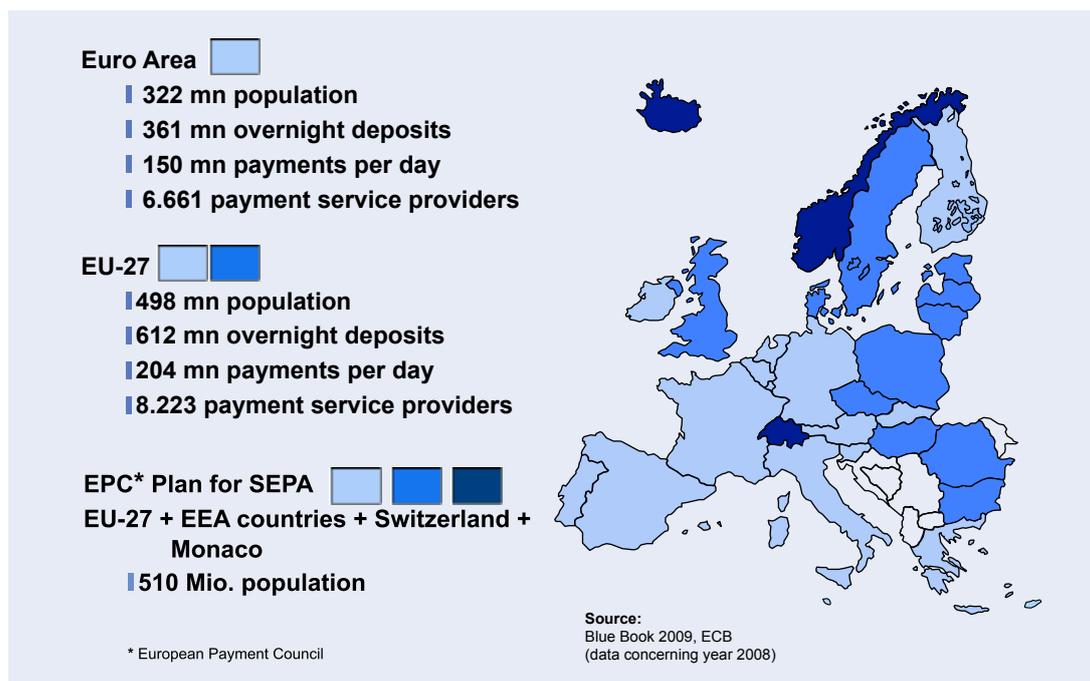
Processing of retail payments: Services offered by the Deutsche Bundesbank

The Deutsche Bundesbank offers its bank and non-bank customers a high performance and cost-effective procedure for the processing of non-urgent domestic and cross-border euro payments. SEPA payments (SEPA Credit Transfers, SEPA Core Direct Debits and SEPA Business-to-Business (B2B) Direct Debits) are processed in the SEPA-Clearer of Bundesbank's Retail Payment System (RPS). Domestic, non-SEPA-compliant payments in DTA format (exchange of data media) and in SWIFT message format MT 103+ are processed directly in the RPS. The Bundesbank procedures for retail payments are used particularly by medium-sized and smaller credit institutions which do not belong to a giro network as a means of processing credit transfers, direct debit pay-

ments and for the collection of cheques. Public authorities can also process SEPA payments via the Bundesbank. This requires access to the Customer Access Mechanism (CAM-SEPA). Public authorities can submit non-SEPA-compliant payments in DTA format directly to the RPS. The Bundesbank is valued as a reliable and neutral partner by both the banking industry and the public sector for the settlement of retail payments.

Europe-wide accessibility via the RPS SEPA-Clearer

The Deutsche Bundesbank has expanded its range of retail payment services in view of the new SEPA instruments and through the RPS SEPA-Clearer offers a competitively neutral, high-performance and cost-effective payment procedure for the settlement of SEPA payments.



All credit institutions participating in the SEPA schemes can become participants in the RPS SEPA-Clearer.

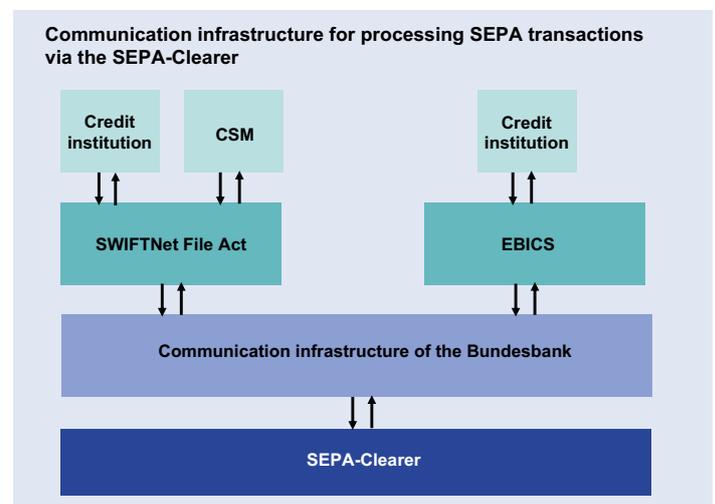
One condition for participation is that the credit institutions must sign the relevant Adherence Agreements, and have thus accepted the terms and conditions of the SEPA Rulebooks for credit transfers and Direct Debits and that they have converted their systems to enable the processing of SEPA payments.

Payments for credit institutions which are neither direct nor indirect participants in the RPS SEPA-Clearer are forwarded by the Bundesbank via other ACHs. To this end, the Bundesbank is connected to the EBA (Euro Banking Association) Clearing STEP2 SCT and SDD services. The Bundesbank is also connected to other European clearing houses such as the STEP.AT system of the Oesterreichische Nationalbank (OeNB) and the Spanish Iberpay clearing house. This ensures the Bundesbank is able to provide its participants with a secure and European-wide access in order to process their SEPA payments.

Payment processing in the RPS SEPA-Clearer

Payments processing in the RPS SEPA-Clearer is effected in line with the TARGET calendar; German national and regional public holidays are not taken into account. Payments are executed in accordance with the cut-off times applying to the respective submission window. One processing day consists of two processing-

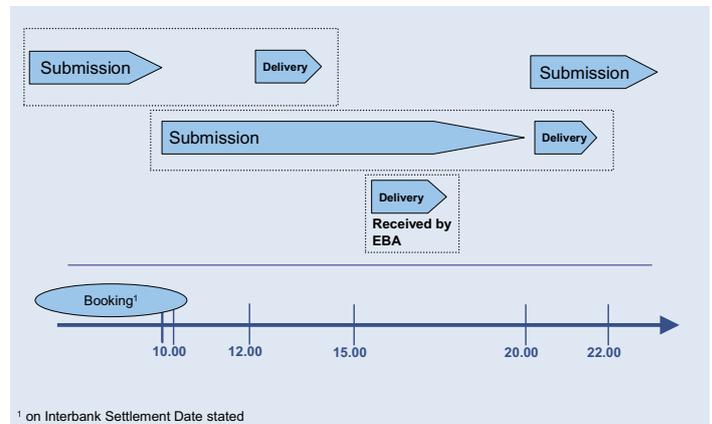
cycles for SEPA Credit Transfers and SEPA Direct Debits. Payments are settled via the participants' accounts held at the Bundesbank. If desired, a participant can use a settlement agent. The SEPA Credit Transfers and SEPA Direct Debits are booked in accordance with the gross coverage principle on the basis of the submitted and delivered logical files.



At the end of every banking business day in the RPS SEPA-Clearer (approx. 22.00), every participant receives a separate daily reconciliation report for each of the services used (SEPA Credit Transfer, SEPA Core Direct Debit, SEPA B2B Direct Debit). These reports give a summary of the files for credit transfers and Direct Debits submitted to and received from the SEPA-Clearer. When delivering SEPA payments, the RPS SEPA-Clearer takes account of a given internal routing table based on the Bank Identifier Code (BIC). Separate routings may be set up for SEPA Credit Transfers and SEPA Direct Debits. Both inbound and outbound communication with the RPS SEPA-Clearer occurs exclusively by means of data telecommunication via SWIFTNet FileAct or EBICS (Electronic Banking Internet Communication Standard).

Processing of SEPA Credit Transfers via the RPS SEPA-Clearer*

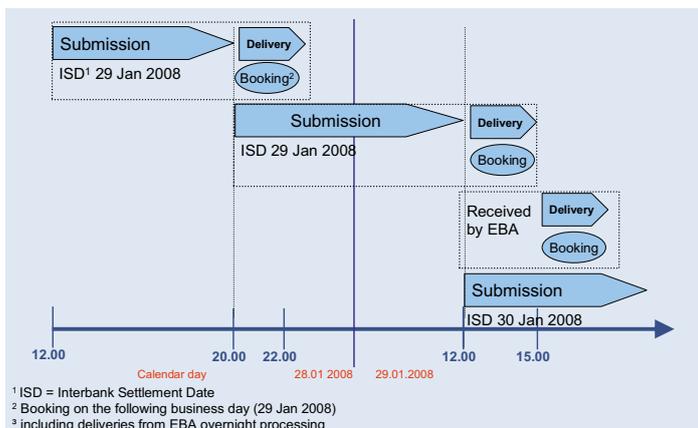
The equivalent values of SEPA Credit Transfer submitted after 20.00 on the previous day and by 12.00 on the current banking business day, are cleared and settled on the current banking business day. SEPA Credit Transfers submitted between 12.00 and 20.00 on the current banking business day are delivered in the evening of the current banking business day; however, these transactions are booked on the next banking business day.



Processing of SEPA Direct Debits via the RPS SEPA-Clearer*

With regard to the settlement of SEPA Direct Debits, it should be noted that, owing to the design of the SEPA Direct Debit procedure, the clearing and settlement of payment messages is usually handled at different times. SEPA Direct Debits submitted between 10.00 and 20.00 on the current banking business day, are delivered on the current banking business day from around 20.15 onwards. SEPA Direct Debits submitted after 20.00 on the preceding business day and by 10.00 on the current banking business day, are delivered on the current banking business day from around 12.15 onwards.

As a defined due date is stipulated for SEPA Direct Debits, the equivalent values of the SEPA Direct Debits that have already been cleared are settled at around 10.15 on the bank business day specified in the payment message (Interbank Settlement Date, ISD).



* The processing and cut-off times refer to the processing of SEPA payments from banks. For non-banks the processing and cut-off times of the Customer Access Mechanism (CAM) have to be taken into account.

DTA clearing in the Retail Payment System (RPS)

Until all euro payments are migrated to SEPA, the Deutsche Bundesbank will continue to offer its customers a clearing service for payments in the German DTA format via RPS. Similarly, until further notice, payments in MT 103+ format can be exchanged in the RPS via the Bundesbank connection to the EBA Clearing STEP2 XCT service.

All Bundesbank account holders are eligible to participate in the file-oriented RPS procedure. The gross settlement procedure used in RPS means that the payee is not exposed to any credit risk. The settlement of payments is float-free. Each working day around 10.1 million transactions are settled (amounting to almost 8.9 billion) of which approximately 42% are credit transfers and roughly 58% are collection orders for Direct Debits and converted cheques.

Payment processing in the RPS

When processing domestic retail payments using the Deutsche Bundesbank's Retail Payment System (RPS), domestic payments must be submitted in DTA format. Credit institutions and public authorities may only submit and deliver payment orders in file format via data telecommunication. The deployed communication protocols are SWIFTNet File Act and EBICS.¹

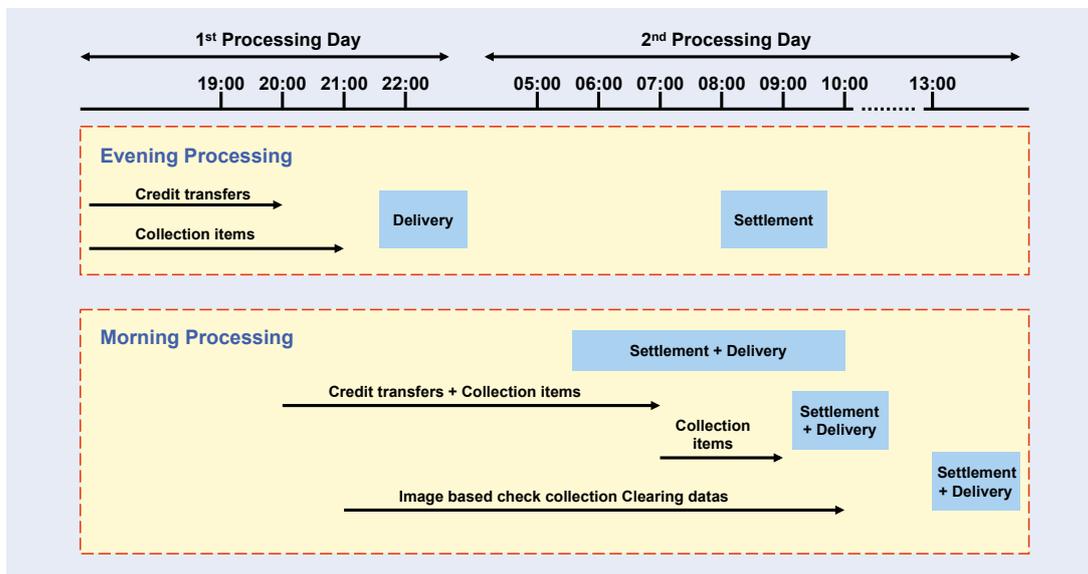
Payments are processed in several processing windows. Those submitted between 07.00 and 20.00 (cut-off time for credit transfers) or 09.00 and 21.00 (cut-off time for direct debit collection) are processed during the evening processing window. The equivalent values of the credit transfers received are blocked in the submitter's Bundesbank account from 19.00 onward, with recourse to available collateral where applicable. Actual processing of the payments is effected in the late evening. Once processing has been completed – at around 22.00 – the files with payments are sent to the participants via data telecommunication. On the next banking business day after submission, the blocked amounts for credit transfers are settled (submitted credit transfers and delivered collection items are debited, submitted collection items and received credit transfers are credited).

Payments submitted via data telecommunication between 20.00 and 07.00 (cut-off time for credit transfers) or 21.00 and 09.00 (cut-off time for direct debit collection) are pro-

Cut-off times

Evening processing	
■ Credit transfers	20.00
■ Collection items	21.00
Morning processing	
■ Credit transfers	07.00
■ Collection items	09.00
Clearing data records for payments from the image-based cheque collection procedure	10.00

¹ The existing communication protocols of EÖ-Gateway will be replaced on 31 December 2010.



cessed during the morning processing window. This gives the participants the opportunity to immediately forward late payments (for example, card payments) to RPS. On this basis, it is even possible to achieve same-day processing as payments in the morning processing window can be cleared and settled on the same day they are received.

All amounts are calculated gross in the RPS using the account held at the Bundesbank by which is meant the individual sums of the submitted or delivered files. The respective cut-off times for credit institutions and public authorities can be found in the current procedure descriptions.

Processing of cross-border payments in the RPS

Since 2003, the Deutsche Bundesbank's RPS has been connected to the EBA Clearing STEP2 XCT service as a direct participant for

the purpose of settling cross-border retail payments which conform with the Pricing Regulation (EU Regulation 924/2009 repealing 2560/2001). STEP2 XCT is a clearing service for the processing of cross-border non-SEPA-compliant euro credit transfers. The communication structure already in use for domestic RPS payments is used for the processing. Alongside credit institutions, the STEP2 XCT service is also used by non-bank customers of the Bundesbank (eg public authorities) for the processing of non-SEPA-compliant cross-border euro payments. The Deutsche Bundesbank exercises two functions within STEP2 XCT. Firstly, as a direct participant, the Bundesbank offers other institutions the possibility to be an indirect participant in that it acts as an intermediary, submitting payments from such banks in STEP2 and receiving STEP2 payments for them. Secondly, the Bundesbank acts, alongside other institutions, as an "entry point" for incoming STEP2 XCT payments: It delivers payments via RPS for recipients in Germany which are not registered as direct or indirect STEP2 participants.

Fees

The Bundesbank charges a fee of € 0.0025 per data record for retail payments (SEPA; DTA) that are submitted by credit institutions via data telecommunication. This fee also applies if payments from the Bundesbank clearing procedure are forwarded to other clearing infrastructures. For payments which are forwarded to the EBA Clearing STEP2 XCT service, the prices stated in the current Bundesbank price directory apply.

The prices stated in the current Bundesbank price directory also apply for those public authorities which are not exempted from charges.

The participation and registration fees for indirect participation in the EBA Clearing STEP2 procedures for the individual services (XCT, SCT and SDD) are passed on to the participants.