

GUIDELINES ON THE PAYMENT AND DATA ENTRY PROCESSES APPLICABLE IN THE INSTANT PAYMENT SYSTEM AND ON THE STANDARDISATION OF THE BASICS OF CERTAIN RELATED BUSINESS SERVICES

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1. PURPOSE OF THE GUIDELINES

It is the MNB's firm expectation that, building on the basic infrastructure of instant payments, market participants develop broadly utilisable, interoperable payment services in a way that the market participants providing payment services do not need to enter into separate agreements with each other regarding the interoperability of their respective services. The purpose of the document is to provide guidelines with respect to the operating rules applied by market participants that enable the uniform processing of instant payments. The application of these rules facilitates the interoperability of the services; moreover, it supports the widespread use of payment services and hence, the modernisation of domestic payment market. To this end, it is recommended that market participants develop and operate any additional services that rely on the instant payment infrastructure in accordance with these Guidelines. Another objective of these Guidelines is to support and accelerate the service developments linked to the instant payment service, to improve the competitiveness of existing market participants and to simplify the market entry of new participants.

The Guidelines present the basic payment and data entry processes of instant payment transactions that are recommended in various payment situations, and lay down rules concerning the operation of requests to pay and the minimum data content that supports business processes, but it is not intended to define complete business processes in full detail as it is the task of market participants to develop these during the creation of specific services. The Guidelines supplement the provisions of the legislation and rulebooks on the processing of instant payments. The document was prepared with the participation of the working group engaged in the standardisation of the basics of additional services within the framework of the instant payments project.

The rules and recommendations formulated in these Guidelines do not cover:

- the solution of customer authentication (is there a need for strong customer authentication [SCA] and if yes, how to solve this, with what participants),
- the detailed distinction between the payment initiation service provider (PISP) and the account servicing payment service provider (ASPSP) during the submission of the payment order,
- the execution process of intra-payment service provider payment transactions,
- the process of secondary account identifier mapping,
- the detailed clearing process within GIROInstant.

The Guidelines do not define a set of business rules concerning the procedure to be followed in the case of incorrect or duplicate payment transactions, but the processes and agreements between the participants of payment transaction processing should be designed in compliance with the rules pertaining to unjustified enrichment as specified in Title XXXII, Part Six of Act V of 2013 on the Civil Code.

2. RECOMMENDED EXECUTION PROCESSES OF INSTANT PAYMENTS

2.1. Payment process at physical points of sale

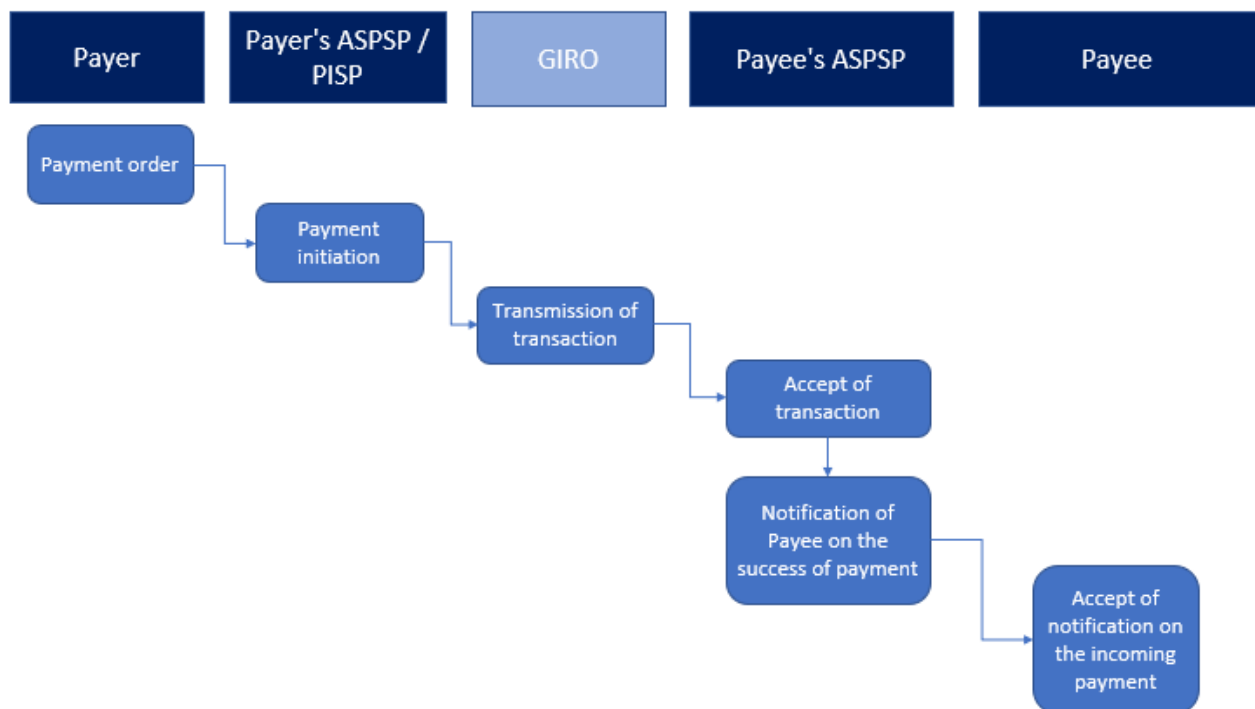
This chapter presents payment situations where the payer and the payee are physically at the same location and as such, the processes involved cover both in-store payments and payment transactions at mobile payment locations. Since in the vast majority of these payment situations the economic event can only be concluded after the completion of payment, the processes presented must include – as a common factor – the immediate notification about the crediting on the payee’s side with such data content that ensures the clear identification of the transaction initiated by the payer and the result of the execution.

Examples for main payment situations at physical points of sale:

- retail purchases: payment at the merchant’s cash register with or without the participation of the cashier
- payment for services: payment at the service provider’s cash register with or without the participation of the provider
- public sector payment situations: on-site payment of fees and charges for services related to the public sector
- automated payments: payments for purchases and services at unattended terminals and vending machines

2.1.1. Without request to pay, initiated on the payer’s device

Figure 1: Payment process without request to pay, initiated on the payer’s device



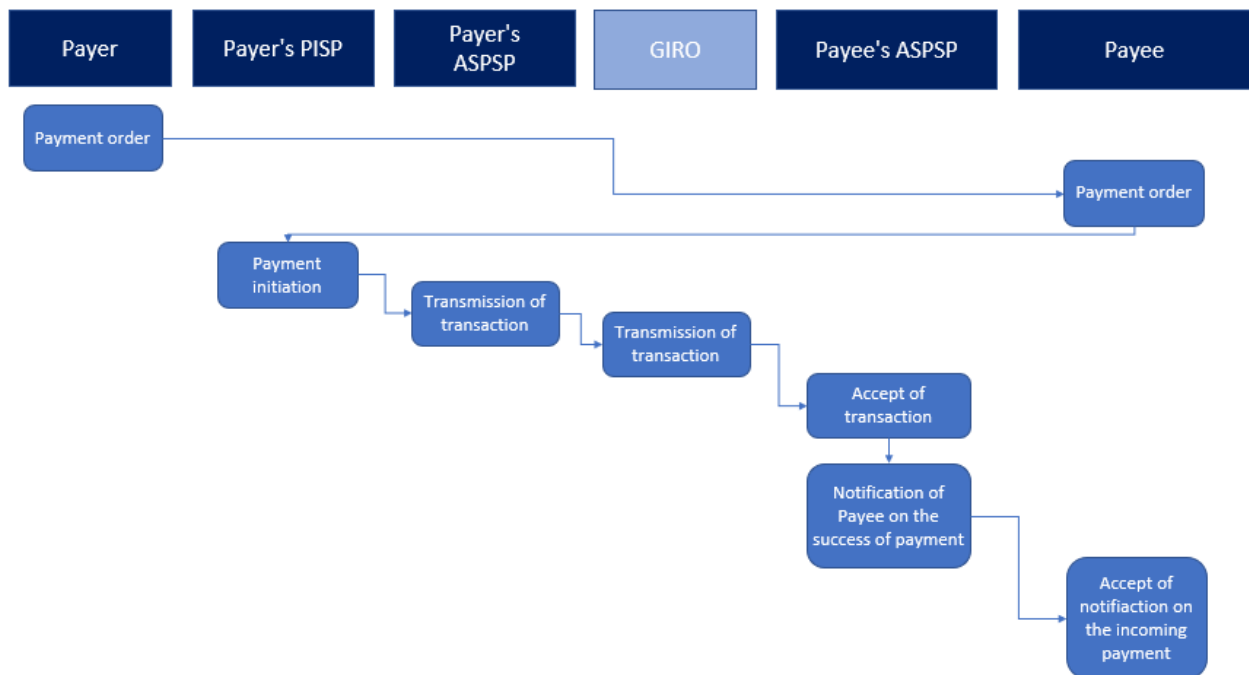
Recommended steps of the process:

1. The payer enters the payment data manually on his own device (e.g.: mobile phone) or applies a technological solution supported by the payee (e.g.: QR code scanner, NFC connection, Bluetooth connection).

2. After having recorded the payment data on his own device, the payer submits the payment order to his account servicing payment service provider (ASPSP) (e.g.: mobile application or internet bank interface) or to a payment initiation service provider (PISP) (e.g.: mobile application).
3. If the payer submitted the payment order to a PISP, the PISP forwards it to the payer's ASPSP.
4. If the payment order was submitted with the payee's secondary account identifier, either the PISP before forwarding the payment order to the ASPSP, or the payer's ASPSP – before or after the authentication or approval– submits a search request to query the payee's data required for forwarding the payment to GIROInstant (bank identifier code of the ASPSP [BIC], the payment account number [IBAN] and the name of the account holder) from the central database of secondary account identifiers.
5. The payer's ASPSP performs the preparations required for the execution of the transaction (acceptance, customer authentication, time stamping, checks).
6. After having performed the time stamping following the acceptance and customer authentication, the payer's ASPSP commences the processing of the order immediately; it blocks or debits the amount to be transferred on the payer's account, and forwards the transaction to GIROInstant.
7. GIROInstant accepts and processes the transaction and then forwards it to the payee's ASPSP.
8. If the payee's ASPSP sends a feedback in the form of a positive status report on the receiving of the transaction and the ability to credit it, GIROInstant finalises the transaction and inter-PSP settlement is executed.
9. The payee's ASPSP makes the amount received available to the payee immediately.
10. In the case of transactions initiated at physical points of sale, it is indispensable that the payee's ASPSP immediately notifies the payee of the crediting of the transaction amount to his account. This should be implemented with a data content and technological solution that ensures the identification of the payer's transaction on the payee's side (e.g.: at the merchant's cash register). This feedback sent to the payee that provides the means for concluding the economic event at physical points of sale.

2.1.2. Without request to pay, initiated on the payee's device

Figure 2: Payment process without request to pay, initiated on the payee's device

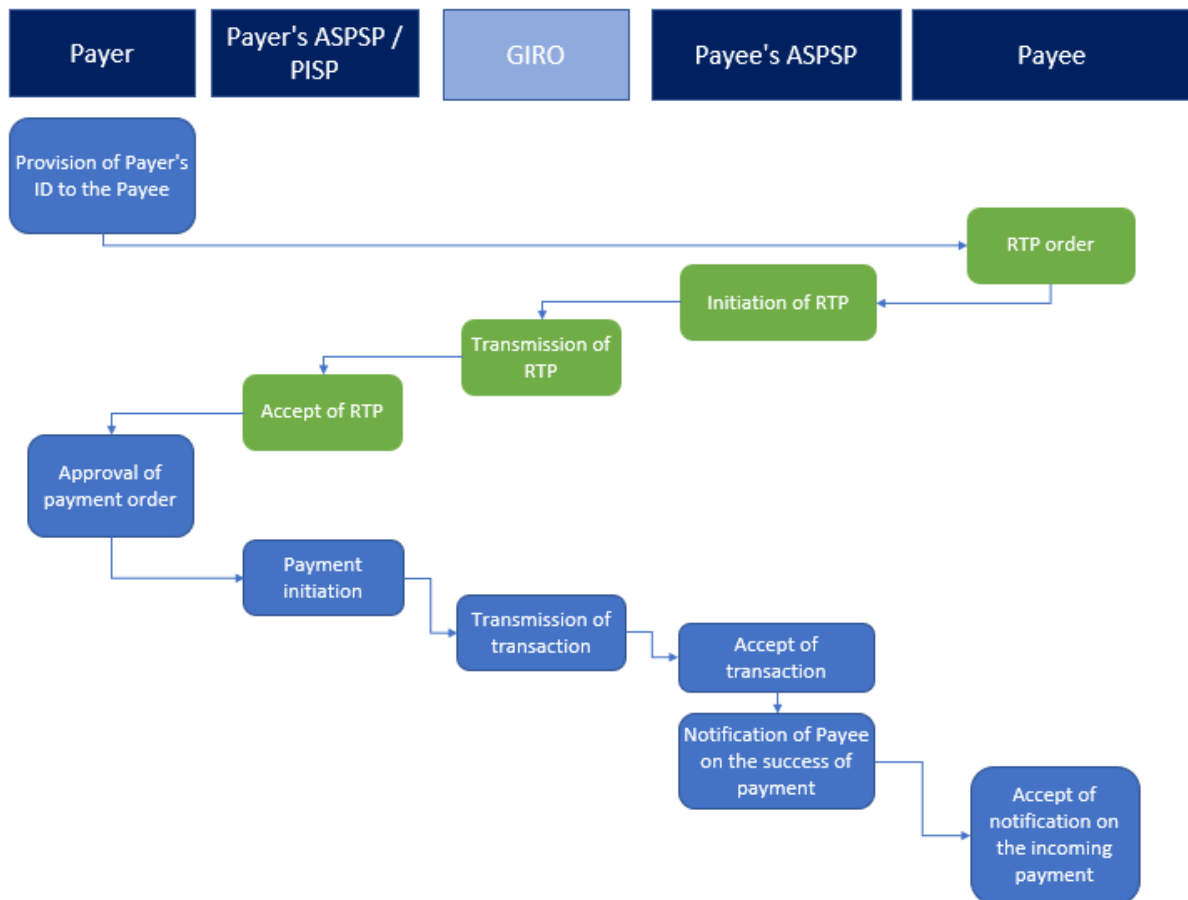


Recommended steps of the process:

1. Identification of the payer by entering his data manually on the payee's device (e.g.: POS terminal, cash register, touchscreen, mobile phone) or through the application of a technological solution (e.g.: QR code scanner, NFC connection, Bluetooth connection, loyalty card reader).
2. Initiation of the payment transaction on the payee's device after approval by the payer.
3. If the payee itself is not a payment initiation service provider (PISP), the submission of the payment order also requires the participation of a PISP.
4. If the PISP is not identical with the payer's account servicing payment service provider (ASPSP), the PISP forwards the payment order to the payer's ASPSP.
5. If the payment order was submitted with the payee's secondary account identifier and the PISP did not perform the query before forwarding the payment order to the ASPSP, before or after the authentication or approval the payer's ASPSP submits a search request to query the payee's data required for forwarding the payment to GIROInstant (bank identifier code of the ASPSP [BIC], the payment account number [IBAN] and the name of the account holder) from the central database of secondary account identifiers.
6. The payer's ASPSP performs the preparations required for the execution of the transaction (acceptance, customer authentication, time stamping, checks).
7. After having performed the time stamping following the acceptance and customer authentication, the payer's ASPSP commences the processing of the order immediately; it blocks or debits the amount to be transferred on the payer's account, and forwards the transaction to GIROInstant.
8. GIROInstant accepts and processes the transaction and then forwards it to the payee's ASPSP.
9. If the payee's ASPSP sends a feedback in the form of a positive status report on the receiving of the transaction and the ability to credit it, GIROInstant finalises the transaction and inter-PSP settlement is executed.
10. The payee's ASPSP makes the amount received available to the payee immediately.
11. In the case of transactions initiated at physical points of sale, it is indispensable that the payee's ASPSP immediately notifies the payee of the crediting of the transaction amount to his account. If the credit transfer was initiated through a PISP, after having received from GIRO the pacs.002 message on the execution of the credit transfer, the payer's bank is recommended to promptly forward the notification on the result of the execution of the credit transfer to the PISP submitting the order, which can in this case immediately notify the merchant of the execution of the payment. This should be implemented with a data content and technological solution that ensures the identification of the payer's transaction on the payee's side (e.g.: at the merchant's cash register). This feedback sent to the payee that provides the means for concluding the economic event at physical points of sale.

2.1.3. With request to pay

Figure 3: Payment process with request to pay



Recommended steps of the process:

1. The payer provides to the payee his data required for launching the request to pay.
2. The payee may launch the request to pay through a technical service provider, a PISP or through his ASPSP, but he can even submit it directly to GIROInstant if he contracted to connect to the central infrastructure as direct participant.
3. If the request to pay was submitted with the payer's secondary account identifier, the payee's PISP – if there is one participating in the process – or the payee's ASPSP submits a search request to query the payer's data required for forwarding the request to pay to GIROInstant (bank identifier code of the account manager [BIC], the payment account number [IBAN] and the name of the account holder) from the central database of secondary account identifiers. Neither the payee nor the technical service provider can use this option in the lack of a PISP status; in such cases either another payment service provider must be included in the process, or they cannot send to the payer request to pay messages based on secondary account identifiers.
4. GIROInstant forwards the request to pay to the payer's ASPSP.
5. The payer's ASPSP (or other service provider, see Chapter 2.5) receives the request to pay and displays it for the payer.
6. The payer approves the payment order generated by his ASPSP based on the request to pay.
7. The payer's ASPSP performs the preparations required for the execution of the transaction (acceptance, customer authentication, time stamping, checks).
8. After having performed the time stamping following the acceptance and customer authentication, the payer's ASPSP commences the processing of the order immediately; it blocks or debits the amount to be transferred on the payer's account, and forwards the transaction to GIROInstant.

9. GIROInstant accepts and processes the transaction and then forwards it to the payee's ASPSP.
10. If the payee's ASPSP sends a feedback in the form of a positive status report on the receiving of the transaction and the ability to credit it, GIROInstant finalises the transaction and inter-PSP settlement is executed.
11. In the case of transactions initiated at physical points of sale, it is indispensable that the payee's ASPSP or the service provider launching the request to pay immediately notifies the payee of the crediting of the transaction amount to his account. This should be implemented with a data content and technological solution that ensures the identification of the payer's transaction on the payee's side (e.g.: at the merchant's cash register). This feedback sent to the payee that provides the means for concluding the economic event at physical points of sale.

2.2. Payment process at electronic points of sale

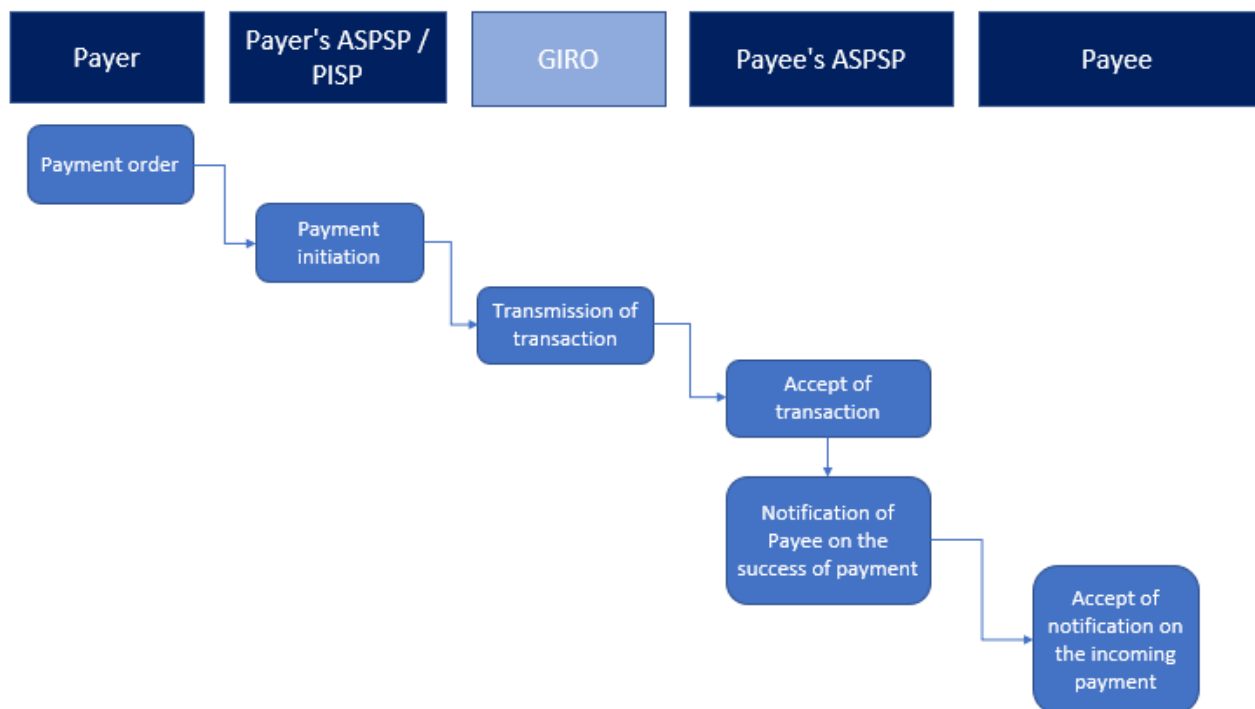
This chapter presents payment situations where the payer and the payee are not at the same location physically. Typically, these situations involve transactions initiated over the internet, in a webshop or at an online marketplace.

Examples for the main payment situations:

- retail purchases: payment for online purchases
- payment for services: payment for services purchased over the internet
- public sector payment situations: online payment of fees and charges for services related to the public sector

2.2.1. Without request to pay, initiated on the payer's device

Figure 4: Payment process without request to pay, initiated on the payer's device

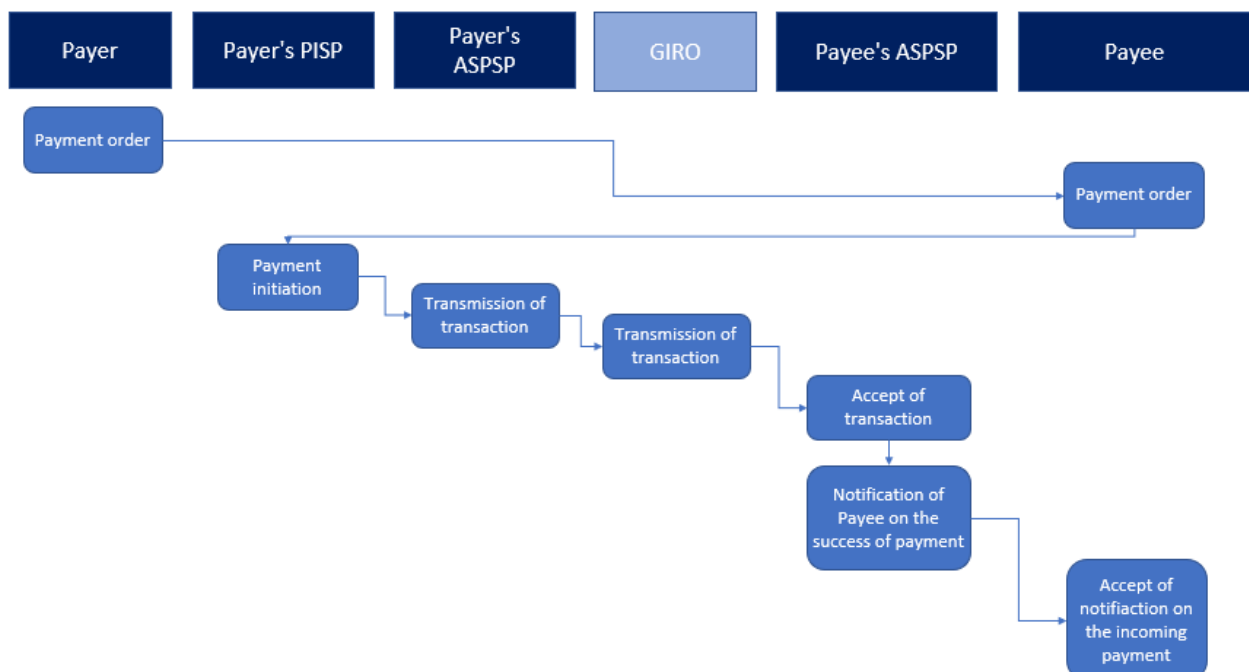


Recommended steps of the process:

1. The payer enters the payment data manually on his own device (e.g.: mobile phone) or applies a technological solution supported by the payee (e.g.: QR code scan from the payee's website).
2. After having recorded the payment data on his own device, the payer submits his payment order to his account servicing payment service provider (ASPSP) (e.g.: mobile application or internet bank interface) or to a payment initiation service provider (PISP) (e.g.: mobile application).
3. If the payer submitted his payment order to a PISP, the PISP forwards it to the payer's ASPSP.
4. If the payment order was submitted with the payee's secondary account identifier, either the PISP before forwarding the payment order to the ASPSP, or the payer's ASPSP – before or after the authentication or approval – submits a search request to query the payee's data required for forwarding the payment to GIROInstant, i.e. the bank identifier code of the ASPSP [BIC], the payment account number [IBAN] and the name of the account holder, from the central database of secondary account identifiers.
5. The payer's ASPSP performs the preparations required for the execution of the transaction (acceptance, customer authentication, time stamping, checks).
6. After having performed the time stamping after the acceptance and customer authentication, the payer's ASPSP commences the processing of the order immediately; it blocks or debits the amount to be transferred on the payer's account, and forwards the transaction to GIROInstant.
7. GIROInstant accepts and processes the transaction and then forwards it to the payee's ASPSP.
8. If the payee's ASPSP sends a feedback in the form of a positive status report on the receiving of the transaction and the ability to credit it, GIROInstant finalises the transaction and inter-PSP settlement is executed.
9. The payee's ASPSP is recommended to immediately notify the payee of the crediting of the amount. Although the payee's real-time notification of the crediting is not always indispensable in electronic payment situations, it is recommended to enable the payee to use the option of notifications.

2.2.2. Without request to pay, initiated on the payee's device

Figure 5: Payment process without request to pay, initiated on the payee's interface

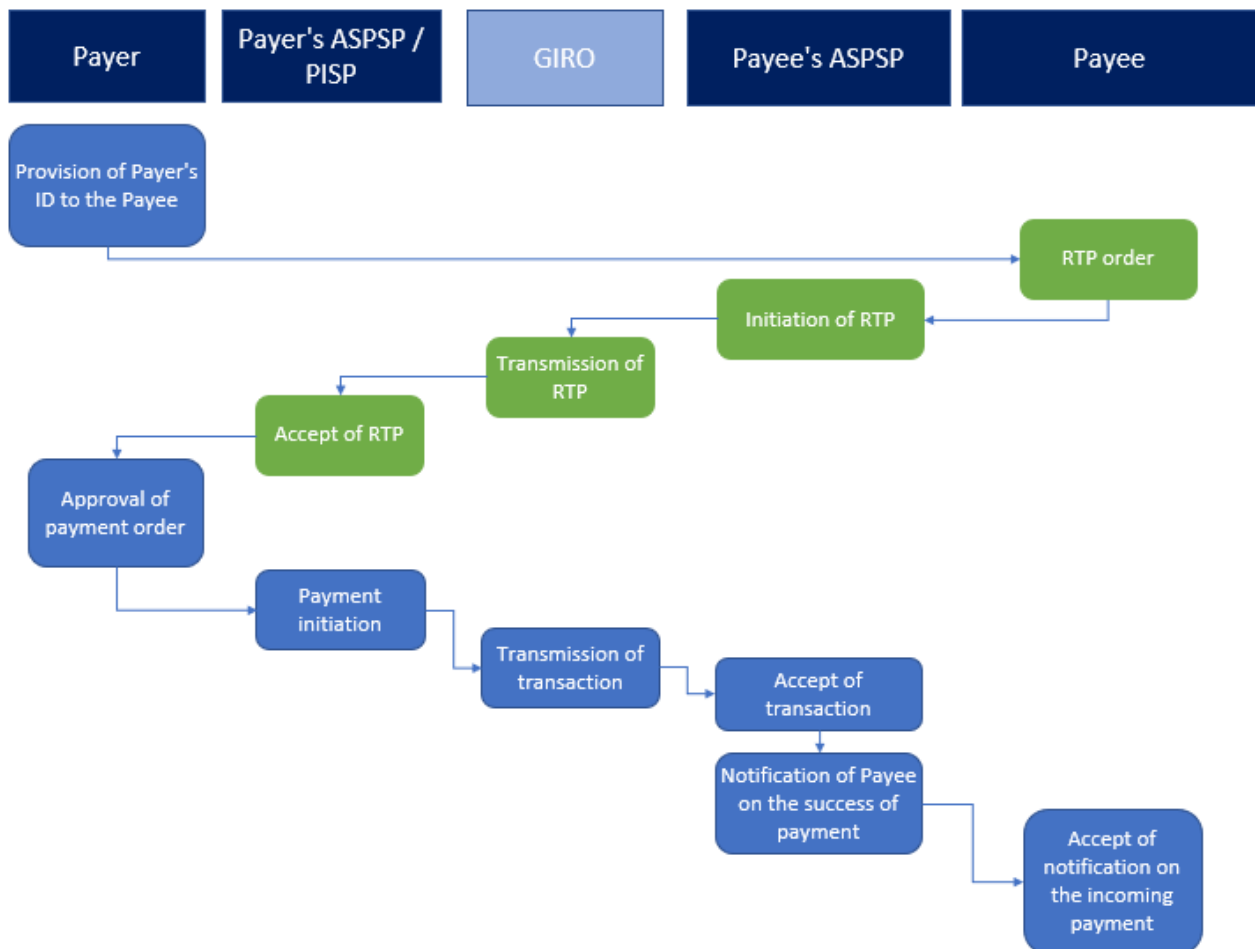


Recommended steps of the process:

1. The payer's provision of the data required for the payer's identification on the payee's website.
2. Initiation of the payment transaction on the payee's website after approval by the payer.
3. If the payee himself is not a payment initiation service provider (PISP), the submission of the payment order also requires the participation of a PISP.
4. If the PISP is not identical with the payer's account servicing payment service provider (ASPSP), the PISP forwards the payment order to the payer's ASPSP.
5. If the payment order was submitted with the payee's secondary account identifier and the PISP did not perform the query before forwarding the payment order to the ASPSP, before or after the authentication or approval the payer's ASPSP submits a search request to query the payee's data required for forwarding the payment to GIROInstant (bank identifier code of the ASPSP [BIC], the payment account number [IBAN] and the name of the account holder) from the central database of secondary account identifiers.
6. The payer's ASPSP performs the preparations required for the execution of the transaction (acceptance, customer authentication, time stamping, checks).
7. After having performed the time stamping following the acceptance and customer authentication, the payer's ASPSP commences the processing of the order immediately; it blocks or debits to the payer's account the amount to be transferred, and forwards the order to GIROInstant.
8. GIROInstant accepts and processes the transaction and then forwards it to the payee's ASPSP.
9. If the payee's ASPSP sends a feedback in the form of a positive status report on the receiving of the transaction and the ability to credit it, GIROInstant finalises the transaction and inter-PSP settlement is executed.
10. The payee's ASPSP is recommended to immediately notify the payee of the crediting of the amount. If the credit transfer was initiated through a PISP, after having received from GIRO the pacs.002 message on the execution of the credit transfer, the payer's bank is recommended to promptly forward the notification on the result of the execution of the credit transfer order to the PISP submitting the order, which can in turn notify the merchant of the execution of the payment. Although the payee's real-time notification of the crediting is not always indispensable in electronic payment situations, it is recommended to enable the payee to use the option of notifications.

2.2.3. With request to pay

Figure 6: Payment process with request to pay



Recommended steps of the process:

1. The payer provides to the payee his data required for launching the request to pay. This may be carried out online through an interface created by the payer for this purpose individually for each transaction, but it could also mean an automated mechanism following prior registration, where the payee automatically uploads the payer's previously provided data stored by him when a transaction arises.
2. The payee may launch the request to pay through a technical service provider, a payment initiation service provider (PISP), or through his account servicing payment service provider (ASPSP), but he can even submit it directly to GIROInstant if he contracted to connect to the central infrastructure.
3. If the request to pay was submitted with the payer's secondary account identifier, the payee's PISP – if there is one participating in the process – or the payee's ASPSP submits a search request to query the payer's data required for forwarding the request to pay to GIROInstant (bank identifier code of the ASPSP [BIC], the payment account number [IBAN] and the name of the account holder) from the central database of secondary account identifiers. Neither the payee nor the technical service provider can use this option in the lack of a PISP status; in such cases either another payment service provider must be included in the process, or they cannot send to the payer requests to pay based on secondary account identifiers.
4. GIROInstant forwards the request to pay to the payer's ASPSP.
5. The payer's ASPSP receives the request to pay and displays it for the payer.
6. The payer approves the payment order generated by his ASPSP based on the request to pay.
7. The payer's ASPSP performs the preparations required for the execution of the transaction (acceptance, customer authentication, time stamping, checks).

8. After having performed the time stamping following the acceptance and customer authentication, the payer's ASPSP commences the processing of the order immediately; it blocks or debits to the payer's account the amount to be transferred, and forwards the transaction to GIROInstant.
9. GIROInstant accepts and processes the transaction and then forwards it to the payee's ASPSP.
10. If the payee's ASPSP sends a feedback in the form of a positive status report on the receiving of the transaction and the ability to credit it, GIROInstant finalises the transaction and inter-PSP settlement is executed.
11. The payee's ASPSP or the service provider launching the request to pay is recommended to promptly notify the payee of the crediting of the amount. Although the payee's real-time notification of the crediting is not always indispensable in electronic payment situations, it is recommended to enable the payee to use the option of notifications.

2.3. Processes of bill payments

This chapter presents processes linked to the payment of single and regular bill payments in situations where the use of the service and the related payment take place on a different date.

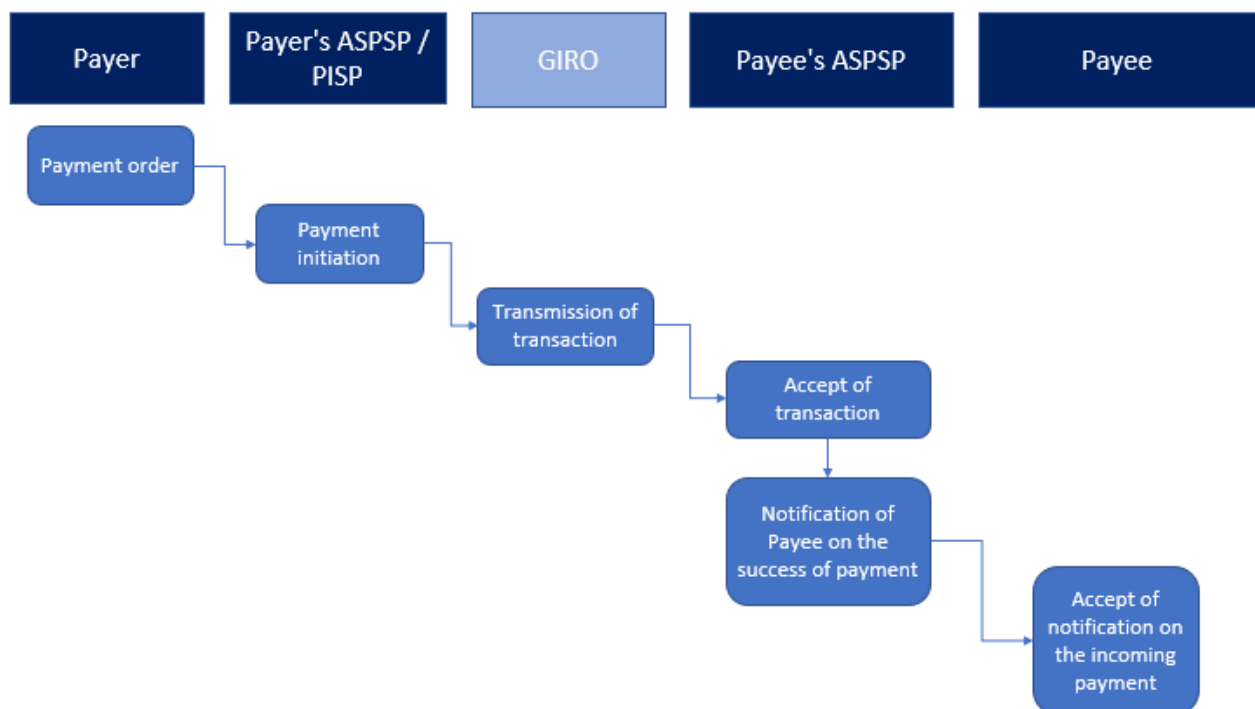
The payment process can be used both for electronic and paper-based bills.

Examples for the main payment situations:

- payment of charges for regularly used services (e.g.: utility, insurance or telecommunications services)
- ex-post payment of charges for ad-hoc services or purchases
- payment of supplier accounts
- payments to the public sector based on pro forma invoices

2.3.1. Without request to pay, initiated on the payer's device

Figure 7: Payment process without request to pay, initiated on the payer's device

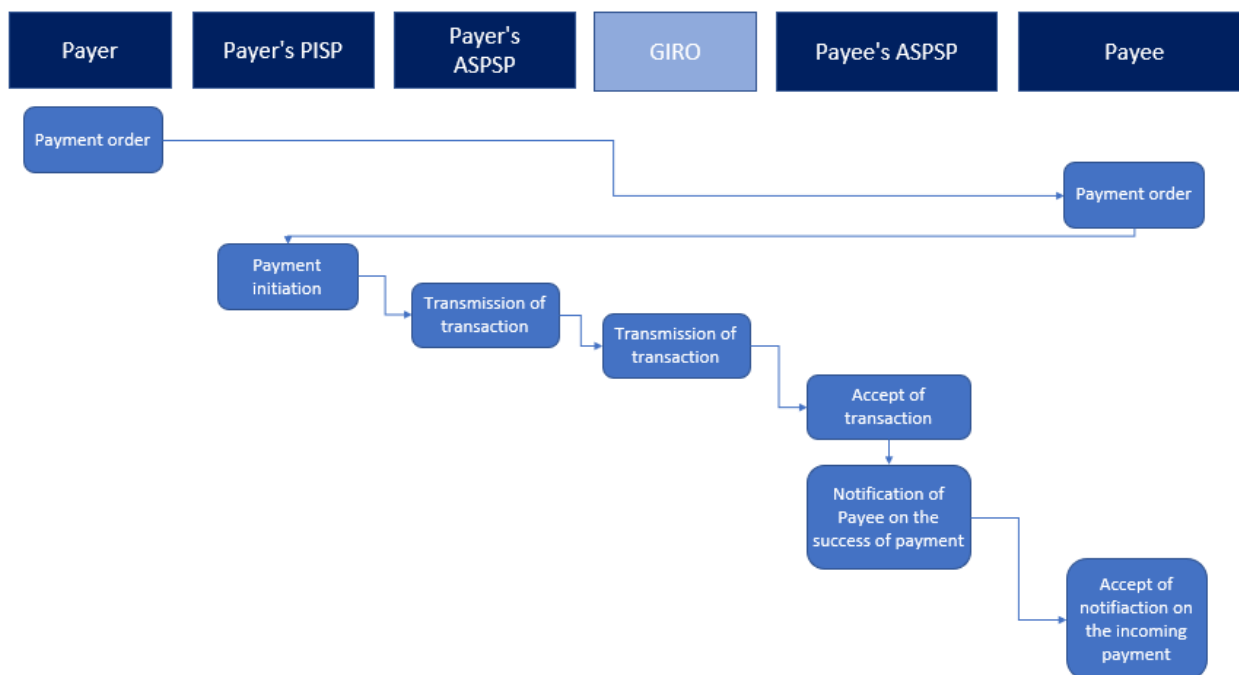


Recommended steps of the process:

1. The payer enters the payment data manually on his own device (e.g.: mobile phone) or applies a technological solution supported by the payee (e.g.: QR code scan from the payee's website or from the paper-based invoice sent by the payee).
2. After having recorded the payment data on his own device, the payer submits his payment order to his account servicing payment service provider (ASPSP) (e.g.: mobile application or internet bank interface) or to a payment initiation service provider (PISP) (e.g.: mobile application).
3. If the payer submitted his payment order to a PISP, the PISP forwards it to the payer's ASPSP.
4. If the payment order was submitted with the payee's secondary account identifier, either the PISP before forwarding the payment order to the ASPSP, or the payer's ASPSP – before or after the authentication or approval, – submits a search request to query the payee's data required for forwarding the payment to GIROInstant, i.e. the bank identifier code of the ASPSP [BIC], the payment account number [IBAN] and the name of the account holder, from the central database of secondary account identifiers.
5. The payer's ASPSP performs the preparations required for the execution of the transaction (acceptance, customer authentication, time stamping, checks).
6. After having performed the time stamping after the acceptance and customer authentication, the payer's ASPSP commences the processing of the order immediately; it blocks or debits to the payer's account the amount to be transferred, and forwards the transaction to GIROInstant.
7. GIROInstant accepts and processes the transaction and then forwards it to the payee's ASPSP.
8. If the payee's ASPSP sends a feedback in the form of a positive status report on the receiving of the transaction and the ability to credit it, GIROInstant finalises the transaction and inter-PSP settlement is executed.
9. The payee's ASPSP is recommended to immediately notify the payee of the crediting of the amount. Although the payee's real-time notification of the crediting is not always indispensable in the case of bill payments, it is recommended to enable the payee to use the option of notifications.

2.3.2. Without request to pay, initiated on the payee's device

Figure 8: Payment process without request to pay, initiated on the payee's device



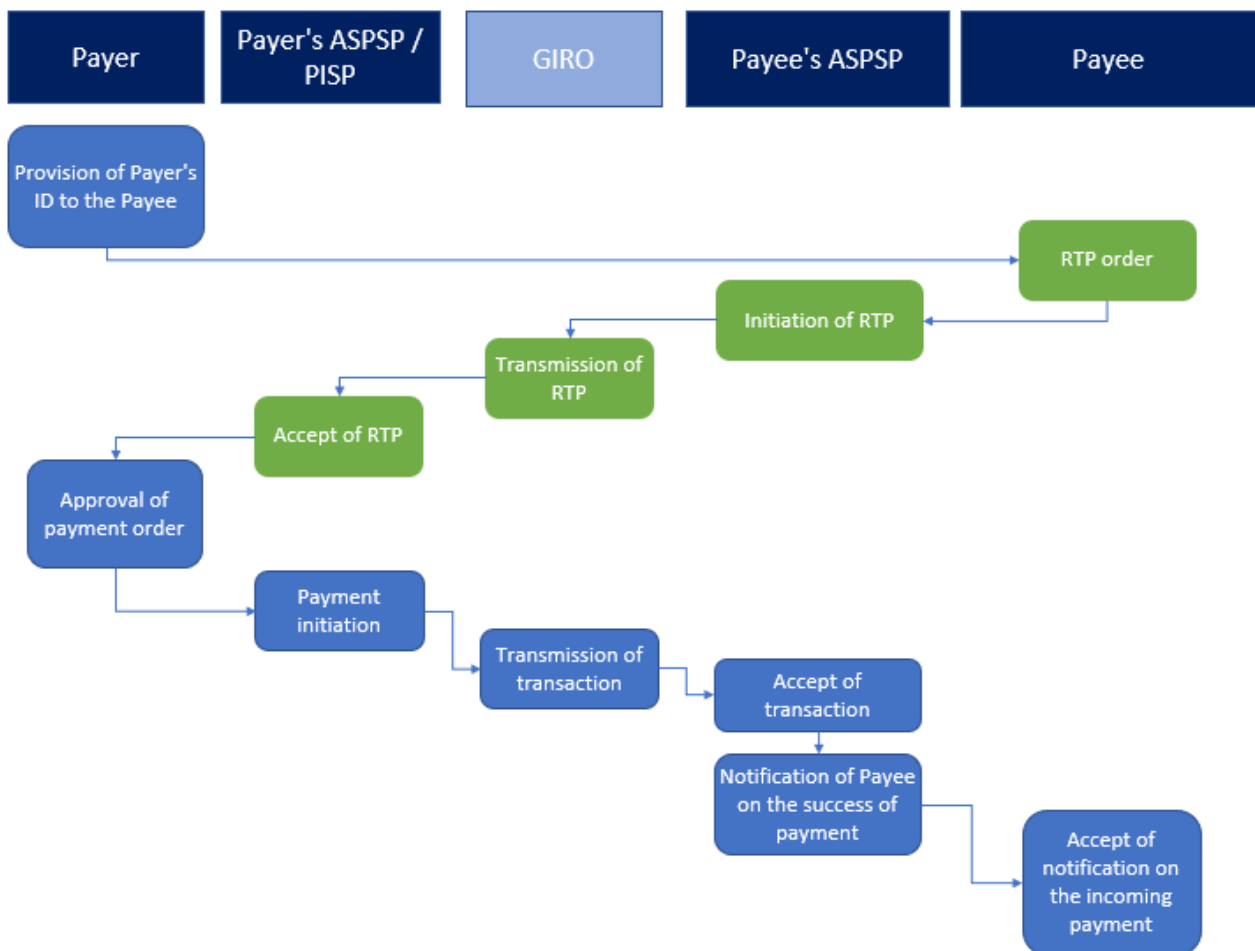
Recommended steps of the process:

1. The payer's provision of the data required for the payer's identification on the payee's website or in the payee's mobile application.
2. Initiation of the payment transaction by the payer on the payee's website or in his mobile application.
3. If the payee himself is not a payment initiation service provider (PISP), the submission of the payment order also requires the participation of a PISP. The PISP may receive the payment data during the billing process already (e.g.: electronic bill presentment and payment service).
4. If the PISP is not identical with the payer's account servicing payment service provider (ASPSP), the PISP forwards the payment order to the payer's ASPSP.
5. If the payment order was submitted with the payee's secondary account identifier and the PISP did not perform the query before forwarding the payment order to the ASPSP, before or after the authentication or approval the payer's ASPSP submits a search request to query the payee's data required for forwarding the payment to GIROInstant (bank identifier code of the ASPSP [BIC], the payment account number [IBAN] and the name of the account holder) from the central database of secondary account identifiers.
6. The payer's ASPSP performs the preparations required for the execution of the transaction (acceptance, customer authentication, time stamping, checks).
7. After having performed the time stamping following the acceptance and customer authentication, the payer's ASPSP commences the processing of the order immediately; it blocks or debits the amount to be transferred on the payer's account, and forwards the transaction to GIROInstant.
8. GIROInstant accepts and processes the transaction and then forwards it to the payee's ASPSP.
9. If the payee's ASPSP sends a feedback in the form of a positive status report on the receiving of the transaction and the ability to credit it, GIROInstant finalises the transaction and inter-PSP settlement is executed.
10. The payee's ASPSP is recommended to immediately notify the payee of the crediting of the amount. If the credit transfer was initiated through a PISP, after having received from GIRO the pacs.002 message on the execution of the credit transfer, the payer's bank is recommended to promptly forward the notification on the result of the execution of the credit transfer order to the PISP submitting the order, which can in turn

notify the payee. Although the payee's real-time notification of the crediting is not always indispensable in the case of bill payments, it is recommended to enable the payee to use the option of notifications.

2.3.3. With request to pay

Figure 9: Payment process with request to pay



Recommended steps of the process:

1. The payer provides to the payee his data required for launching the request to pay. This may be carried out online through an interface created by the payer for this purpose individually for each transaction, but it could also mean an automated mechanism following prior registration, where the payee automatically uploads the payer's previously provided data stored by him when a transaction arises.
2. The payee may launch the request to pay through a technical service provider, a payment initiation service provider (PISP), or through his account servicing payment service provider (ASPSP), but he can even submit it directly to GIROInstant if he contracted to connect to the central infrastructure as direct participant.
3. If the request to pay was submitted with the payer's secondary account identifier, the payee – if it is a PISP – , the PISP – if there is one participating in the process – or the payee's ASPSP submits a search request to query the payer's data required for forwarding the request to pay to GIROInstant (bank identifier code of the ASPSP [BIC], the payment account number [IBAN] and the name of the account holder) from the central database of secondary account identifiers. Neither the payee nor the technical service provider can use this option in the lack of a PISP status; in such cases either another payment service provider must be included in the process, or they cannot send to the payer requests to pay based on secondary account identifiers.
4. GIROInstant forwards the request to pay to the payer's ASPSP.

5. The payer's ASPSP receives the request to pay and displays it for the payer.
6. The payer approves the payment order generated by his ASPSP based on the request to pay.
7. The payer's ASPSP performs the preparations required for the execution of the transaction (acceptance, customer authentication, time stamping, checks).
8. After having performed the time stamping following the acceptance and customer authentication, the payer's ASPSP commences the processing of the order immediately; it blocks or debits the amount to be transferred on the payer's account, and forwards the transaction to GIROInstant.
9. GIROInstant accepts and processes the transaction and then forwards it to the payee's ASPSP.
10. If the payee's ASPSP sends a feedback in the form of a positive status report on the receiving of the transaction and the ability to credit it, GIROInstant finalises the transaction and inter-PSP settlement is executed.
11. The payee's ASPSP or the service provider launching the request to pay is recommended to immediately notify the payee of the crediting of the amount. Although the payee's real-time notification of the crediting is not always indispensable in the case of bill payments, it is recommended to enable the payee to use the option of notifications.

2.4. Processes of person-to-person payments

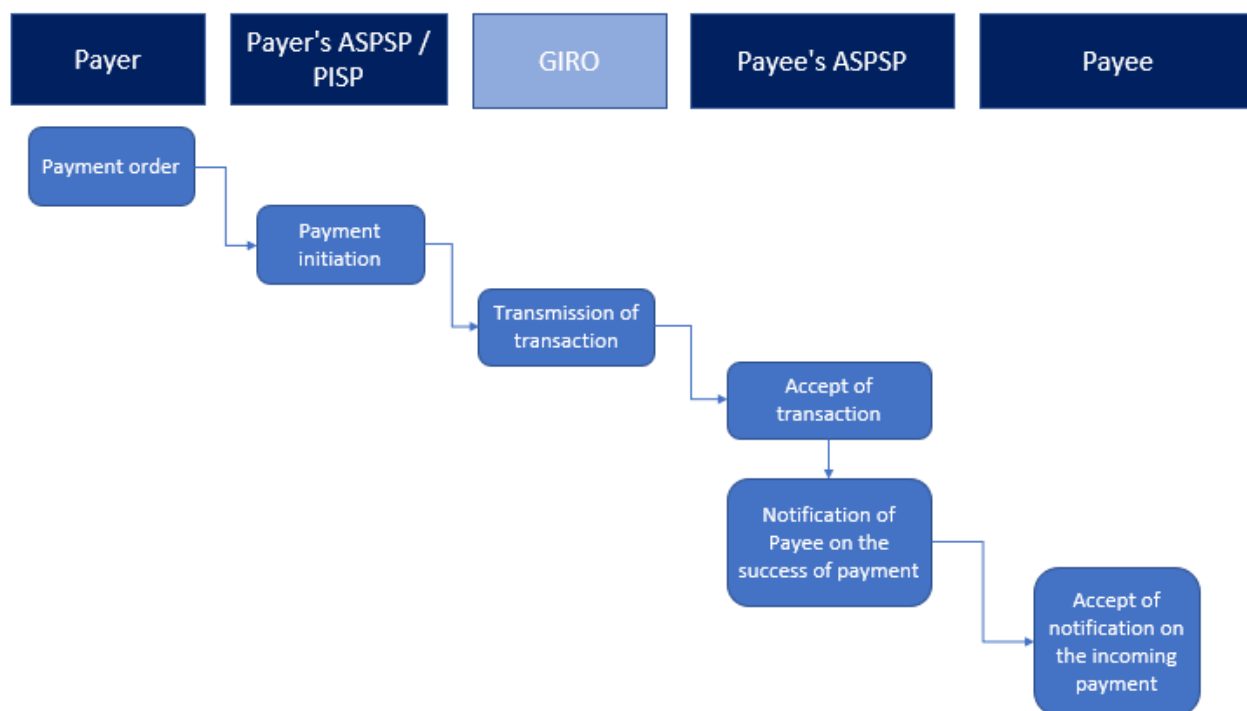
This chapter presents the processes of person-to-person payments. These transactions may take place based on a business relationship or without any, on the spot or between remote participants alike.

Examples for the main payment situations:

- money transfer between private individuals
- payment for purchases or services received from private individuals
- payment for on-site services or purchases
- payment at merchants that do not use acceptance services

2.4.1. Without request to pay, initiated on the payer's device

Figure 10: Payment process without request to pay, initiated on the payer's device

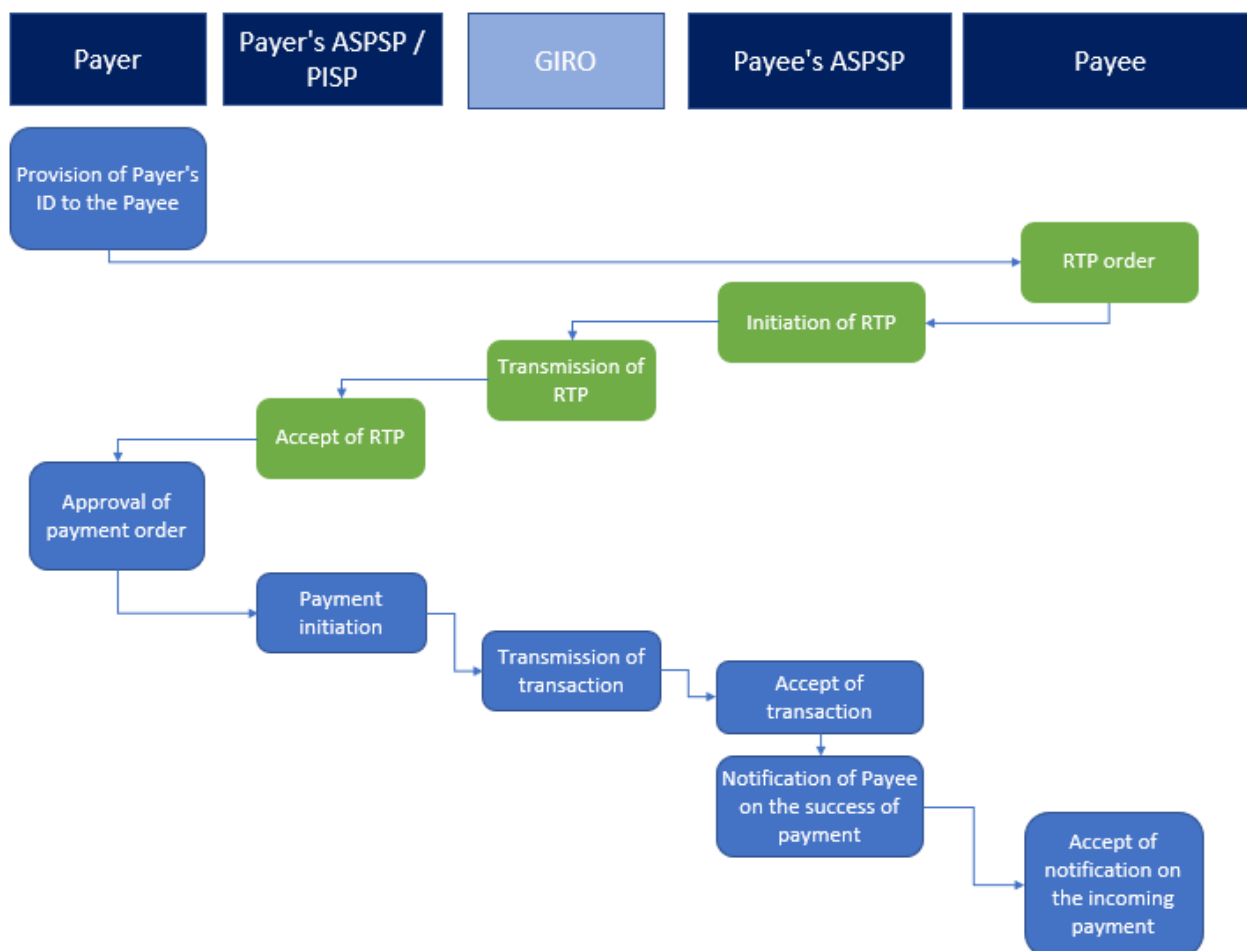


Recommended steps of the process:

1. The payer enters the payment data manually on his own device (e.g.: mobile phone) or applies a technological solution supported by the payee (e.g.: QR code scanner, NFC connection, Bluetooth connection).
2. After having recorded the payment data on his own device, the payer submits his payment order to his account servicing payment service provider (ASPSP) (e.g.: mobile application or internet bank interface) or to a payment initiation service provider (PISP) (e.g.: mobile application).
3. If the payer submitted his payment order to a PISP, the PISP forwards it to the payer's ASPSP.
4. If the payment order was submitted with the payee's secondary account identifier, either the PISP before forwarding the payment order to the ASPSP, or the payer's ASPSP – before or after the authentication or approval – submits a search request to query the payee's data required for forwarding the payment to GIROInstant, i.e. the bank identifier code of the ASPSP [BIC], the payment account number [IBAN] and the name of the account holder, from the central database of secondary account identifiers.
5. The payer's ASPSP performs the preparations required for the execution of the transaction (acceptance, customer authentication, time stamping, checks).
6. After having performed the time stamping following the acceptance and customer authentication, the payer's ASPSP commences the processing of the order immediately; it blocks or debits the amount to be transferred on the payer's account, and forwards the transaction to GIROInstant.
7. GIROInstant accepts and processes the transaction and then forwards it to the payee's ASPSP.
8. If the payee's ASPSP sends a feedback in the form of a positive status report on the receiving of the transaction and the ability to credit it, GIROInstant finalises the transaction and inter-PSP settlement is executed.
9. The payee's ASPSP is recommended to immediately notify the payee of the crediting of the amount. Although the payee's real-time notification of the crediting is not always indispensable in person-to-person payment situations, it is recommended to enable the payee to use the option of notifications.

2.4.2. With request to pay

Figure 11: Payment process with request to pay



Recommended steps of the process:

1. The payer provides to the payee his data required for launching the request to pay. This may also take place by the payee's scanning of the QR code displayed on the payer's device. In the case of payments between private individuals this step is not always necessary as the payee may already have the payer's relevant data based on a prior relationship.
2. The payee may launch the request to pay through a technical service provider, a payment initiation service provider (PISP), or through his account servicing payment service provider (ASPSP).
3. If the request to pay was submitted with the payer's secondary account identifier, the PISP – if there is one participating in the process – or the payee's ASPSP submits a search request to query the payer's data required for forwarding the request to pay to GIROInstant (bank identifier code of the ASPSP [BIC], the payment account number [IBAN] and the name of the account holder) from the central database of secondary account identifiers. The technical service provider cannot use this option in the lack of a PISP status; in such cases another participant must be included in the process.
4. GIROInstant forwards the request to pay to the payer's ASPSP.
5. The payer's ASPSP receives the request to pay and displays it for the payer.
6. The payer approves the payment order generated by his ASPSP based on the request to pay.
7. The payer's ASPSP performs the preparations required for the execution of the transaction (acceptance, customer authentication, time stamping, checks).

8. After having performed the time stamping following the acceptance and customer authentication, the payer's ASPSP commences the processing of the order immediately; it blocks or debits the amount to be transferred on the payer's account, and forwards the order to GIROInstant.
9. GIROInstant accepts and processes the transaction and then forwards it to the payee's ASPSP.
10. If the payee's ASPSP sends a feedback in the form of a positive status report on the receiving of the transaction and the ability to credit it, GIROInstant finalises the transaction and inter-PSP settlement is executed.
11. The payee's ASPSP or the service provider launching the request to pay is recommended to immediately notify the payee of the crediting of the amount. Although the payee's real-time notification of the credit transaction is not always indispensable in person-to-person payment situations, it is recommended to enable the payee to use the option of notifications.

2.5. Payment initiation service providers in the payment process

A significant element relating to the presentation of the payment processes is the involvement of non-bank participants. This is particularly important because the instant payment processes can only operate efficiently if all participants of the payment chain can forward the entire data content defined in the HCT Inst Scheme, Request to Pay Scheme and the Secondary Account Identifier Services Rulebooks and in the Guidelines. In this regard it should be borne in mind that, pursuant to the provisions of the relevant MNB Decree¹ (hereinafter: MNB Decree), all payment service providers participating in the payment chain are legally bound to transmit the data. The PSD2 Directive² requires account servicing payment service providers (ASPSPs, currently primarily banks) to make available to payment initiation service providers (PISPs) all information required for carrying out their activity³. Communication between PISPs and ASPSPs can be performed through APIs⁴, but it is also important to forward all data fields required for the initiation of instant payments and for the transmission of requests to pay – that is, mandatory and supplementary data contents alike – between the PISPs and ASPSPs. The MNB Decree's aforementioned article is specifically intended to obligate ASPSPs to put in place an interface through which the entire data content of the transfer orders submitted through the PISP – including data provided by the payer, the payee or the PISP – can be transmitted to them. In other words, in the case of payment orders submitted through a PISP, ASPSPs will not be in a position where they can, for the purposes of restricting competition, choose to process and enable the transmission of only the mandatory core data (e.g. payee's name and bank account number, transaction amount) of the credit transfers through the APIs put in place by them. This would result in the PISPs' exclusion from a considerable part of the instant payment market, as it would limit or eliminate the possibility of taking recourse to the ancillary services built on the instant payment system with the PISPs' participation. The relevant article of the MNB Decree, therefore, is intended to respond to the change arising from the significantly expanding role of credit transfers after the introduction of the instant payment system, which will require supplementary data contents for the standardisation of business processes.

In addition, it should be borne in mind that requests to pay may be sent and received also by market participants who are not licensed to provide payment services, and even these participants should be able to process and forward the supplementary data contents described above.

The implementation of the above is illustrated by the figure below, where the former request to pay-based process is supplemented with the new elements marked in yellow. At the launch of the request to pay, the dotted lines indicate that the payee has a number of options to launch the request, even by bypassing his ASPSP. The payer may enter into

¹ Decree No. 35/2017 (XII. 14.) of the Governor of the Magyar Nemzeti Bank on the Execution of Payment Transactions: http://njt.hu/cgi_bin/njt_doc.cgi?docid=205900.368886

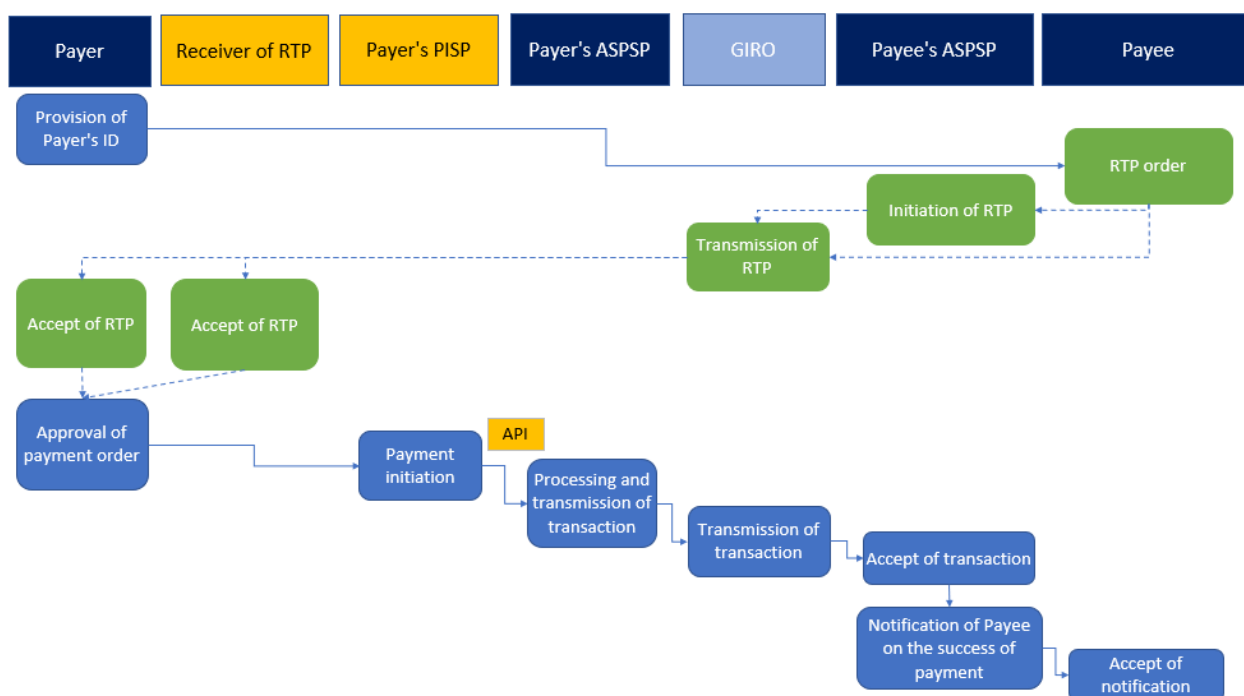
² Directive (EU) 2015/2366 of the European Parliament and of the Council on payment services in the internal market

³ Commission Delegated Regulation (EU) 2018/389 of 27 November 2017 supplementing Directive (EU) 2015/2366 of the European Parliament and of the Council with regard to regulatory technical standards for strong customer authentication and common and secure open standards of communication (SCA RTS)

⁴ Application Programming Interface

a contract with a service provider that is not licensed to provide payment services for the receipt and processing of incoming requests to pay. It is also possible that a payer not licensed to provide payment services joins GIRO and receives requests to pay himself. These options are also marked by dotted lines. In accordance with the above it is also important to ensure that all data provided by the payee is included in the credit transfer order during the processing of a request to pay (even if the processing is performed by a non-payment service provider). After the processing, it is possible that the submission of the credit transfer order takes place through a PISP and not directly at the payer's account servicing payment service provider (ASPSP). Of course, credit transfer orders may also be submitted through a PISP without a previous request to pay, and the obligation to forward data contents is binding in these cases as well. The PISP communicates with the payer's account servicing payment service provider (ASPSP) through the API; the abovementioned provisions of the MNB Decree are intended to cover this situation: even where the submission takes place through a PISP, the payment service provider participating in the payment chain must ensure that the entire data content (thus, for example, the cash register code added by the payee to the payment order or provided in the request to pay) is transmitted in full.

Figure 12: Payment process with request to pay and the involvement of non-bank participants



3. RECOMMENDED DATA ENTRY PROCESSES IN THE CASE OF INSTANT PAYMENTS

The basic service of the instant payment system's basic infrastructure facilitates the real time execution of payments between payment accounts; however, this only establishes the fundamentals for widespread use, and it does not ensure in itself that the new payment service can indeed be used in a variety of payment situations. This requires active cooperation by the market participants, i.e. payment service providers, payment initiation service providers, technical service providers, who are expected to establish – either competing or cooperating with each other – interoperable, modern payment services built on the basic infrastructure of the instant payment system.

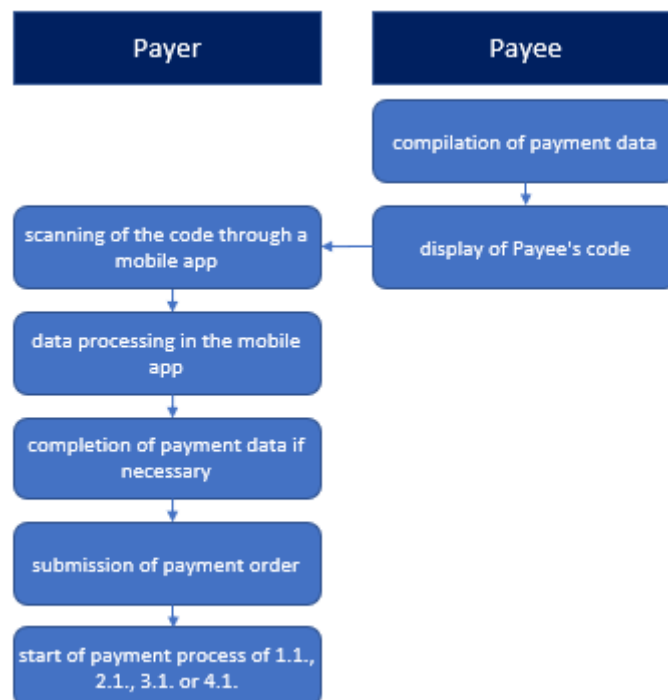
In designing the ancillary services it must be borne in mind that it should be possible to maintain the interoperability of the services even when they are created or operated by different service providers. In respect of the payment services built on the instant payment system, solutions creating services that address identical needs and operate in

parallel, but not in a technically interoperable way are unacceptable. With a view to supporting this, it may be useful to develop common technical standards for the data entry solutions that are expected to be used most often, and they should be made freely available to all stakeholders. However, it is important to ensure the technical interoperability of the services even in the case of the less frequently used technical solutions that do not have common standards. To that end, for the receipt of the instant credit transfer orders of their customers, payment service providers are required to use open data entry solutions that are interpretable for all other stakeholders. The application of open standards means that the data entry standards developed by market participants can be read, decoded and processed by anyone.

Similar to the payment processes, data entry processes should also be standardised, irrespective of the specific data entry solution and standard. Both on the payer's and the payee's side, this may facilitate the increasingly widespread use of the services, while on the developer and operator sides of the services, it may speed up service development. This section recommends uniform execution processes for the most frequent data entry situations.

3.1. Scanning the code displayed by the payee

Figure 13: Data entry process by scanning the code displayed by the payee



Recommended steps of the process:

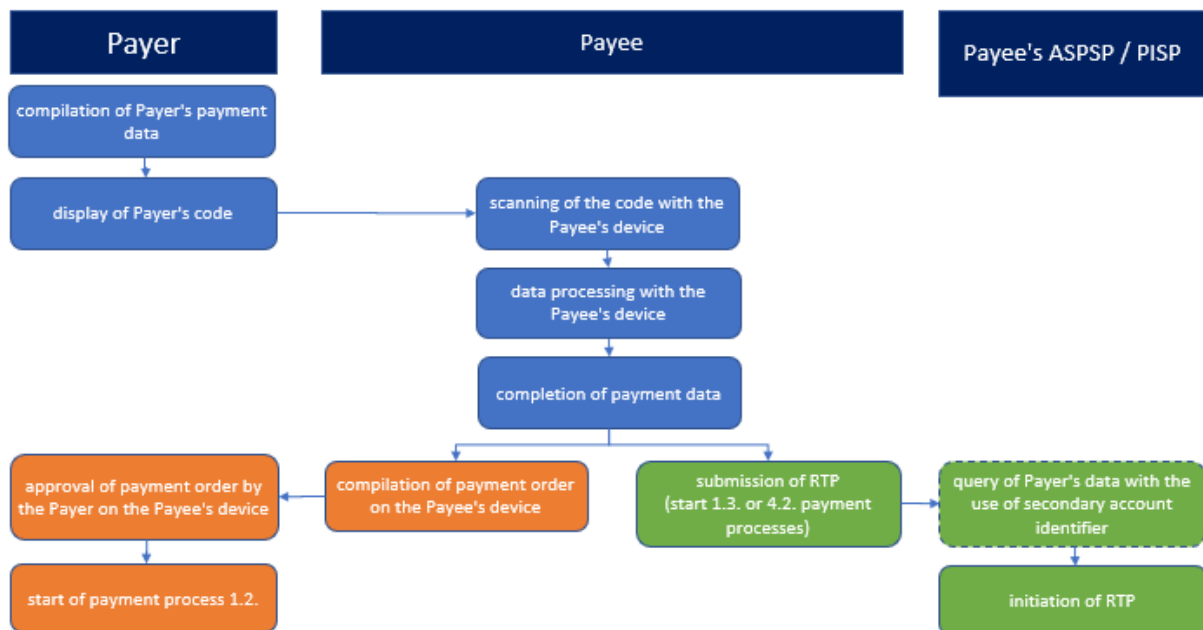
1. The payee gathers all data required for the payment: his name and IBAN number or one of his secondary account identifiers (e.g.: phone number, email address, tax identification code), potentially the transaction amount and further supplementary minimum data content of the given business process.
2. By indicating a code (e.g.: barcode or QR code) manually (e.g.: in printed form) or by way of an electronic solution (e.g.: mobile application), the payee displays the data required for the payment transaction. In such cases the payer and the payee do not necessarily have to be at the same location; the code may be passed on either by way of electronic data transmission or even via postal services.
 - a. A two-dimensional code (e.g.: QR code) holds more data content; it can be used to display the name and the IBAN as well as any additional information as appropriate. The code may be static (i.e. it only contains the payee's core data and as such, it is the same in all transactions) or dynamic (when it

also contains the specific data of the given transaction [e.g. amount, transaction ID) and as such, it changes from transaction to transaction).

- b. Due to the limited data content of the one-dimensional barcode, only the data required for directing the payment order (secondary account identifier or IBAN) can be specified.
3. Using a mobile application, the payer scans the payee's code.
4. The payer's mobile application processes the scanned data.
5. The payer supplements the data with additional information as needed (e.g.: transaction amount, if the payee did not pass it on via the code displayed).
6. The payer approves the data and submits the payment order to a payment initiation service provider (PISP) or to his account servicing payment service provider (ASPSP).
7. This data entry process can be applied in the case of the payment process presented in Sections 1.1, 2.1, 3.1 or 4.1 of Chapter 2.

3.2. Scanning the code displayed by the payer

Figure 14: Data entry process by scanning the code displayed by the payer



Recommended steps of the process:

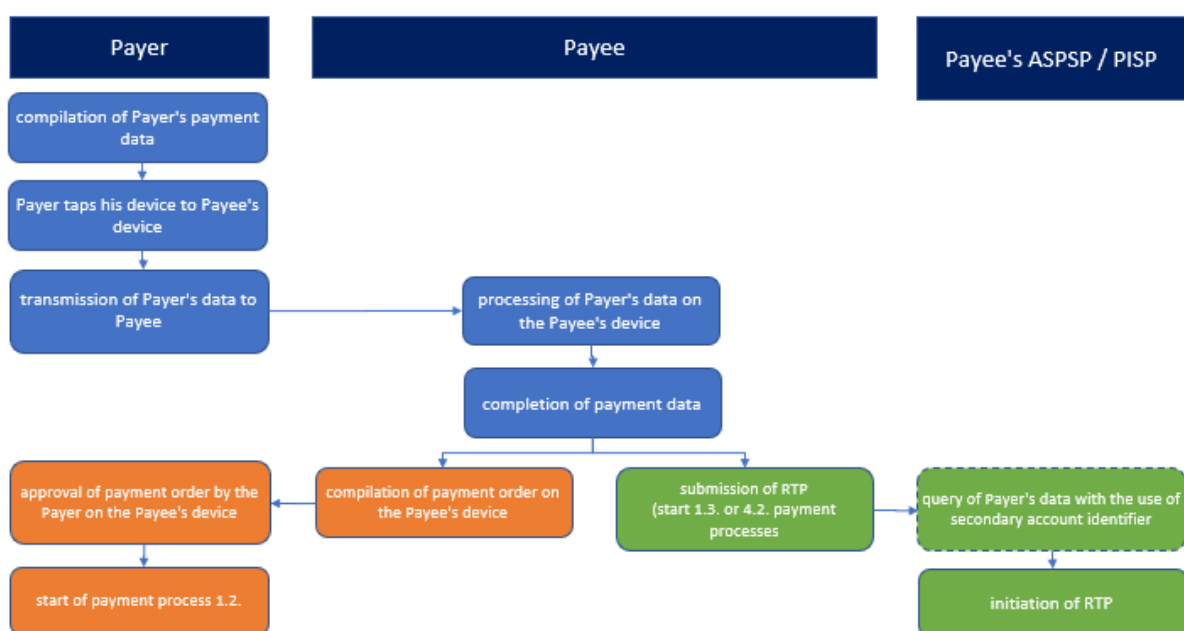
1. The payer gathers all data required for initiating the payment: his name and IBAN number or one of his secondary account identifiers (e.g.: phone number, email address, tax identification code).
2. By indicating a code (e.g.: barcode or QR code) manually (e.g.: in printed form) or by way of an electronic solution (e.g.: mobile application), the payer displays his data required for the payment transaction.
 - a. A two-dimensional QR code holds more data content; it can be used to display the name and the IBAN as well as any additional information as appropriate. The code may be static (i.e. it only contains the payer's core data and as such, it is the same in all transactions) or dynamic (when it also contains

the specific data of the given transaction [e.g. amount, transaction ID) and as such, it changes from transaction to transaction).

- b. Due to the limited data content of the one-dimensional barcode, only the data required for directing the payment order (secondary account identifier or IBAN) can be specified.
3. Using an electronic solution (e.g.: a mobile application, POS terminal, cash register), the payee scans the payer's code.
 4. The payee processes the scanned data.
 5. The payee supplements the scanned data with the required additional data content (e.g.: transaction amount, merchant code, cash register code).
- A) Without request to pay, initiated on the payee's device (this solution is only feasible in physical (e.g.: retail) payment situations; it cannot be applied in the case of a private individual payee):
6. The payee compiles and displays the payment order on his own device.
 7. On the payee's device the payer approves the payment order, which is then sent to the payer's ASPSP (if the payee is also a PISP) or to a PISP.
 8. This data entry process can be applied in the case of the payment process presented in Section 1.2 of Chapter 2.
- B) With request to pay:
6. The payee compiles and sends to the payer the request to pay.
 7. This data entry process can be applied in the case of the payment process presented in Sections 1.3 and 4.2 of Chapter 2.

3.3. Contactless transfer of the payer's data

Figure 15: Contactless transfer of the payer's data

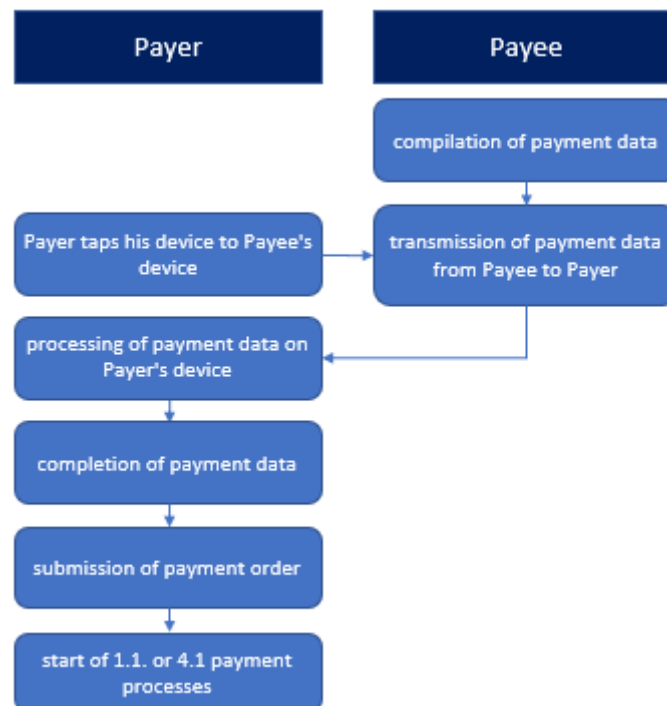


Recommended steps of the process:

1. On his own device, the payer gathers all data required for the payment: his name and IBAN number or one of his secondary account identifiers (e.g.: phone number, email address, tax identification code).
 2. The payer taps his device to the payee's device. In the case of the payer, the device can be a mobile phone application but also such a physical device (e.g. a loyalty card) that enables him to identify himself to the payee.
 3. The payer transfers his identification data to the payee. The payee can be a merchant or even a private individual. The data transfer may take place via NFC (Near Field Communication) transmission or via Bluetooth-based solutions.
 4. The payee processes the scanned data. In the case of merchants, data processing may also take place in the merchant's own (cash register) system, while mobile phone applications are primarily used in the case of private individual payees.
 5. The payee supplements the scanned data with the required additional data content (e.g.: transaction amount, merchant code, cash register code).
- A) Without request to pay, initiated on the payee's device (this solution is only feasible in retail payment situations; it cannot be applied in the case of a private individual payee):
6. The payee compiles and displays the payment order on his own device.
 7. On the payee's device the payer approves the payment order, which is then sent to the payer's ASPSP (if the payee is also a PISP) or to a PISP.
 8. This data entry process can be applied in the case of the payment process presented in Section 1.2 of Chapter 2.
- B) With request to pay:
6. The payee compiles and sends to the payer the request to pay.
 7. This data entry process can be applied in the case of the payment process presented in Sections 1.3 and 4.2 of Chapter 2.

3.4. Contactless transfer of the payee's data

Figure 16: Contactless transfer of the payee's data

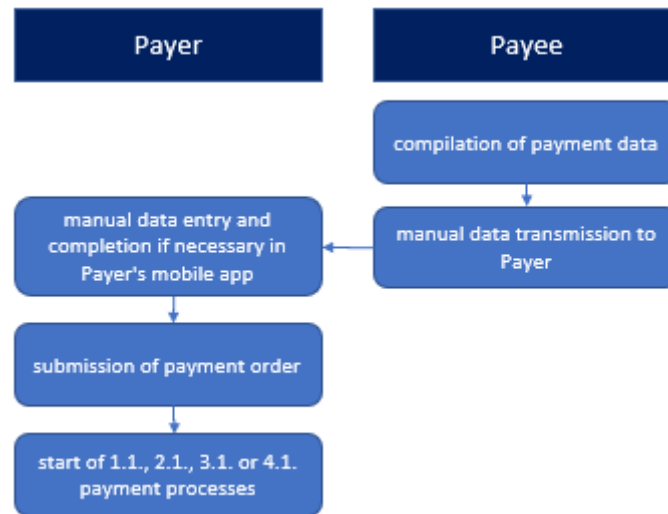


Recommended steps of the process:

1. The payee gathers all data required for the payment: his name and IBAN number or one of his secondary account identifiers (e.g.: phone number, email address, tax identification code), potentially the transaction amount and further supplementary minimum data content of the given business process.
2. The payer taps his device to the payee's device. In this case, the payer's device may be a mobile phone application, in which the payer can carry out all further steps. Depending on whether the payee is a merchant or a private individual, his device may be a POS terminal, a cash register, or a mobile phone application.
3. The payee transfers his data to the payer. The data transfer may take place via NFC (Near Field Communication) transmission or via Bluetooth-based solutions. In addition to the identification data, the transfer may also include additional data (e.g.: in the case of retail payments, the transaction amount, the shop code or the cash register code may also be transferred).
4. The payer processes the scanned data.
5. The payer supplements the scanned data with additional data content as needed (e.g.: transaction amount if it has not been transferred already).
6. The payer submits his payment order to his ASPSP or to a PISP.
7. This data entry process can be applied in the case of the payment process presented in Sections 1.1 and 4.1 of Chapter 2.

3.5. Manual entry of payment data on the payer's device

Figure 17: Manual entry of payment data on the payer's device

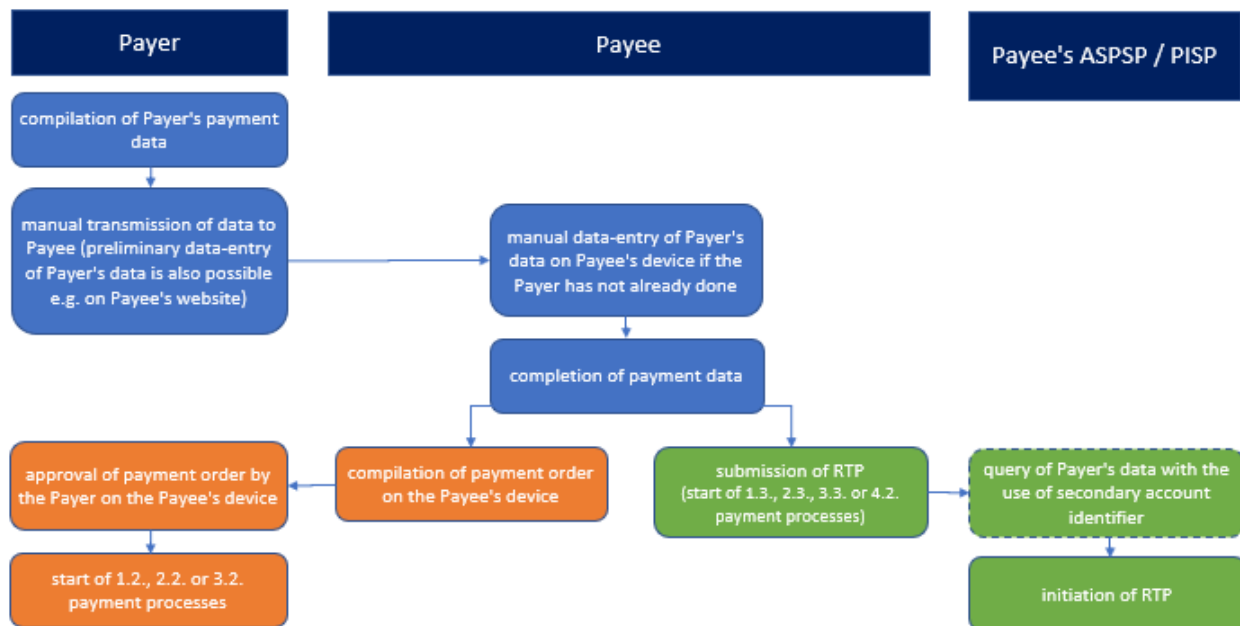


Recommended steps of the process:

1. The payee gathers all data required for the payment: his name and IBAN number or one of his secondary account identifiers (e.g.: phone number, email address, tax identification code), potentially the transaction amount and further supplementary minimum data content of the given business process.
2. The payee transfers the data required for the payment to the payer manually (e.g.: orally or in writing). In such cases the payer and the payee do not necessarily have to be at the same location; the data required for the payment may be passed on either by way of electronic data transmission or via postal services.
3. In his own mobile application, the payer records and supplements as needed the data received from the payee.
4. The payer submits his payment order to his ASPSP or to a PISP.
5. This data entry process can be applied in the case of the payment process presented in Sections 1.1, 2.1, 3.1 or 4.1 of Chapter 2.

3.6. Manual entry of payment data on the payee's device

Figure 18: Manual entry of payment data on the payee's device



Recommended steps of the process:

1. The payer gathers all data required for the payment: his name and IBAN number or one of his secondary account identifiers (e.g.: phone number, email address, tax identification code).
 2. The payer transfers his data required for the payment to the payee manually (e.g.: orally or in writing). In such cases the payer and the payee do not necessarily have to be at the same location; the data required for the payment may be transferred even on the payee's website, or in advance in a service contract.
 3. On his own device, the payee manually records the payer's data required for the payment. In the case of merchants, the data may be recorded in the merchant's own (cash register) system, while mobile phone applications are primarily used in the case of private individual payees.
 4. The payee supplements the data provided with the required additional data content (e.g.: transaction amount, shop code, cash register code).
- A) Without request to pay, initiated on the payee's device (this solution is only feasible in physical or electronic payment situations or in the case of bill payments; it cannot be applied in the case of a private individual payee):
5. The payee compiles and displays the payment order on his own device.
 6. On the payee's device the payer approves the payment order, which is then sent to the payer's ASPSP (if the payee is also a PISP) or to a PISP.
 7. This data entry process can be applied in the case of the payment process presented in Sections 1.2, 2.2, and 3.2 of Chapter 2.
- B) With request to pay:
5. The payee compiles and sends to the payer the request to pay.
 6. This data entry process can be applied in the case of the payment process presented in Sections 1.3, 2.3, 3.3 and 4.2 of Chapter 2.

4. RECOMMENDED MINIMUM DATA CONTENT IN MAIN PAYMENT SITUATIONS

In the case of instant credit transfers and requests to pay, the MNB Decree specifies the mandatory content of credit transfer orders, while the rulebooks of the GIROInstant service define the mandatory data contents technically required to execute the transactions. However, instant payment and request to pay services can only function efficiently in individual payment situations if the parties participating in the payment process are also able to provide the supplementary data needed for them, and all other participants are able to transmit and interpret such data.

Especially in the case of physical and electronic retail and bill-type payments (thus, in essence, C2B payments), it is indispensable for the actual operability of individual payment solutions that the data required for the identification of the given transaction are received by the payee (e.g. merchant or utility service provider) in the course of the payment transaction. For example, this makes it possible to ensure that the notification linked to the crediting of the funds is generated in the right place in the payee's systems and that the business processes related to the payment can be executed without manual intervention. This is particularly important in such time-critical payment situations as physical retail payments. In the course of the professional consultation on additional services, the MNB identified the following additional data contents which, while not mandatory elements of a credit transfer order or request to pay, are needed for the practical use of instant payments.

- Payment situation identifier (based on ISO purpose codes; e.g. bill payment, e-commerce, etc.): in the credit transfer and request to pay messages, service providers will be enabled to indicate the specific payment situation in which the given transaction was executed. Although, due to the flexible use of instant credit transfers, situations may arise where even the payment service provider is unable to decide whether the given transaction is a person-to-person money transfer or, for example, a retail purchase, service providers should make an effort to be able to specify the correct payment situation code in as many payment situations as possible. This will also be a significant assistance in their own business analyses. The payment situation is supplied in the purpose code ("Purpose") field of the credit transfer order and the request to pay initiation from a set of elements that can be selected from a list defined by the ISO standard.
- Retail unit, shop identifier: in the case of physical retail purchases where the acquirer is a retail chain, for the correct identification of the point of sale the acquirer may need the transaction to also include the code of the shop processing the payment. The above information is supplied in the "ShopID" field of the "Regulatory Reporting" block of the credit transfer order and the request to pay initiation, as a 35-digit character data type.
- Merchant device (cash register, POS) identifier: in the case of physical retail purchases, there may be several devices in a shop (e.g. cash register, POS terminal) where instant payments can be processed immediately; therefore, it is important to include not only the shop ID but also the identifier of the specific device in the credit transfer message. The above information is supplied in the "MerchDevID" field of the "Regulatory Reporting" block of the credit transfer order and the request to pay initiation, as a 35-digit character data type.
- Invoice or receipt identifier: it may be important to provide the identifier of the bill or invoice to be paid – for instance, in the case of utility bill payments –, because this may support subsequent retrievability both on the payer's and on the payee's side. Similarly, in the case of retail transactions it may be useful to supply the receipt identifier. The above information is supplied in the "InvoiceID" field of the "Regulatory Reporting" block of the credit transfer order and the request to pay initiation, as a 35-digit character data type.
- Customer identifier (for bill payments): it primarily happens in the case of utility bill payments that a service provider identifies its customers by way of a special identifier only used by the given service provider. In this case, this also needs to be included in the credit transfer message, because it helps to monitor the financial settlements both on the payer's and on the payee's side unambiguously. The above information is supplied in the "CustomerID" field of the "Regulatory Reporting" block of the credit transfer order and the request to pay initiation, as a 35-digit character data type.

- Payee’s internal transaction identifier: the payee business may assign an identifier to each individual financial settlement, and the inclusion of such identifiers in the credit transfer message may facilitate the quick and unambiguous processing of the transaction in the payee’s own internal systems. The above information is supplied in the “CredTranID” field of the “Regulatory Reporting” block of the credit transfer order and the request to pay initiation, as a 35-digit character data type.
- Loyalty or discount scheme identifier: in the case of retail purchases, it may be in the interest of both the payer and the payee merchant to include identifiers linked to specific discounts. This also enables the customer to identify himself with his own loyalty card number and claim the personal discounts to which he is eligible even before the approval of the transaction. The above information is supplied in the “LoyaltyID” field of the “Regulatory Reporting” block of the credit transfer order and the request to pay initiation, as a 35-digit character data type.
- National Tax and Customs Administration (NAV) verification code: in the case of retail purchases, the receipt must mandatorily contain the NAV verification code. In view of the posterior transaction processing, this code can also be included in the credit transfer message. The above information is supplied in the “NAVCheckID” field of the “Regulatory Reporting” block of the credit transfer order and the request to pay initiation, as a 35-digit character data type.

Table 1: Use of specific supplementary data contents in each payment situation

Data content	Physical acceptance	Electronic acceptance	Bill payment
Payment situation identifier	X	X	X
Shop identifier	X	X	
Device identifier	X		
Account identifier		X	X
Customer identifier		X	X
Payee’s internal transaction ID	X	X	X
Loyalty scheme identifier	X	X	X
NAV verification code	X	X	

These contents can be placed in the interbank messages defined by GIRO (instant credit transfer initiation: pacs.008, request to pay initiation: pain.013), and the centrally defined length and format enable all participants to interpret the information provided correctly. A practical example for the above: for the quick execution of a payment transaction in a physical shop of a retail chain it is necessary to also include, as detailed in the chapters above, the identifier of the shop and the identifier of the cash register or POS terminal located in the shop in the credit transfer message launched by the customer, in order to enable the merchant’s system to indicate to the given cashier the receipt of the payment, i.e. the financial settlement of the purchase.

It is also important to emphasise that the process of instant payment can be configured in numerous ways, including the transmission of request to pay messages; therefore, it is also important to ensure that these data are provided and forwarded also upon sending and receiving such requests. In other words, if the merchant sends a request to pay that includes these data – which assist in processing and reconciliation – then the payer’s payment service provider should compile the credit transfer order generated in response to the request to pay in such a way that it also includes the same data content.

Since during the development of the instant payment system the goal was essentially to design a flexible central infrastructure, the data contents listed above do not imply that it is not possible to add further data contents later on. However, due to the network nature of payment transactions, it is important to have central coordination in place in

respect of these data fields and contents (primarily through the rulebooks and technical documents of GIRO) because all participants of the payment process should be able to validate, interpret and process these data contents.

In relation to the standardised data content it should also be borne in mind that developments are needed on the corporate side and on the merchant side as well for the transmission and receipt of instant payment messages (credit transfers, requests to pay). The benefits of the new service – such as sending requests to pay to customers or payers – can only be exploited if the company's internal systems are also aligned with the changing business environment arising from the continuous, real-time exchanges of messages.

On the bank's side, the provision of customer information and statement sending will imply additional task in relation to the data content. In this regard, the following should be noted:

- Mandatory elements of the bank statement for credit transfers: legal regulations on subsequent information on payment transactions do not specify at message field level the exact information to be displayed on bank statements. In this regard, customers' interests should be borne in mind primarily; therefore, in the case of paper-based statements it is not necessary to print the data content of all message fields as it would result in an unmanageable format. However, it is expedient to make available to customers the data content required for the execution of business processes in an electronically processible format (such as XML), as this may ensure – in the case of corporate customers – the automated processing of financial settlements in the internal systems.
- Mandatory elements of the bank statement for requests to pay: in relation to requests to pay, in the case of instant credit transfers it is indispensable to indicate that they were launched in response to requests to pay, and the identifier of the request to pay should also be displayed.

5. PROPOSALS FOR THE RULES APPLIED TO ENSURE THE STANDARDISED OPERATION OF REQUESTS TO PAY

In accordance with the MNB Decree, requests to pay are standardised messages that include, at the minimum, the data required for the initiation of instant credit transfer orders. Essentially, the payment processes that can be executed with requests to pay are similar to those of direct debits; however, there are a number of differences compared to the main, currently used direct debit transaction types:

- Firstly, it is a difference from direct debits that requests to pay can be used far more extensively; for example, they can be used in retail payments and person-to-person payments alike. Secondly, financial settlement is not automatic; the payer's approval is required for the launch of the credit transfer, which also means that liquidity management may be more flexible on the payer's side. This might be an important factor among low-income payers, who can adjust bill payments to the receipt of their incomes⁵. On the sender's side, requests to pay allow for further flexibility in that the validity of the request can be set to any date within a 2-month period; in addition, for the sake of customer information, a separate payment deadline can be also set in the message.
- There is a difference compared to payment cards as well: on the one hand, it is not necessarily needed to involve separate physical devices (card and terminal) in the process; moreover, sending and receiving requests do not necessary require the participation of payment service providers. Fewer participants may translate to lower costs linked to the request to pay service relative to other payment methods. It is an additional advantage that the credit transfer generated in response to the request is immediately credited to the account.

⁵ See, for example, analyses on the "request for payment" service to be introduced in the United Kingdom: <http://www.fasterpayments.org.uk/sites/default/files/Request%20For%20Payment.pdf>

5.1. Basic-level business rules

Owing to the abovementioned specificities of requests to pay, there is a need to formulate basic-level, central operating rules, a part of which makes up the rulebook of GIRO, the operator of the central infrastructure. The individual rules detailed below specify whether their uniform application is expected of all participants of the provision of request to pay services, or the MNB just recommends participants to establish the given function so that they design their services in consideration of these rules of execution, thereby ensuring interoperability between the services.

- **Ability to modify the amount:** In order to facilitate the use of the request to pay service in as many payment situations and as flexibly as possible, in a dedicated message field the sender of the request has an option to indicate whether the amount specified in the request can be modified; i.e. whether a credit transfer involving a different amount can be launched in response to the given request. If yes, the modification is allowed in both directions; in other words, the amount of the financial settlement can be both higher or lower than the amount specified in the request. However, it is not possible to launch more than one credit transfer based on a request to pay. The standardised presentation of the choice of modification is subject to the RTP-MOD rule of the Message Implementation Guidelines of requests to pay, which is displayed by adding the “M” attribute in the PaymentIdentification/InstructionIdentification field of the request to pay; market participants are expected to treat this function accordingly.
- **Payment in installments:** Some business situations may call for payment in installments, but upon the launch of the system it will not be possible to pay in installments in response to the requests to pay received. It is possible, however, for the payee to handle the necessity of payment in installments by sending several requests to pay.
- **Requests to pay over HUF 10 million:** In the case of instant credit transfers, the statutorily defined value limit for the mandatory instant processing is HUF 10 million. The execution of instant credit transfers above HUF 10 million is up to the decision of the payment service providers participating in the process. It is therefore possible to send a request to pay above HUF 10 million, but it is not certain that the instant credit transfer launched in response to the request will be executed. GIRO will maintain a publicly available registry of the value limit up to which individual payment service providers are willing to send and receive instant credit transfer orders. Payment service providers report their send and receive limits to the registry on a voluntary basis; moreover, they may enter into bilateral agreements in this regard, of which they notify their customers in their standard service agreements in accordance with the provisions of the Act on Payment Services. If the payment service provider receiving the request to pay is aware that the credit transfer to be launched in response to the given request to pay in excess of HUF 10 million cannot be executed (because the provider has entered into an agreement with the payee’s payment service provider already), he is required to reject the request to pay. If the amount of the request to pay can be modified – that is, the “M” attribute is indicated in the PaymentIdentification/InstructionIdentification field of the request to pay –, the payment service provider receiving the request to pay shall forward the request to pay to the payer in all cases.
- **Transmission of HUF 0 requests to pay:** It is not possible to send HUF 0 requests to pay; the service provider sending the request is required to reject the request in accordance with the GIRO rulebook.
- **Display of dates:** According to the MNB Decree, the validity period of requests to pay cannot exceed two months. In addition to the mandatorily set validity period, there is an option – for the sake of customer information – to set the payment deadline as well, which must fall within the validity period. The underlying business content of this option is a possible situation where even though the sender of the request to pay specifies the payment deadline of the invoice (e.g.: 1 month), he is willing to accept payment after the expiry of the invoice but still within the validity period of the request to pay (2 months). Filling out the payment deadline field is not mandatory, but processing the content of the message field is recommended. In the request to pay, the validity period is displayed in the PaymentIdentification/RequestedExecutionDate/DateTime field to one hundredth of a second in accordance with the RTP-DLN rule of the Message Implementation Guidelines.

The payment deadline is displayed, also to one hundredth of a second, in the RegulatoryReporting/Details/Information/LatestDtTm optional field of the H-DATA rule of the Message Implementation Guidelines of requests to pay.

- Upon launching the request, the given service provider decides at his discretion the accuracy to which the request's initiator should specify the time; it is essentially a matter of the business agreement between the parties.
 - If, on the sender's side of the request the service provider does not allow the most accurate completion of the validity period field (up to 0.01 sec.), the provider must clearly indicate in its policies the accuracy to which the requests sent are filled out automatically. For example, if the validity period of the request to pay can only be specified to the day, it may make a day's difference in the time limit open for payment whether the service provider fills in the validity period according to 00:00 or 23:59. For the sake of the uniform treatment of validity periods, the MNB recommends that the service provider of the request to pay generate the request to pay message rounding up the missing time values if the sender of the request does not specify the validity period of the request to pay to one hundredth of a second. For example, if the customer specified 10:00 02.03.2020 as the validity period, in the request to pay message forwarded to GIROInstant the service provider should specify a time value of 10:00:59.99 02.03.2020. With respect to the treatment of time values, payment service providers are expected to provide accurate information to customers in all cases.
 - On the receiver's side of the request to pay (payer's side), time fields displayed should be accurate to the second.
- **Minimum validity period:** In payment situations where the financial settlement is expected to be executed instantly (e.g. physical retail purchases) it may be more expedient to define a short validity period in the request to pay, as a longer period for the settlement (hours or days later) would not make sense from a business perspective; moreover, any technical problems arising in the payment process may lead to customer complaints. At the same time, in these situations it is important to take into account time requirement of transmission and processing of individual messages; moreover, some time might be required on the payer's side as well, to manually approve the credit transfer order generated based on the request to pay. With that in mind, it is recommended to specify at least a 30-second period from generation for the validity period of requests to pay; however, the central infrastructure will not validate this period – it is solely dependent on the business processes of the sender of the request to pay or his service provider.
 - **Feedback on expired requests to pay:** If by the end of the validity period of the request to pay the payer has not launched a credit transfer, the service provider receiving the request need not notify the initiator of the request of the expiration of the validity period.
 - **Recall of requests to pay:** If the request to pay needs to be recalled to avoid erroneous financial settlement, it is possible to send a recall message in the system. The receiver of the request to pay must send a feedback whether the recall was successful or the instant payment transaction launched in response to the request has already been executed.
 - **Message flow in the case of non-bank participants:** Apart from the default case of requests to pay launched through the payee's account manager to the payer's account manager, numerous other non-bank participants can be involved in the process. If the addressee of the request to pay is such a non-bank participant (payment initiation service provider or another participant unlicensed to provide payment services) and is identified in the request to pay with the BEI code specified by GIRO (GIRO Request to Pay Scheme Rulebook), the feedbacks related to the request to pay (Rulebook: pain.014 RCVD, ACCP, RJCT messages) must be sent by this non-bank service provider. If a credit transfer has also been executed in response to the request to pay and the credit transfer order was submitted through a payment initiation service provider, after having received from GIRO the pacs.002 message on the execution of the credit transfer, the payer's bank is recommended to promptly forward the notification on the result of the execution of the credit transfer order to the payment initiation service provider submitting the order.

- **Sending several parallel requests to pay to the payer:** In some cases a customer may use his own account manager bank and another (payment initiation) service provider in respect of receiving requests to pay. In such cases it could happen that more than one request to pay messages are sent in parallel to the customer with respect to the same economic transaction (e.g. bill payment), which the customer can view both on the bank's and on the (payment initiation) service provider's interface. Consequently, there is a theoretical possibility that the payer settles the same financial obligation multiple times. In order to prevent this, the senders of requests to pay (e.g. utility service providers, merchants) are expected to design their respective systems taking all efforts to prevent such situations so that only one service provider can be registered per customer in relation to the transmission of requests to pay.
- **Requests to pay initiated in batch:** Since the MNB Decree has no provisions on how the payment service provider providing the request to pay service is required to set the working day on which the request to pay is accepted, nothing prevents the provider from setting a different working day in the case of requests to pay submitted in a batch than for non-batch requests to pay. Moreover, even in the case of batch requests to pay, the payment service provider can freely determine the time interval at which it is willing to accept such requests within the given calendar day. However, even in the case of batch requests to pay, the MNB expects the payment service providers offering such services to hold a working day continuously, at least for customers qualifying as consumers, on each calendar day with respect to requests to pay as well. Before accepting the requests to pay, the payment service provider managing the payee's payment account must perform, item by item, the checks required for the acceptance of batch requests to pay. Thereafter, the payee's payment service provider registers the requests to pay, and this will become the time from which the payment service provider has 5 seconds to forward its customer's request to pay to the payer's service provider. Payment service providers enter into separate agreements with their customers on the provision of the request to pay service, in which they can make stipulations even in regard of requests to pay that can be submitted by customers under one second.

5.2. Rules of (front-end) presentation on the customer's interface linked to the requests to pay

Numerous, previously inaccessible services can be provided to customers through requests to pay. For the widespread use of the service, it is essential to present these options to customers in a uniform and unambiguous manner.

- The payer's side is expected to ensure that the payer is also notified if the sender of the request to pay indicated that the amount can be modified, and the payer should also be able to do this on the given customer interface.
- It must be clearly indicated whether the request has expired or has been responded already, but this information should also be subsequently retrievable for customers; moreover, in such cases the possibility of the customer's launch of a credit transfer in response to such messages should be eliminated in order to comply with the MNB Decree.
- Payment service providers are recommended to put in place a solution where upon receipt of a suspected fraudulent request to pay customers are not only enabled to reject the request but also to report the suspected fraud to their PSPs in an easy-to-use manner (e.g. by pressing a "Report fraud" button or by way of an electronic form).
- In order to prevent fraud, payment service providers are recommended to put in place a solution in their applications that enables the user (payer) to block the sender of a request to pay – because of fraud or for any other reason –, or to request such blocking from the service provider in a simple way.
- Upon the recall of requests to pay, the addressee of the requests expected to be notified of the recall of the request and of the reason for the recall – if available – based on the information contained in the Additional Information field of the pain.014 message.

5.3. Use of secondary account identifiers, their connection to requests to pay

The use of secondary account identifiers and the related processes are regulated in detail by the MNB Decree and the GIRO Rulebook. However, for the sake of clarity, a few key points should be noted:

- **The central database of secondary account identifiers can only be queried by payment service providers.** This is because the database contains such connected personal data (account number, phone number, email address, tax number, tax ID) to which access should be allowed only for a very restricted group of users for data protection reasons. In addition, no one should be in a position to create their own customer database from the data provided by customers. It is also important that even payment service providers are required to have a specific purpose for querying the payee's account number linked to the secondary account identifier, which must be related to specific credit transfer or request to pay transactions.
- **Account servicing and payment initiation service providers will have different permissions.** Payment initiation service providers (PISPs) will only have access to the search function; i.e. they are only allowed to query from the central database the account number linked to the payee's secondary account identifier. Account servicing payment service providers (ASPSP), however, will also have access to the registration, deletion and query (i.e. the look-up of secondary account identifiers linked to an account number) functions (see: GIRO Rulebook).
- **If the credit transfer order is submitted with the payee's secondary account identifier through a payment initiation service provider, the operating processes may vary.** Since both payment initiation service providers (PISP) and account servicing payment service providers (ASPSP) are permitted to look up information in the central database (i.e. query the payee's account number linked to the secondary account identifier), it depends on the internal process organisation setup of the participants whether the query is performed by the PISP already, or it will be the ASPSP's task.
- **It is not possible to launch a request to pay under the secondary account identifier of the payee (sender of the request to pay).** Since the validity period of requests to pay may be as long as two months, during this period there might be a change in the account number linked to the secondary account identifier of the payee of the credit transfer to be launched based on the request to pay, or the secondary account identifier may be

deleted from the central database. In such cases, the credit transfer launched in response to the request may be sent to the wrong account number or may fail altogether. In order to avoid this, all requests to pay must include the payee's account number. Upon launching the request to pay, it is possible to specify the secondary account identifier of the recipient of the request to pay (the payer).

6. FUTURE TREATMENT OF THE GUIDELINES

The main purpose of the Guidelines was to ensure that all potential uses and payment processes known at the time of the Hungarian launch of the instant payment system are supported by guidelines on the operating rules applied by market participants that enable the uniform execution of instant payments. Market innovation, however, may give rise to new business requirements in the future, which may necessitate the modification and extension of the Guidelines. Since in certain cases this may differently affect the business interests of individual market participants, it is important that all decisions regarding the Guidelines are made on the basis of market feedbacks, but essentially in consideration of public good and the advancement of the entire Hungarian payment market. Therefore, the Guidelines will remain in the care of the MNB and GIRO Zrt. after the launch of the instant payment service. Market participants, in turn, may also submit proposals regarding potential modifications to the Guidelines, with consultations held on the application possibilities thereof between the managers of the Guidelines and the affected users. The modifications approved on the basis of the proposals will be publicly announced by no later than 3 months before the entry into force.