

EPC Report on Instant Payments

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1. Executive Summary

An active debate has started among market players within the SEPA payments industry and among public authorities regarding the case for ‘faster’ and even ‘instant’ payments.

With this report and against the background of the 1 December 2014 ERPB Statement, the EPC wishes to contribute to the forthcoming debate on instant payments within the ERPB. The entire contents of this report are based on ‘desktop’ research alone and discussions within the EPC have to date involved its members only. Therefore this report must be seen as a preliminary contribution from just one SEPA stakeholder.

The report highlights that the expectations of both payers and payees must be the starting point to develop an approach for instant payments in SEPA. These should be the basis for the debate within the ERPB. The first action to undertake should be to understand what payers and payees actually want from instant payments. The defined needs of the payer and the payee will determine the concrete features of any instant payments solution. They will also provide an indication about the volume potential in instant payments and the most suitable payment instrument(s).

The report also outlines the opportunities that instant payments may bring. They have the potential to reduce cash and cheques especially in the Person-to-Person (P2P) and Person-to-Business (P2B) segments and facilitate e- and m-commerce payments.

Payment Service Providers (PSPs) could use their instant payment infrastructure (where available or planned) as a springboard to develop other 24/7/365 financial services and products to serve their customers better and attract new clients. When using the instant payment services, the PSP business customers can further develop their own solutions, for example to centralise their liquidity and to improve their cash-flow management.

The EPC especially would like to draw the attention of the ERPB to the issues (chapter 6) when considering its approach for instant payments in SEPA. One issue that the ERPB will need to assess and eventually concur on, is which “go to market” scenario would be the most appropriate to reach the full potential of instant payments in SEPA. Also the roll-out of an instant payment solution supported by various PSPs will demand that PSPs, payment infrastructure providers and corporate payment service users allocate substantial resources to and carefully plan internally their part in the roll-out. They should coordinate on a regular basis with each other as the implementation progresses. This will be a gradual process within SEPA.

Based on our assessment of the market and the customer perspective, the opportunities and the issues that instant payments at SEPA level may bring, the EPC is of the opinion that there may be a need for an instant payment scheme at SEPA level. At this stage, with the current ERPB definition in mind and subject to the position and expectations of the other stakeholders from the supply and demand side, a majority of the EPC Instant Payments Task Force members consider that the credit transfer could be a suitable payment instrument for instant payments in SEPA, as a first step. On the other hand, the EPC wishes to point out that other payment instruments, notably electronic money and payment cards, are also suitable for instant payments and that certain existing instant payment solutions are based on these particular payment instruments.

In view of the benefits of broadening the discussion in an ERPB multi-stakeholder environment, the EPC recommends it would be desirable for the ERPB to establish an instant payments working group with the mission of analysing what the end-to-end requirements for pan-European instant payment scenarios would be. The EPC submits together with this report a proposal for Terms of Reference of a working group on instant payments, for the ERPB to consider (see Annex I).

The EPC finally wishes to draw the ERPB’s attention to possible high level business requirements for future instant payment solutions (see in Annex II). Our intention with this input is to demonstrate the complexity related to the development of a European instant payments solution, for stakeholders to consider.

2. Background

2.1. Diverse payment landscape in SEPA

The Single Euro Payments Area (SEPA) is composed of a large number of countries with separate and diverse national payment systems, instruments and habits¹, even after the successful migration to SEPA payment schemes. The overall share of electronic payment volumes in the total volume of payments still greatly differs between SEPA countries.

The market share of each electronic payment instrument within the volume of electronic payments can also be markedly different. For example, the direct debit is the preferred electronic payment instrument in some countries whereas the credit transfer or the payment card is the most frequently used instrument in other countries.

At EU level, ECB statistics show that approximately 100 billion non-cash payments were made in 2013, broken down as follows:

- Card payments: 43.6
- Credit transfers: 26.5
- Direct debits: 23.9
- Cheques: 3.7
- Electronic money payments: 1.8
- Other: 0.4

2.2. Short explanation of current major payment instruments

2.2.1. *SCT and SDD*

The aim of the Single Euro Payments Area (SEPA) is to improve the efficiency of payments and turn the fragmented national markets for euro payments into a single domestic one across the EU/EEA. This enables end-users to send and receive cashless euro payments under the same conditions to (from) anyone located anywhere in SEPA, using a single payment account and a single set of payment instruments.

In particular, following the SEPA Regulation (Regulation (EU) No 260/2012), existing national euro credit transfer and direct debit schemes are being replaced by SEPA Credit Transfer (SCT) and SEPA Direct Debit (SDD).

The identification of any account in the SEPA countries is based on the International Bank Account Number (IBAN) and the Business Identifier Code (BIC), being one of the elements on which the clearing² and settlement of SCTs and SDDs between Payment Service Providers (PSPs) is based in SEPA.

Article 69 of the Payment Services Directive (PSD) stipulates that the payer's PSP has to ensure that, after the point in time of the receipt of the payment order, the amount of the payment transaction is credited to the payee's PSP account at the latest by the end of the next business day.

In most cases, the SCT and SDD transactions are processed, cleared, settled and booked through batch³ processing and not in real time. On any given business day, the SCT and SDD transactions initiated by the corporate and business customers are usually transmitted in a data file although they may be initiated individually.

¹ For further information, please consult item 7.2 "Relative importance of payment instruments" of the ECB Payment Statistics Data dated 25 August 2014 (consult <http://sdw.ecb.europa.eu/reports.do?node=1000001964>)

² Clearing is defined as the process of transmitting, reconciling and, in some cases, confirming transfer orders prior to settlement, potentially including the netting of orders and the establishment of final positions for settlement. Clearing of payments is necessary to turn the promise of payment (for example, in the form of an electronic payment request) into actual movement of funds from one Payment Service Provider (PSP) to another

³ Difference between batch and real-time processing:

- Batch processing: all individual payment transactions received during a specific period of time during a business working are grouped into a single (batch) file. This file is then submitted for further clearing and settlement usually at the end of day.
- Real-time processing: the processing, clearing and (potentially) settlement of payments take place on a transaction-by-transaction basis as soon they reach a PSP system, i.e. in real time.



Usually at the end of the business day, the files are all uploaded in one (or more) batch(es) and transmitted for further clearing and final settlement via SEPA scheme compliant market infrastructures. The current settlement times are dictated by TARGET2⁴ opening hours and business days.

When the final funding positions between the payer's PSPs and the payee's PSPs are determined, the funds are subsequently released from the payer's PSPs to the payee's PSPs. Only then will the payee's PSPs book the funds on the accounts of the respective payees.

In some countries the clearing & settlement process is carried out a number of times during workdays, which leads to a same day processing. Where on-us⁵ processing takes place, the booking can take place real-time. In addition a payee's PSP also has the option to pre-credit its clients.

2.2.2. Payment cards

A payment card is a card that can be used by a cardholder and accepted by a merchant to make a payment in return for goods and services – either at the point of sale (POS) or remotely (in “card-not-present” transactions) – or to withdraw cash at automated teller machines (ATMs). Cards are used to authorise a debit from the cardholder's account or to draw on a line of credit granted to the cardholder by the card issuer. Cards are issued in the context of a card scheme, and the transactions effected using those cards are cleared and settled in accordance with the rules of that card scheme. The routing to clear and settle card payments may currently vary depending upon the card scheme.

The transfer of funds from the cardholder to the card issuer and from the card acquirer to the merchant is carried out in accordance with the contractual agreements between those parties. The transfer of funds from the card issuer to the card acquirer takes place in accordance with the rules of the card scheme.

A card transaction provides the payee with a guarantee within the limits of the card scheme rules and applicable legislation.

2.2.3. Cash payments

Customers also rely on cash payments (i.e. payments made using banknotes and coins). Cash is mainly used for face-to-face transactions of low value between individuals or between an individual and a merchant. A cash payment can be made at any time and is an immediate and final transfer of value. The recipient can immediately use the cash received for further payments. In most EU countries cash is still the predominant retail payment instrument in terms of number of transactions.

2.2.4. Large value payments

In addition to the SEPA retail payment schemes, customers are able to initiate single urgent and/or large-value payment transactions which are settled within the same day on a one-to-one basis in central bank money with immediate finality. These transactions are transmitted through dedicated infrastructures which are open during normal business working hours only.

Banking applications based on these infrastructures already address current customer needs for urgent payments – such processing includes not only “large value” transactions but at times also “low value”, retail transactions. These solutions speed up the processing of payments but do not define standards in the end-to-end processing.

2.3. **Legal and regulatory environment in EU**

Payments in the EU are regulated by an extensive set of European legislation. The list below details the most important laws and regulations:

- Payment Services Directive (PSD) (Directive 2007/64/EC)

⁴ TARGET2 is the real-time gross settlement (RTGS) system owned and operated by the Eurosystem. Payment transactions are settled one by one on a continuous basis in central bank money with immediate finality.

⁵ On-us payment means that the transaction is processed between the payer's account and the payee's account whereby both accounts are held with one and the same PSP



- SEPA Regulation (Regulation 260/2012)
- Regulation on cross-border payments (Regulation 924/2009)
- Regulation on information on the payer accompanying transfers of funds (Regulation 1781/2006)
- Directive on the comparability of fees related to payment accounts, payment account switching and access to payment accounts (PAD) (Directive 2014/92/EU)
- Settlement Finality Directive (SFD) (Directive 2009/44/EC)
- Anti-Money Laundering Directive (AML) (Directive 2005/60/EC)
- Data Protection Directive (Directive 95/46/EC)
- SecuRe Pay Recommendations
- European Banking Authority (EBA) Guidelines

2.4. Change drivers for payments

New technologies (e.g., smartphones, APIs, cloud computing) lead to changes in customer habits and expectations - including but not limited to the uptake of e-commerce and m-commerce - and stimulate innovation in payments. Customers make increasingly use of these online and mobile channels to buy goods and services at any time - including during evening hours and weekends - and anywhere.

These developments contribute to the expectation for a faster (or real-time) finality and/or confirmation of the payment.

2.5. Views from Euro Retail Payments Board and European Central Bank on instant payments

Referring to these change drivers, an active debate has started among market players within the SEPA payments industry and among public authorities regarding the case for 'faster' and even 'instant' payments.

The Statement following the **Euro Retail Payments Board (ERPB)** meeting of 1 December 2014⁶ outlined that “ *‘instant payments’ are defined as electronic retail payment solutions available 24/7/365 and resulting in the immediate or close-to-immediate interbank clearing of the transaction and crediting of the payee’s account with confirmation to the payer (within seconds of payment initiation). This is irrespective of the underlying payment instrument used (credit transfer, direct debit or payment card) and of the underlying arrangements for clearing (whether bilateral interbank clearing or clearing via infrastructures) and settlement (e.g. with guarantees or in real time) that make this possible.*”

In that same ERPB document, the vision on instant payments is articulated:

“In a competitive market, providers should not adopt a “silo” approach offering closed-loop non-interoperable instant payment solutions, but a “layered” approach developing a scheme for end-users to make payments with increased speed leveraging the current payment instruments (first layer) and the underlying clearing and settlement infrastructures (second and third layer). Such solutions should take advantage of the harmonisation and integration already achieved with the SEPA project, preventing the emergence of a fragmented European market for instant payments in euro. [There is] a need for at least one pan-European instant payment solution for euro open to any payment service provider (PSP) in the EU.”

Finally, the ERPB “*invited the supply side of the industry (in close cooperation with the demand side and with the active involvement of the EPC as a potential scheme developer) to make an assessment of the issues related to pan-European instant payment solutions in euro to be presented at the ERPB meeting in June 2015.*”

The **European Central Bank (ECB)** further describes the term ‘Instant payment solution’⁷:

“Instant payment solutions should be understood as “cashless cash”: in the era of e-commerce and digital communication users expect such solutions to be available and to deliver the same payment experience as cash, i.e. not only provide immediate confirmation that funds are available on the payer’s account, but also immediate availability of such funds to the payee.”

⁶ ERPB statement following the second meeting of the ERPB held on 1 December 2014 (ERPB/2014/018)

⁷ Pan-European instant payments in euro: definition, vision and way forward (ERPB/2014/017)

3. Report's objective, scope and approach

With this report, and against the background of the 1 December 2014 ERPB Statement, the EPC wishes to contribute to the forthcoming debate on 'instant' payments with the other ERPB members. The ERPB definition could be split into:

- a) What is meant with an instant payment:

"Instant payments' are defined as electronic retail payment solutions available 24/7/365 and resulting in the immediate or close to immediate interbank clearing of the transaction and crediting of the payee's account (within seconds of payment initiation)"*

***EPC note:** in order to avoid any interpretation on the type of account, the PSD definition of 'payment account' should be followed.

- b) The payment instrument:

"irrespective of the underlying payment instrument used (credit transfer, direct debit or payment card) and"*

***EPC note:** electronic money⁸ should be added to include all existing electronic payment instrument types

- c) How an instant payment can be finally settled*:

"irrespective of (...) the underlying clearing and settlement arrangements that make this possible."

***EPC note:** different solutions can be identified

The EPC understands that the ERPB definition of instant payments represents a long-term vision for instant payments, setting out wide-ranging deliverables and milestones. However, intermediate phase(s) to reach that goal may be needed as payers and payees in different countries and segments might have different expectations from instant payments. It is important to stress that instant payments may not be limited to retail payments stricto sensu (refer to sections 2.2.1 to 2.2.4) and that they may substitute some existing electronic payment instruments, cheques and cash. Furthermore, instant payments can be subject to a form of processing cycle that will be different from the existing batch SEPA payment processing.

This report stresses that the expectation of both payers and payees must be the starting point to build the future landscape for instant payments and should thus drive the debate within the ERPB. On purpose, this report limits itself to instant payments made from and to payment accounts. Instant payments to/from other types of account are out of scope of this report – yet not discarded.

The entire contents of this report has been based solely on 'desktop' research and discussions within the EPC. Due to time constraints, the EPC has not engaged into any formal discussions with representatives from the demand side or from other payment supply players at European or at national level on the topic of 'instant' payments for the purpose of producing this report. Therefore, this report must be seen as a preliminary contribution from only one SEPA stakeholder.

The report seeks to provide a market and customer perspective on instant payments (chapter 4), lists the opportunities (chapter 5) and main issues (chapter 6) and concludes with recommendations (chapter 7), as an EPC contribution for the ERPB to consider. The EPC finally wishes to draw the reader's attention to possible high level business requirements for future instant payment solutions described in Annex II - Possible high level business requirements.

⁸ Electronic money (e-money) can be understood as a digital equivalent of cash, stored on an electronic device or remotely at a server. An example is an "electronic purse", in which users store relatively small amounts of money on a smart card to use for small payments. E-money can also be stored on and used via mobile phones or internet-based payment accounts

4. Market and customer perspective on instant payments

4.1. Current market position

Within SEPA, a number of payment initiatives have emerged providing for faster time cycles (in some cases involving real time processing). A considerable number of the launched initiatives concern on-us payment and electronic money solutions.

Currently, already a few initiatives seem to meet the ERPB definition of instant payments if one considers making an instant payment between the payer’s account and the payee’s account whereby each account is held at a different PSP (namely in Denmark, Italy, Poland, Sweden and UK).

Figure 1 below provides a non-exhaustive list of initiatives. Some of these solutions are limited to a Person-to-Person (P2P) functionality.

Inter-PSP solutions <i>(with infrastructure provider)</i>	On-U.s payment / e-money solutions
<ul style="list-style-type: none"> o DK: Mobile Pay, Swipp (<i>Express Clearing</i>) o ES: Ealia (<i>Cecabank</i>) o EU: Visa Direct*(<i>bank card infrastructure</i>) o FR: Paylib (<i>bank card infrastructure</i>) o GR: DCT (DIAS Credit Transfer) OnLine (DIAS) o IT: Jiffy (SIA), ZAC (ICBPI) o PL: Express Elixir (KIR), BlueCash (<i>Blue Media</i>), P2P mobile payments (BLIK/<i>Express Elixir</i>) o PT: MB SPOT instant transfer (SIBS) o SE: Swish (BiR) o UK: Paym (<i>Faster Payments</i>) <p>=> 14 solutions (so far)</p> <p><small>* Formerly named Immediate Payments (sent through the Visa Personal Payments system)</small></p>	<ul style="list-style-type: none"> o AT: Yapital, Paybox premium, Erste Bank iPhone to iPhone app o BE: Scashen (two BE banks) o DE: Yapital o ES: Wizzo, Cashually, TRANSFI, Yaap Money o EU: iPay International, PayCash, PayPal (even global) o FI: DNA Täpökkä, Elisa Wallet, MobilePay o FR: S-Money o GR: Winbank Instant Cash App o IE: Pay to Mobile, Realex Fire o IT: HYPE o LU: Yapital o LV: Mobilly o MT: BOV Mobile o PT: Caixa plim, QR Code Millenium <p>=> 24 solutions (so far)</p>

Figure 1 Non-exhaustive list of faster or instant payment initiatives in the EU (EPC desktop research)

4.2. Customer expectations as starting point

The customer needs for an instant payment should form the starting point when developing any instant payment solution. The requirements of both the payee and the payer should be collected upfront. Payees and/or payers might expect that an instant payment essentially provides the same (or even superior) payment experience as cash (“cashless cash”). In addition payees might require the instant availability of funds given to the payee or at least the instant receipt of a payment confirmation or guarantee.

The defined needs from the payer and the payee will determine the concrete features for any instant payment solution at national and/or at a cross-border level. This should give an indication about the expected volume and aggregate value of instant payment transactions. As a consequence, such input will also determine the clearing and settlement structure needs as well as the overall implementation and annual recurring operating costs.

Even though the EPC has not engaged into any formal discussions with representatives from the SEPA demand side or from other SEPA supply players at European or national level, it identified on a preliminary basis the following payer and payee expectations for an instant payment solution:

4.2.1. Both from payers and payees

- Instant payment solution, accessible in a 24/7/365 mode
- Easy to use
- Confidence in the reliability of the payment solution

- Broad reachability of the solution: a large majority of PSPs offer an instant payment solution
- Solution is PSP independent: instant payments can be sent/ received to/from anyone regardless of the payer’s PSP or the payee’s PSP

4.2.2. From payers

- Easy to pay with
- Instant certainty of the payment

4.2.3. From payees

- Availability of funds: the funds have been made available (nearly) real-time to his/her payment account

4.3. Potential impact of instant payments

The current technology developments described in section 2.4, namely the smartphone adoption and the integration of sales channels open 365/24/7 by the merchants, together create the conditions for a consumer to make a payment anytime (with immediate execution) and anywhere in the P2P and person-to-business (P2B) segments. The use of instant payments in these two segments has the potential to reduce the usage of cash and cheques.

As for the Business-to-Business (B2B) and Business-to-Person (B2P) segments, the predictability of the payment transactions made in these segments will remain the most relevant factor for payers and payees. Many payments in these segments may not need an instant - but rather a timely - execution (e.g., recurrent collections, salary and pension pay-outs). On the other hand, specific niches in the B2B segment could become early adopters of instant payments (e.g., to make or receive the payment for the delivery of goods within a just-in-time supply chain; replacement of large-value cheques to allow an immediate transfer of ownership of goods or assets).

The assumption could be made that success of instant payments in the P2P and P2B segments may lead to the spread of instant payments into the B2B and B2P segments over time.

In Figure 8 of the Annex III – Potential impact of instant payments on existing payment instruments, the EPC provides an overview about the electronic payment instruments which appear to be candidates for instant payments. Figure 8 is essentially based on information collected by SWIFT and the Dutch banking community.

4.4. Possible examples of use cases

The non-exhaustive list of examples of use cases below shows in which situations instant payments could bring benefits to payers and/or payees. It should be noted that existing electronic payment instruments can already support most mentioned use cases.

Person-to-Person (P2P)	Person-to-Business (P2B)
<ul style="list-style-type: none"> – Money transfer of funds between consumers: <ul style="list-style-type: none"> ○ Face-to-face to substitute cash or cheques: Purchase of (second-hand) goods with higher value (e.g., car, furniture, antique); paying a share of a joint bill; pay-out of pocket money ○ Not-present: remittance or emergency fund transfer to the beneficiary for immediate use by the beneficiary – Purchase on (internet) auctions – Buying goods online from another consumer 	<ul style="list-style-type: none"> – Consumer spots an opportunity and uses an instant payment to pay for a good or service (last-minute tickets for events, travel, parking) – Purchase on online/ internet stores – Payment of services rendered at home and the service provider requests to be paid on the spot (e.g., plumber, electrician, cleaner) – (Re)Activation of services (e.g., mobile phone top up, online streaming of live events, video on demand)

	<ul style="list-style-type: none"> – Invoice/bill payment to avoid late payment penalty fees or cut-off of service delivery – Purchase of or payment advance for high-value goods (e.g., apartment, car) which requires immediate transfer and/or confirmation of funds to the payee – Payment of goods or services at POS with a mobile device (substitute to cash) e.g., taxi, restaurant, shop – Donations to disaster-relief organization – Payment of insurance premium to provide immediate cover for the risks to be insured – Payment of tax, fines or penalties
Business-to-Person (B2P)	Business-to-Business (B2B)
<ul style="list-style-type: none"> – Urgent pay-out of compensation (government welfare, insurance claims) to the consumer – Payment for delivery of service from freelancers, self-employed, day-workers at end-of-day or at the moment of completing the project – Immediate reimbursement by a merchant of a returned good bought by a consumer – Urgent correction of payment error or oversight – Payday lending 	<ul style="list-style-type: none"> – Non-recurrent pay-on-delivery: food and beverages between shops & suppliers, fuel supply, shipping – High-value intercompany transfers payments e.g., driven by short-term treasury needs – Payment of insurance premium to provide immediate cover for the risks to be insured – Centralisation of funds into one PSP / account – Payment of tax, fines or penalties – Urgent correction of payment error or oversight – Money transfer of funds between businesses to substitute bank-confirmed cheques for the purchase of high-value goods or assets including merger and acquisition-related payments – Alternative for the national and/or EU limitations set on cash transactions for the purchase of goods or the limitations set for card transactions – Purchase on online/ internet stores – Payment of services rendered on the spot and the service provider requests to be paid on the spot (e.g., plumber, electrician, cleaner) – Invoice/bill payment to avoid late payment penalty fees or cut-off of service delivery – Purchase of or payment advance for high-value goods (e.g., apartment, car) which requires immediate transfer and/or confirmation of funds to the payee

Figure 2 Examples of instant payment use cases



Each individual PSP will determine the appropriate channel(s) through which it will offer an instant payment service to its various customer segments.

PSPs may also continue to introduce new services based on instant payments and/or their internal instant infrastructure, which could lead to new use cases.

4.5. Suitable payment instruments for instant payments

The selection of a payment instrument that would be suitable for instant payments will depend on the needs and expectations expressed by payers and payees based on the various payment instruments' features, including the related rights and obligations. Business requirements will also play a role in the selection of the underlying payment instrument.

Card payments and direct debit collections are initiated by the payee whereas for credit transfers and electronic money it is the payer that starts the payment initiation process. The selection of the instrument will determine the set-up of underlying clearing and settlement infrastructure and the use of standards.

The ERPB definition of instant payments currently specifies that the instant payment results “...in the immediate or close-to-immediate interbank clearing of the transaction and crediting of the payee’s account with confirmation to the payer (within seconds of payment initiation).”

At this preliminary stage, with the current ERPB definition in mind and subject to the position and expectations of the other stakeholders from the supply and demand side, a majority of the EPC Instant Payments Task Force members consider that the credit transfer could be a suitable payment instrument for instant payments in SEPA, as a first step. A specific scheme may be required in that context.

On the other hand, the EPC wishes to point out that other payment instruments, notably electronic money and payment cards, are also suitable for instant payments and that certain existing instant payment solutions are based on these particular payment instruments.

5. Opportunities

As shown in the use cases in Figure 2 above – there are a number of situations where instant payments can be an added value to payers, payees and their PSPs.

Firstly, it has the potential to reduce cash and cheques especially in the P2P and P2B segments and thereby increase the value of servicing such customer segments. Furthermore, it may reduce the cost of managing cash and cheques which are the most expensive means of payment at the level of the entire economy. Instant payments may further facilitate e- and m-commerce payments. The EPC also believes that instant payments should not be looked at in isolation. The payment can be seen as just one phase within a larger - integrated - value chain of service and/or good offerings.

PSPs could use their instant payment infrastructure (where available or planned) as a springboard to develop other 24/7/365 financial services and products better to serve their customers and attract new clients. Instant payments would be a useful tool to spread the use of digital interaction channels between PSPs and their clients, contributing to the larger goal of Digital Europe.

When using the instant payment services, the PSP business customers can further develop “treasury and payment factories” to centralise their liquidity and to improve their cash-flow management. The availability of funds 24/7 will help to optimise their liquidity management.

6. Main Issues

In light of the ERPB Statement (refer to section 2.5), the EPC wishes to draw the attention of the ERPB to the following issues below. The order of the issues is not to be considered as an indication of their relative importance.

The EPC emphasises that actions to address these issues still have to give PSPs and Payment Service Users (PSUs) the potential to adopt new technologies. These actions should maintain the ability for PSPs to innovate in services offered to their customers and, at the same time, preserve competition between PSPs.

6.1. The “go to market” scenarios for instant payments

Broadly speaking, two main scenarios exist to offer instant payments to payers and payees across SEPA: either through interoperability between existing (national) solutions or by establishing at least one instant payment solution SEPA-wide. Each main scenario or a combination of these two scenarios to launch an instant payment solution⁹ has pro’s and con’s.

Scenario	Pro’s	Con’s
One instant payment solution SEPA-wide	<ul style="list-style-type: none"> – One single solution with SEPA-wide reach potential – Solution most likely to fit the needs of all payers and payees all over SEPA thanks to required intensive cooperation between PSPs and other stakeholders – Clarity for PSPs and customers about solution specifications and implementation costs in addition to known business requirements for the value chain – Economies of scale – Leverage of investment for SEPA migration – Using a SEPA brand, an easily recognisable solution for all EU users 	<ul style="list-style-type: none"> – Long time-to-market: requires upfront cooperation and consensus with PSPs and other stakeholders at SEPA level on the underlying payment instrument. – The agreement reached between PSPs and other stakeholders might not provide the ideal one-size-fits-all solution meeting all national (and possibly different) payment behaviours or alternatively could require extra costs – Unlikely to lead to a rapid convergence – Impacts the existing (national) (P2P) instant payment solutions in the market or being implemented (and related investments) – Huge infrastructure project – Less room for innovation
More than one instant payment solution SEPA-wide	<ul style="list-style-type: none"> – PSPs and PSUs may have a choice in instant payment solutions that meet their needs – The underlying payment instrument can be different for the various solutions – The existing (national) instant payment solutions may develop into a SEPA wide solution 	<ul style="list-style-type: none"> – Need for interoperability may have a negative impact on execution time of the instant payment (with more participants and infrastructures in the chain, more time for the execution is needed) – Extra implementation costs for PSPs and PSUs in case they wish to offer more than one instant payment solution – Can a SEPA-wide reach be obtained? – Impacts the other existing (national) (P2P) instant payment solutions in the market or being implemented (and related investments) – Risk of fragmentation
More than one instant payment solution SEPA-wide alongside national solutions	<ul style="list-style-type: none"> – Successful existing national instant payment solutions may develop into a SEPA wide solution – PSPs and PSUs may have a choice in instant payment solutions that meet their needs – The underlying payment instrument can be different for the various solutions 	<ul style="list-style-type: none"> – Need for interoperability may have a negative impact on execution time of the instant payment (with more participants and infrastructures in the chain, more time for the execution is needed) – Extra implementation costs for PSPs and PSUs in case they wish to offer more than one SEPA solution and the successful national solutions – Can a SEPA-wide reach be obtained?

⁹ The EPC considers that the instant payment solutions will be optional for any PSP

	<ul style="list-style-type: none"> – National solutions can be more focused on addressing specific community needs and culture, therefore driving adoption more effectively – Smaller number of participants in a solution are easier to handle in order to enable faster time to market – Leverage on already existing/planned solutions, local instruments and infrastructures 	<ul style="list-style-type: none"> – Risk of continued fragmentation
Only national solutions but with interoperability	<ul style="list-style-type: none"> – Shorter time-to-market – PSPs and PSUs may have a choice in instant payment solutions that meet their needs – The underlying payment instrument can be different for the various solutions – Higher national acceptance because of fit to culture based expectations – Leverage of already existing/planned solutions, local instruments and infrastructures 	<ul style="list-style-type: none"> – Costs to set up interoperability between the solutions – Interoperability can have a negative impact on execution time of the instant payment (with more participants and infrastructures in the chain, more time for the execution is needed) – Risk of greater fragmentation – Interoperability issues between national solutions for PSPs wishing to offer and for payers & payees wishing to use instant payments – More time required to reach sufficient reachability – May payees and payers still have interest for instant payment solutions?

Figure 3 Launching instant payment solutions: scenarios and implications

It must be noted that so far a limited number of PSPs were involved in the development of instant payment solutions most of which are used at national level only. This has made the launch of these solutions better manageable in terms of the number of stakeholders. Developing instant payment solutions at SEPA level will demand input and support from a much larger and more heterogeneous group of stakeholders (e.g., already over 4,500 PSPs use the EPC SCT scheme).

6.2. Implementation of instant payment solution

Various avenues can be explored to develop instant payment approaches, depending on the payment instrument (payment card, credit transfer, direct debit, electronic money) and on how an instant payment solution will be linked with the clearing and settlement layer and on whether to go for a staggered approach or a “big bang” across Europe.

An instant payment solution that executes payment transactions from the payer to the payee with each PSU using a payment account held at different PSP, has to rely on real-time and resilient infrastructures at inter-PSP level and at PSP-PSU level (especially for corporate and public PSUs) to prevent failures in payment instruction transmission and processing.

The roll-out of an instant payment solution supported by various PSPs demands that PSPs, payment infrastructure providers and corporate PSUs carefully plan the roll-out internally and coordinate regularly the implementation progress between one another.



Each involved party will have to invest in the appropriate technology, allocate the required FTE resources, and budget ahead the costs for the solution development, the implementation rollout and the subsequent recurring run-the-business costs. Given the resilient infrastructures required for instant payments, this can form an obstacle for smaller PSPs to participate in the initial launch phase of an instant payment solution. PSPs may leverage currently available payment infrastructure and internal systems to make the roll-out of an instant payment solution as cost-efficient as possible. It will require time to realise all these steps before an instant payment solution is rolled out across SEPA.

The EPC has not engaged into any formal discussions with representatives from the demand side or from other payment supply players at European or at national level on the topic of instant payments. Therefore the EPC can highlight from the sole perspective of a PSP the following implementation factors that must be foreseen when planning and budgeting for the implementation of an instant payment solution:

- Changes to existing core banking systems enabling debiting and crediting of payments in an instant way
- Implementation of a gateway enabling instant payments online processing (e.g., transaction validation/transformation, etc.) and integration of such gateway with existing core banking systems
- IT infrastructure upgrades depending on the foreseen transaction volumes (one by one transaction processing in an instant manner vs. batch file processing several times a day)
- Changes in electronic banking systems (new functionality for customers to be presented and operated in the internet and mobile banking systems)
- Other IT infrastructure investments (e.g., requirements regarding network parameters, cryptography)
- Operational costs:
 - Liquidity management
 - Risk management
 - Payments operated in a 365x24x7 mode (appropriate resources should be in place)
 - Testing (due to the online nature of instant payments there are higher requirements on tests environments/performance tests, etc.)

By way of illustration, in Denmark¹⁰ instant payments were implemented as part of a larger project to modernise the payments infrastructure. The main deliveries in the project was a new clearing and an instant payments solution. The total cost was about 33,5 million EUR (250 million DKK) at infrastructure and at PSP level.

With regard to the UK Faster Payments solution¹¹, the cost for of building, installing, and maintaining the infrastructure was 275 million EUR (200 million GBP) or 15% of the total cost. On top of that, the average investment cost for each of the 12 initial PSPs that offered this solution at the 2008 launch date was between 62 and 70 million EUR (45 and 51 million GBP respectively), although the actual cost varied considerably between those PSPs, which already had a real time core banking platform and those that did not.

The illustrations from Denmark and the UK highlight that individual PSP and country situations are not comparable and the investments required for an instant payment solution can be very different between PSPs or countries. The starting point from which the PSPs in each country will roll out an instant payment solution will be different. Each country has separate and diverse national payment systems.

From the above it clearly appears that the time and investment needed for the implementation of an instant payments solution at individual PSP, infrastructure and PSU level and then at aggregate level will be considerable.

¹⁰ Input from Danish Bankers Association for this report

¹¹ The figures regarding the implementation of Faster Payments in the UK can be found on the following link: <http://www.bostonfed.org/economic/current-policy-perspectives/2014/cpp1405.htm>

6.3. Regulatory aspects

Any instant payments solution must be capable to process instant payments within seconds while at the same time applying security and compulsory validation processes based on anti-money laundering (AML), counter-terrorism and sanction obligations in a risk-based approach. PSU expectations must be managed in those cases where a payment is delayed in those cases where there is a “hit” and the payment has to be investigated further before it can be released. In the UK, for example, a payer’s internet banking site carries a notice that the payment may take two hours to process.

There are still requirement disparities between the national authorities and a harmonization of these requirements by the authorities is needed at the outset. As instant payments can be exchanged between a payer’s PSP and a payee’s PSP each located in a different European country, this disparity in requirements will represent a major challenge for PSPs supporting a cross-border instant payment solution.

Apart from this AML issue, the EPC considers that the existing European legislative framework (refer to section 2.3) can already properly accommodate instant payments.

6.4. Anti-fraud measures

Due to their immediacy, instant payments may become a prime target for fraudsters.

Procedures for the remediation of erroneous payments (even if not fraud related) and fraudulent payments will have to be redesigned - in compliance with PSD2- in order to match the more frequent processing cycles and the increased financial risks this may create. Reference is also made to section 2.3.

6.5. Availability 24/7/365

The goal of any instant payment solution is to ensure the continuous ability to send and to receive payments at any time of any given day (working days, weekends or public holidays). A minimum availability should be guaranteed to ensure a good user experience. System maintenance and business continuity requirements are important aspects to be considered.

However, it could be difficult to ensure round the clock availability of all participants upon an instant payment solution launch. The main reason lies in the variety of IT systems and environments used by PSPs. In case more than one instant payment solution would be available on the market, then the interoperability aspect between these instant payment solutions would have to be taken into account. In practice, it may well be that full implementation across SEPA would need to be staggered over a certain period of time.

PSPs unable to meet the performance, availability and resilience requirements of an instant payment solution should not offer the instant payment service until they are fully ready so as not to undermine the end-to-end performance of the solution as well as the quality and reliability of the service provided to PSUs.

Customer expectations about round the clock availability of an instant payment solution have to be managed as a result.

6.6. Value dates for instant payments outside normal business hours

In those cases where a service is not offered 24/7/365, there would be an issue in the application of the value date to apply for incoming and outgoing instant payments where an instant payment has been initiated outside normal business operating hours (weekends, evenings).

The PSD prohibits the back valuation of the debit date for the outgoing payment. From the perspective of the payer’s PSP, this means that the instant payment transaction will bear the value date of the next normal business working day.

The PSD further stipulates that the value date of an incoming payment must be the day of the funds inflow to the payee’s PSP. From the perspective of the payee’s PSP, it is unclear what the value date of the instant payment transaction would be if this incoming transaction were to be received during a weekend. The instant payment transaction would presumably bear the value date of the next normal business working day (following the settlement of the transaction).

This issue has also to be seen in connection with the expectation about the availability of funds to the payee (refer to section 4.2.3). It is a sensitive matter for payers and payees as the (aggregation of individual) instant payment amounts can be substantial.

One possible solution to this issue is that all settlement infrastructures would be available 24/7/365, allowing for settlement during weekends and on public holidays.

6.7. Timespan of inter-PSP instant payment execution

The ERPB definition indicates that “*‘instant payments’ are defined as electronic retail payment solutions available 24/7/365 and resulting in the immediate or close-to-immediate interbank clearing of the transaction and crediting of the payee’s account with confirmation to the payer (within seconds of payment initiation)...*”

The EPC emphasises that the timespan “*(within seconds of payment initiation)*” in the ERPB definition leaves room for different interpretations by PSUs and PSPs. However, the perception of the customer is that the funds have been made available immediately or close-to-immediately to the payee.

The ERPB definition further leaves open how the clearing and settlement of instant payments should be done to satisfy the perception of the customer. Especially when taking into account the possible settlement set-ups, the EPC proposes to distinguish between instant payments and “close to instant” payments. The consequences from these two set-ups for the supply side of the payments industry must be well understood:

- Instant payment: a straight-through-processed (STP) end-to-end settled payment having no inter-PSP clearing and settlement risks
- “Close to instant” payment: an instant clearing message between the payer’s PSP and the payee’s PSP with instantly making funds available to the payee but with a later settlement between the PSPs

Each of the two set-ups will not affect customer perception about the immediate or close-to-immediate availability of the funds to the payee.

However, for the payee’s PSP in particular, the impact of an instant payment set-up is very different to that of the “close to instant” payment set-up.

The former does not require any new functionality for making funds available to the payee as the transaction is settled immediately between the payer’s PSP and the payee’s PSP.

However, in order to make funds available in a “close to instant” payment set-up, functionalities have to be developed, which will eventually offer the payee de facto a credit transaction which has not yet been settled. This means that such set-up will require additional measures to manage the credit risk between PSPs and between the payee’s PSP and the payee.

On the other hand, a “close-to-instant payment” set-up may have a different impact in terms of the eventual solution development, the implementation rollout and the subsequent run-the-business activities (refer to section 6.2). The EPC suggests the choice between these two solution set-ups should be left to PSPs and may evolve according to market demand. They may also depend on the nature of the underlying payment instrument.



7. Recommendations – proposed next steps

Based on its preliminary assessment of the market and the customer perspective, the opportunities and the issues that instant payments at SEPA level may bring, the EPC believes there may be a need for an instant payment scheme at SEPA level. However, the implementation of any instant payment scheme at SEPA level will require careful planning, the necessary resources from PSPs, payment infrastructures and PSUs and coordination between these stakeholders.

Therefore, it is of utmost importance that all relevant stakeholders from the demand and the supply side firstly determine and agree on the clear and quantifiable customer needs and the appropriate scenario(s) for developing an instant payment scheme at SEPA level.

At this preliminary stage, with the current ERPB definition in mind and subject to the position and expectations of the other stakeholders from the supply and demand side, a majority of the EPC Instant Payments Task Force members consider that the credit transfer could be a suitable payment instrument for instant payments in SEPA, as a first step. On the other hand, the EPC wishes to point out that other payment instruments, notably electronic money and payment cards, are also suitable for instant payments and that certain existing instant payment solutions are based on these particular payment instruments.

In view of the benefits of broadening the discussion in an ERPB multi-stakeholder environment, the EPC suggests that it would be desirable for the ERPB to establish an instant payments working group with the mission of analysing the case for pan-European instant payment scenarios and what the end-to-end requirements for them would be.

Together with this report, the EPC proposes a draft Terms of Reference for an ERPB WG on instant payments including concrete deliverables and realistic timelines. This for consideration at the June 2015 ERPB meeting (see Annex I – Proposal for draft Terms of Reference of an ERPB WG on instant payments).



Annex I – Proposal for draft Terms of Reference of an ERPB WG on instant payments

Proposed Mandate of the Working Group on instant Payments

Based on Article 8 of the mandate of the Euro Retail Payments Board a working group is set up with the participation of relevant stakeholders from the demand and the supply side to formulate recommendations on how to reach a harmonised and integrated European market for instant payments in euro.

Scope:

The members of the ERPB agreed that “instant payments” are defined as electronic retail payment solutions available 24/7/365 and resulting in the immediate or close-to-immediate interbank clearing of the transaction and crediting of the payee’s account with confirmation to the payer (within seconds of payment initiation). This is irrespective of the underlying payment instrument used (credit transfer, direct debit, e-money or payment card) and of the underlying arrangements for clearing (whether bilateral interbank clearing or clearing via infrastructures) and settlement (e.g. with guarantees or in real time) that make this possible.

Taking into account emerging national solutions and in order to prevent market fragmentation the members of the ERPB agreed on the need for at least one pan-European instant payment solution for euro open to any Payment Service Provider (PSP) in the EU.

Purpose:

The aim of the ERPB WG on instant payments is to define at least high level end-to-end requirements for SEPA instant payment solutions that are to be developed by 2020 at the latest.

Deliverables:

The Working Group is expected to:

1. Identify first the concrete expectations and needs of the main different customer segments (e.g., consumers, SMEs, large corporates, public administrations) relating to the initiation or receipt of instant payments in euro. This step should allow the quantification of the scale of market demand for instant payments.
2. Recommend which “go to market” scenario for instant payments in euro would be most suitable to meet the customer expectations (e.g., a formal SEPA-wide instant payment scheme, combination of one or more SEPA wide solutions and/or interoperable national solutions etc.).
During this step, the WG has to assess how the different scenarios are open to new technological developments, innovation and competition in payment services.
3. Determine the high level end-to-end requirements for the recommended “go to market” scenario. These requirements may be different for the various different customer segments.
4. Recommend the most appropriate SEPA payment instrument for the recommended “go to market” scenario based on the determined business requirements.
5. Develop a roll-out plan with deliverables against a timeline for each stakeholder group based on the selected “go to market” scenario and the selected SEPA payment instrument.

In all above steps, the ERPB WG needs to take into account the legislative framework and its evolution.

**Time horizon:**

The working group is expected to start as of July 2015 and deliver its report to the ERPB on its findings, including concrete recommendations:

- on points 1 to 4 by the November 2015 ERPB meeting
- on point 5 and with a final report by the June 2016 ERPB meeting

The June 2016 ERPB meeting will decide on the future of the group.

Participants and chairmanship:

Membership in the working group is open to all volunteering members of the ERPB. The working group will ideally include at least representatives of payment service providers, consumers, SMEs, large corporates, retailers and e/m-commerce merchants.

One representative of the ECB and a number of representatives of euro area NCBs are invited to join the working group as active participants. A representative of the EU Commission will be invited as observer.

The working group is to be co-chaired by TBD (supply side) and TBD (demand side).

Rules of procedure:

The mandate of the ERPB defines a broad set of rules for the procedures of its working groups. The working group takes positions on a $\frac{3}{4}$ majority basis. Upon request, dissenting members (if any) may have their opinions annexed to the final document(s) prepared by the working group. The members of the group decide on how to organise their work. Costs related to the operation of the working group are met by the members of the group.

Annex II - Possible high level business requirements

In case of further work on possible instant payment solution(s) within the ERPB and potentially with other stakeholders, the EPC wishes to highlight possible business requirements that it identified at this stage. This list is not exhaustive. The order of the requirements is not to be considered as an indication of their priority.

With this annex, the EPC wishes to demonstrate the complexity related to instant payments and to start feeding the debate. Note that these business requirements do not equate to commercial requirements.

1.1. Immediate availability of funds for payees

A “true” instant payment solution should ensure immediate availability (and usability) of funds for the payee. Due to the nature of instant payments, immediate availability of funds i.e. within seconds would be the ideal feature of the solution.

1.2. Payment certainty for payee

Instant payment solution rules should provide for payment certainty for the payee.

The instant payment processing must be based on the assumption that both the payer’s PSP and the payee’s PSP are notified about the instant payment status in order to secure proper handling and communication. This is also required for reconciliation purposes within a PSP.

1.3. Reachability

According to the EPC the offer and use of any instant payment solution shall be left to the market. Each PSP is free to offer an instant payment solution to its customers. A PSP is not obliged to participate in an instant payment solution.

For an instant payment solution to work, it should however prescribe that each PSP wishing to offer the solution must act as a payee’s PSP and as a payer’s PSP. The solution should not allow PSPs to join in only one role as it would be key to give the payer and the payee the comfort that the payment was successfully executed (irrespective of how the final settlement of the instant payment takes place).

If a pan-EU solution were to be devised this principle should be assessed in the light of the reachability requirements imposed by EU Regulation 260/2012 (SEPA Regulation) if within the scope of this Regulation.

Additionally, the accessibility of clearing and settlement mechanisms has to be taken into consideration as it will have a significant impact on the reachability of PSPs.

1.4. Interoperability

If more than one instant payment solution is created, it is recommended that these solutions become interoperable with each other.

It needs to be analysed if the existing payment instrument infrastructures can be made interoperable in order they can be used for any instant payment solution. The requirements under section 1.13 (standards) should be kept in mind to achieve interoperability between instant payment infrastructures.

1.5. Irrevocability of instant payments

An instant payment solution should ensure irrevocability and non-repudiation of an instant payment. Once the order for an instant payment has been received by the payer’s PSP, the instant payment cannot be reversed.

R-transaction messages for instant payments should be restricted to recalls due to fraud (if practically and legally possible), to rejects and to returns due to technical errors (e.g., account closed, non-existent account) or time-outs.

1.6. Reconciliation

Any instant payment solution should provide PSPs with some mechanisms to reconcile transactions (e.g., possible errors during instant payment execution).

1.7. Common understanding on the concept of executing instant payments “within seconds”

The ERPB/ECB definition on IPs specifies that ‘*Instant payments*’ are defined as *electronic retail payment solutions available 24/7/365 and resulting in the immediate or close to immediate interbank clearing of the transaction and crediting of the payee’s account* (within seconds of payment initiation)’*

All stakeholders should debate on the understanding of the starting and end points of an instant payment timecycle being of less than or equal to an agreed number of seconds.

Is it when the payer (or an intermediary) actually hits the <send> button to initiate the payment message? Does the instant payment process start when the instant payment financial message leaves the payer’s PSP and the instant payment timecycle ends when the payee receives confirmation that the funds have been made available (provided that the account could be reached)?

In case a common understanding is agreed upon, all stakeholders need to realise that the actual time cycle of instant payment execution is strictly connected with the processing flow and the security validations done by each involved PSP (see also section 1.16). Time differences in the instant payment processing may occur between national and cross-border instant payments as PSPs have to apply a different set of payment validation checks between national and cross-border payments.

1.8. Customer identification

As an instant payment solution must enable the execution of instant payments within seconds, a reliable customer identification between PSPs is needed order to avoid possible “addressing” errors. Such identification may be e.g., an IBAN. The strong authentication requirements defined in the European Banking Authority (EBA) internet security recommendations should be taken into account. Customer convenience should also be taken into consideration.

1.9. Currency

Any SEPA-wide instant payment solution should at least support payment transactions in euro. It is in line with the ERPB vision on instant payments.

1.10. Value limits on transactions

Any instant payment solution should foresee mechanisms to manage the assessed risks related to instant payments. Setting a single transaction value limit¹² and/or a cumulative value limit over a certain period of time (e.g. 24 hours) is such a possible mechanism. Every single instant payment exceeding the limit is automatically rejected. Such single instant payment value limit will depend on the set-up of the instant payment solution:

- In case the instant payment solution is a formal scheme: a value limit may be set at scheme level
- At the level of the instant payment clearing and settlement infrastructure
- The leeway given to each PSP offering an instant payment solution to set more stringent conditions based on its own risk assessment in processing instant payments and its fraud prevention measures to protect its customers

Furthermore, value limits can be set by the payer and even potentially by the payee. Limits could also be set on the aggregated number of instant payment transactions and/or the aggregated value.

1.11. Real-time access to payment status information

Any instant payment solution should provide information about the payment status in (near) real-time to the payer, the payee and the respective PSPs to indicate if the payment was correctly executed or that an error did occur.

¹² This may be an issue for the interoperability between different instant payment solutions

1.12. Set of payment and non-payment related messages

Positive and negative scenarios related to the processing of instant payments require a set of payment and non-payment related messages.

Besides, an instant payment solution may prescribe additional messages related to liquidity management and other processes relevant for the payee, the payer or their respective PSPs.

When defining the various required messages, instant payment solution developers should analyse which existing infrastructure(s) can deal with this variety in messages.

1.13. The standard(s) for each instant payment process phase (link to interoperability)

The use of one specific or more than one standard should be discussed with all stakeholders concerned. The chosen standard(s) will impact the level of extra investments needed at the end of PSPs, infrastructures, payers and/or payees.

All stakeholders and instant payment solution developers should take into account the current ISO 20022 implementation developments and see if the ISO 20022 standard can meet the specific business requirements of instant payments.

The ISO 20022 XML messages are a main stream technology in the payment environment. The PSPs have implemented the SCT and SDD schemes which are based on ISO 20022 XML messages as prescribed by the SEPA Regulation.

The adoption of the same standard for instant payment processing could facilitate the implementation for PSPs and their customers. The use of the existing infrastructure and messaging for instant payments would make the interoperability easier in case of multiple instant payment solutions.

1.14. Effective process to handle all returns and to allocate liability

Although the instant payments would be irrevocable (see 1.5), effective processes must be established to deal with instant payment r-transaction possibilities such as payment returns or rejects.

An instant payment return request should indicate that it concerns an instant payment giving this request a different urgency and defining clear obligation to the payee's PSP, subject to applicable legislation.

In case instant payments need to be returned from the payee to the payer because e.g., the consumer returns the good and claims a re-imburement from the merchant, the EPC considers that such scenarios should not be covered by an instant payment solution. In accordance with the fundamental principles of irrevocability and separation of payment transactions from the underlying commercial transactions, instant payment solutions should not have a direct connection with the contractual relationship between the payer and payee. Such a return could be a separate instant payment if so agreed between the two sides to the commercial transaction.

1.15. Settlement approach that mitigates material risk of loss

Regardless of the settlement model (e.g., RTGS or net settlement), any instant payment solution should provide security mechanisms to avoid credit risk for the PSPs offering the solution (e.g., through prefunded, loss-sharing¹³ or collateral models).

In the first phase of an instant payment solution, an immediate settlement of the instant payment may not be needed. The PSP users of the solution can agree that the instant payments are settled during the next upcoming scheduled settlement cycle during normal business hours of the settlement mechanism. In case the settlement would take place only during normal business hours, user PSPs must agree on measures to deal with issues arising in the period between two scheduled settlement cycle during normal business hours.

In a second phase of an instant payment solution, when the volume scales up and the service is opened to more customer segments, this solution may no longer be appropriate. Additional settlement cycles and additional opening hours especially during weekends and on public holidays, may be needed to reduce the cost of ring fenced liquidity.

¹³ Loss sharing is not avoiding risk but mutualising losses



1.16. Compliance with customer and data protection, anti-fraud, anti-money laundering (AML) and sanctions

The consumer protection measures prescribed by EU legislation (e.g., PSD) that apply on any payment instrument used nationally or SEPA-wide should be equally valid for instant payments where relevant.

Data protection at the business and technical layers should be ensured. It is assumed that the data protection rules that apply to the existing electronic payment instruments, will be equally valid for instant payments where relevant.

However, closer investigation into EU and even national legislation on data protection will be required in case an instant payment solution would rely on matching tables linking the IBAN, the payment card number, the mobile phone number/ e-mail address /other tokens or aliases with the name of the customer.

Any instant payment solution must be capable of processing instant payments within seconds while applying at the same time security and compulsory validation processes based on AML, counter-terrorism and sanction obligations and with anti-fraud measures from individual PSPs. Such processing capacity must be resilient especially as instant payments can be exchanged between a payer's PSP and a payee's PSP each located in a different European country. This requirement may form a major challenge for any SEPA-wide instant payment solution (refer to sections 6.3 and 6.4).

The customer experience should also be kept in mind when developing an instant payment solution. When lengthy data attributes have to be provided, this may lead to customer friction.

1.17. PSP-to-PSP support

An instant payment solution should provide a minimum service level regarding PSP-to-PSP support. As the instant payment instructions will be exchanged within seconds, inter-PSP support to resolve problems is key to guarantee the confidence in the instant payment solution.

It is clear that any support or service provided at the PSP- PSU-level is a commercially important matter. Each PSP determines individually the level of instant payment support to its payees and payers.

1.18. Inclusiveness

Instant payments could also be seen as a way of meeting the limited payment needs of some customer segments, which are at present considered as "under banked". Indeed as shown in Figure 8, the P2P single transfer appears as a very promising payment segment for instant payments. Those payments may very well be considered as the closer substitute for cash, which notably is the most "inclusive" payment instrument. This means that any instant payment solution should be available for all customer segments in a progressive approach, according to each PSP assessment and implementation plans (refer to section 6.2). However, the objective of enhancing financial inclusion via instant payment solutions should also be gauged in terms of additional requirements, costs and communication efforts that it would entail.

Annex III – Potential impact of instant payments on existing payment instruments

The following global overview produced by SWIFT indicates from a **global** perspective for which payment products an instant payment solution could be adopted:

Payment products as candidates for Real-Time (RT) adoption (PSP view)










Payer	Payee	Type	Share*	Value of RT		Trend	RT Candidate
				Confirming	Availability		
Consumer 80%	Consumer	<u>Person to Person</u>	4%	●	◐	↗	Primary candidate
	Business	<u>Point of Sale (Physical)</u>	51%	●	◐	↗	Secondary candidate
		Bill Payment**	18%	◐	◐	→	
		High Value		●	●	→	
		<u>E-Commerce</u>	7%	●	◐	↗	Primary candidate
<u>Mobile Commerce</u>	●	◐		↗	Primary candidate		
Business 20%	Consumer	Bulk Payment			◐	→	
	Business	<u>Invoice Payment</u>	20%	◐	◑	→	Secondary candidate
		High Value Order		●	●	→	

* Share of total non-cash payments worldwide
** Including direct debits

Figure 4: Global view (SWIFT) - Impact Instant Payments on Non-Cash Payments

When looking into the **euro zone** more specifically, the overview below prepared by the Dutch banking community gives the possible impact of instant payments on electronic payment products (2013 ECB euro zone statistics):

Possible impact of Instant Payments on electronic payment products, euro-zone
excluded is the likely effect of IP on cash payments

	Type	Share*(%)	Growth Trend	IP candidate
P2P	Single transfer	3%		Yes
	Point of Sale	41%		Yes
P2B	E/M-commerce	8%		Yes
	Bill payment**	32%		Yes, CT & Cheque
	High value payment	<0.5%		Yes, up to x €
B2P	Bulk payment	7%		Not immediately
B2B	Bill payment**	7%		Yes , CT & Cheque
	Point of Sale	1%		Yes
	High value payment	<0.5%		Yes, up to x €

* Share in transaction volume, ** either through Credit Transfer or Direct Debit or Cheque
 Information prepared by NL for TF EPC TF IP meeting of April 2015, largely based on ECB statistics 2013, euro-zone – March 30th, 2015, for EPC internal purposes only.

Figure 5: Euro Zone View (Dutch Banking Community) - Impact Instant Payments on Electronic Payment Products

P2P payments, e- and m-commerce payments are considered to be the primary payment products that would benefit from a possible instant payment solution. To a lesser extent, an instant payment solution could support Point-of-Sale (POS) payments and single invoice payments.

As an illustration from a **non-euro zone** country, Figure 6 and Figure 7 show the evolution in the volume and the value of Faster Payments in the UK until November 2014. At the end of November 2014, approximately 55 percent of the Faster Payments volumes covered single immediate payments. The average value of a single immediate payment is about 890 GBP.

(Note: Faster Payments may not completely meet all requirements outlined in the ERP/ECB definition in section 2.5).

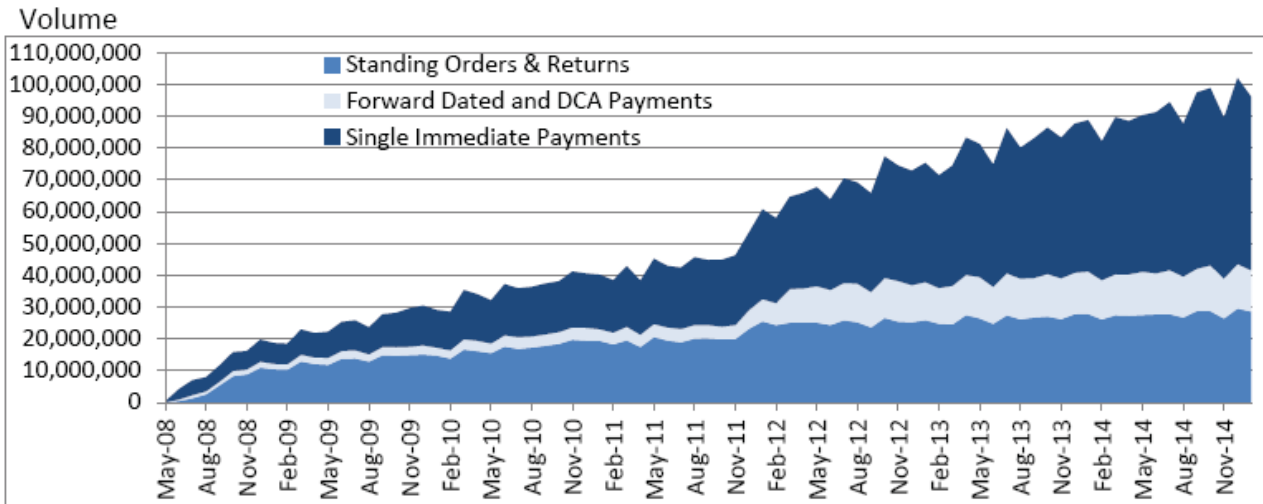


Figure 6: Faster Payments UK Transaction Volume Evolution 2008-2014

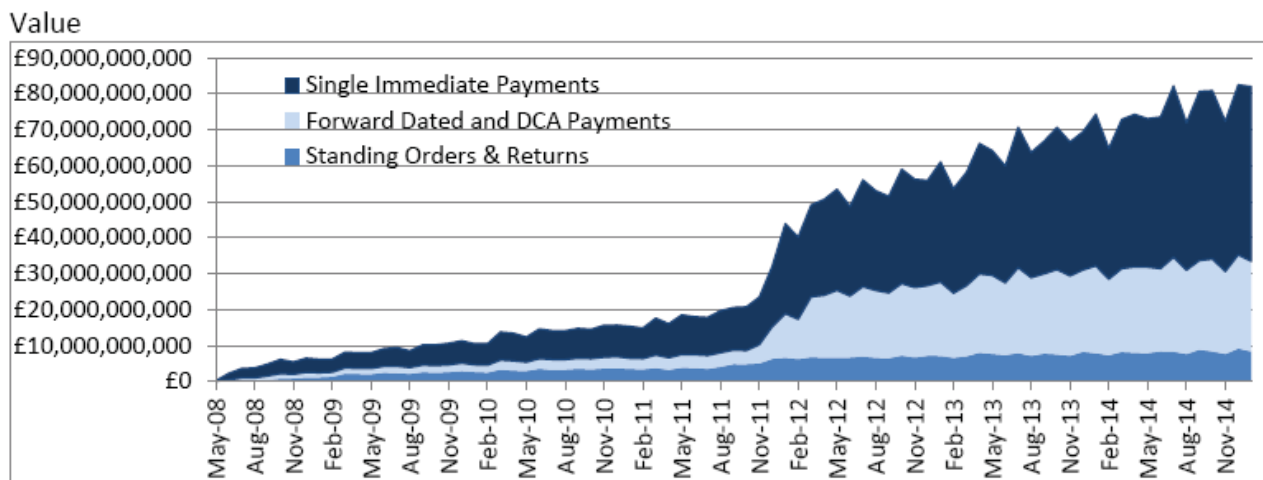


Figure 7: Faster Payments UK Transaction Value Evolution 2008-2014

Based on the input from SWIFT, the Dutch banking community and the UK, the EPC indicates in Figure 8 which electronic payment instruments may be candidates for instant payments.

An important note must be made on the presented low percentage in P2P payment situations in Figure 4 and Figure 5 (4 and 3 percent respectively). The share of such payments would be much higher if cash payments and cheques in such situations were taken into account as well.










Payment segment	Type	Growth trend	Candidates for instant payments
P2P	Single transfer		Primary
P2B	Point-of-Sale (POS)		Secondary
	E-and M-commerce		Primary
	Bill payment*		Secondary (credit transfer)
	High-value payment (HVP)		Secondary**
B2P	Bulk payment		Low priority
B2B	Bill payment*		Secondary (credit transfer)
	Point-of-Sale		Secondary***
	High-value payment (HVP)		Secondary**

Figure 8 Growth trend of electronic payment types and level of impact from instant payments

* Covers credit transfer and direct debit - note that instant payments clearly fill a need of the payee with regard to 'late' bill payments

** HVPs up to a certain amount might be routed via an instant payment solution instead of a real-time gross settlement system operated by a national central bank

*** No differentiation for the payee if the payer is a consumer or business customer

Annex IV - List of EPC Instant Payments Task Force members

Name	Institution	Country
Chair		
Anthony Richter	HSBC	United Kingdom
Members		
Jean-Yves Jacquelin	Erste Bank der österreichischen Sparkassen	Austria
Walter Pfeffer	Geldservice Austria GmbH	Austria
Jo Germeys	BNP Paribas Fortis	Belgium
Claus Berthelsen	Danish Bankers Association	Denmark
Phillip McGriskin	EPIF (WorldPay Future)	European PSP sector association
Marieke van Berkel	European Association of Co-operative Banks (EACB)	European PSP sector association
Patrick Poncelet	European Banking Federation (EBF)	European PSP sector association
Norbert Bielefeld	European Savings & Retail Banking Group (ESBG)	European PSP sector association
Jouni Lallukka	Nordea Bank Finland	Finland
Thomas Kraft	BNP Paribas	France
Thierry Rottier	Crédit Agricole	France
Jérôme Raguénès	FBF	France
Frédérique Gualbert	La Banque Postale	France
Ingo Beyritz	Association of German Banks	Germany
Thomas Egner	Commerzbank	Germany
Hartmut Bremer	Deutsche Bank	Germany
Karen Weber	DZ Bank	Germany
Richard Hauke	German Savings Bank Association	Germany
Axel Schindler	National Association of German Cooperative Banks	Germany
Corinna Lauer	UniCredit Bank AG	Germany
Vasilis Panagiotidis	Hellenic Bank Association	Greece
Martin James	Banking & Payments Federation Ireland	Ireland
Rita Camporeale	ABI	Italy
Corrado Borsatti	ICBPI	Italy
Alberto Tiberino	ISP	Italy
Jean Petry	BGL BNP Paribas S.A.	Luxembourg
Grzegorz Leńkowski	Polish Bank Association/ KIR (National Clearing House)	Poland
Teresa Mesquita	SIBS (nominated by Caixa Geral de Depositos)	Portugal
Jesús Lozano Belio	BBVA	Spain
Julia Rosello Sal	Caixabank	Spain
Alejandro Torío	Santander	Spain
Gunnel Silvé	Svenska Handelsbanken	Sweden
Angie Staender	PostFinance	Switzerland
Mark Buitenhek	ING Bank	The Netherlands
Ruth Wandhöfer	Citibank	United Kingdom
European Payment Council		
Etienne Goosse	Director General	N/A
Bart Clarebout	Task Force secretary	N/A