

EPC proposal for the design of an optional euro SCT Instant scheme

Document reference: EPC 269-15
Document version: Version 1.0
Date of issue: 05 November 2015
Produced by: EPC ad-hoc SCT Instant Scheme Design Task Force

1. Background of the EPC Proposal

1.1. Views from the Euro Retail Payments Board on instant payments

The Statement following the **Euro Retail Payments Board (ERP)** meeting of 1 December 2014¹ 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 ERP Statement, the ERP “*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 ERP meeting in June 2015.*”

1.2. EPC report on instant payments for the June 2015 ERP meeting

Against the background of the 1 December 2014 ERP Statement, the EPC contributed to the debate on ‘instant’ payments with the other ERP members by producing an [EPC report](#) on instant payments in June 2015.

This report stresses that the expectations 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 ERP. On purpose, this report limits itself to instant payments made from and to payment accounts.

The report provides a market and customer perspective on instant payments, lists the opportunities and main issues and concludes with recommendations, as an EPC contribution for the ERP to consider. The report includes possible high level business requirements for future instant payment solutions.

1.3. Outcome of the June 2015 ERP meeting

The members of the ERP welcomed the EPC report and invited the EPC to present to the ERP by November 2015 a proposal for the “design” of an instant SEPA Credit Transfer scheme (SCT Inst scheme) in euro, which could be adhered to by EU payment service providers on a voluntary basis.

The ERP further created a group (so-called ERP High Level Group (HLG) on instant payments) that reflects the composition of the ERP at the level of alternate ERP members to offer guidance as needed to the EPC regarding the development of the SCT Inst scheme in the period from July to November 2015.

1.4. Developments in the period July – October 2015

The ERP HLG on instant payments convened on 17 July to provide a first round of stakeholder input for the EPC to consider in the development of an SCT Inst scheme design proposal.

An EPC internal “ad-hoc SCT Instant Scheme Design Task Force” had been created to work out the design of a proposed SCT Inst scheme. The intermediate SCT Inst scheme design output from this Design Task Force was discussed at a second ERP HLG meeting on instant payments on 02 October.

The final draft of the EPC proposal was reviewed by the ERP HLG at a conference call held on 30 October.

The EPC has also sought the input of other technical stakeholders during that period.

¹ ERP statement following its second meeting held on 1 December 2014 (ERP/2014/018)

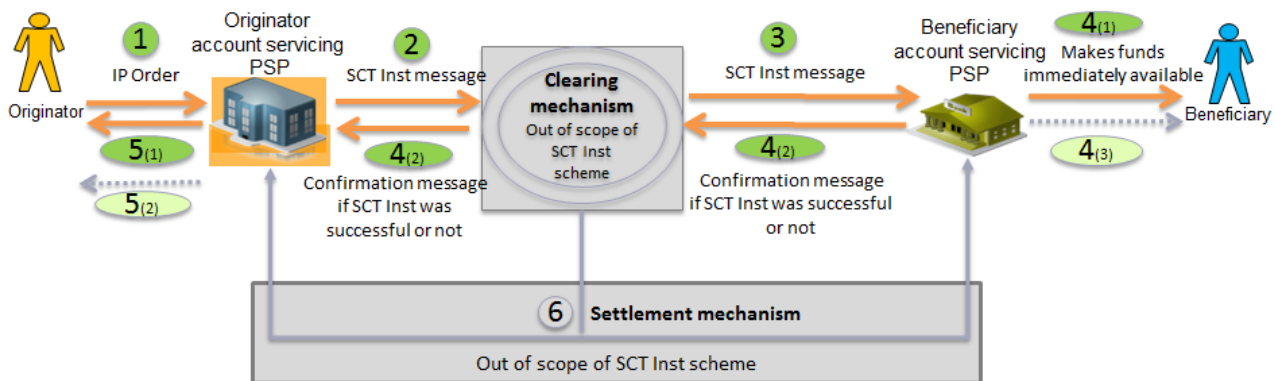
2. EPC Proposal for the Design of an SCT Instant Scheme

With the current ERPB definition in mind, the EPC proposes an instant payment scheme based on the credit transfer payment instrument (SCT Inst scheme).

The scheme forms part of a four-layered approach separating itself from the initiation layer, the clearing² layer and the settlement³ layer.

Therefore, the proposed design of the EPC SCT Inst scheme does not specify how the clearing and the settlement of SCT Inst transactions should or could be done. It is at the discretion of each future SCT Inst scheme participant how it arranges for the clearing and the settlement of its future incoming and outgoing SCT Inst transactions.

2.1. Conceptual work flow and process steps



Process steps:

- (1) The Originator account servicing payment service provider (PSP) receives an instant payment (IP) order from the Originator⁴.
- (2) The Originator account servicing PSP verifies if it has all necessary information to execute the IP order and executes various validation checks. When these validation checks are successful, the Originator account servicing PSP immediately sends an SCT Inst message to the clearing mechanism⁵.
- (3) **Out of scope of SCT Inst scheme:** the clearing mechanism directs the SCT Inst message immediately to the concerned Beneficiary account servicing PSP.
- (4) The Beneficiary account servicing PSP:
 - (1) Verifies if it can apply the SCT Inst to the Beneficiary account and executes various validation checks. When the SCT Inst message is complete and correct and the validation checks are successful, the Beneficiary account servicing PSP makes the funds immediately available to the Beneficiary.
 - (2) Sends immediately a message back to the Originator account servicing PSP through the same clearing mechanism to confirm whether the IP order has been accepted and funds have been made available to the Beneficiary (*positive confirmation*) or not (*negative confirmation with an immediate reject*).

² Clearing in general is 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 to another.

³ Settlement is the completion of a transaction processing with the aim of discharging the participants' obligations through the transfer of funds.

⁴ Directly or indirectly initiated in compliance with the Payment Services Directive 2 (PSD2).

⁵ A clearing mechanism can be an automated clearing house or another mechanism such as intra-PSP and intra-PSP group arrangements and bilateral or multilateral agreements between SCT Inst participants. A clearing mechanism may also conduct the settlement function.

- (3) The information about the new available funds is instantly accessible to the Beneficiary (e.g., through the online banking application). If agreed with the Beneficiary, this PSP sends the Beneficiary an instant notification message about the funds made available to the Beneficiary.
- (5) Originator account servicing PSP:
 - (1) In case the Originator account servicing PSP has received a negative confirmation message from the Beneficiary account servicing PSP or the clearing mechanism indicating that the funds had **not** been made available to the Beneficiary, the Originator account servicing PSP is **obliged** to inform or to send immediately a **negative** confirmation message to the Originator.
 - (2) Instantly reserves the amount of the SCT Inst transaction on the Originator's payment account with this information instantly accessible to the Originator (e.g., through the online banking application). If agreed with the Originator, this PSP sends the Originator an instant notification message about the funds made available to the Beneficiary.
- (6) **Out of scope of SCT Inst scheme:** the amount of the SCT Inst transaction is included in the settlement procedure between the Originator account servicing PSP and the Beneficiary account servicing PSP, and as such in the total amount credited by the settlement mechanism to the Beneficiary account servicing PSP during the settlement process.

Important notes:

This work flow does not cover the handling of exceptions and disruptions (e.g., message transmission issues, r-transactions). These aspects will be outlined in the EPC SCT Inst scheme rulebook.

This work flow only shows the process of an SCT Inst transaction between two SCT Inst scheme participants directly using the same clearing mechanism.

In case the Originator account servicing PSP and the Beneficiary account servicing PSP do not use the same clearing mechanism, the various types of messages under (2), (3) and (4) under section 2.1 to conclude the SCT Inst transaction will be exchanged through two or more clearing mechanisms.

In case the Originator account servicing PSP and/or the Beneficiary account servicing PSP do not directly participate in a clearing mechanism, the various types of messages under (2), (3) and (4) will be exchanged through one or two direct participant(s) in a clearing mechanism.

The two latter cases will have notable implications in terms of time performance of the SCT Inst, as noted in section 3.7.

2.2. Proposed key features

The EPC defines the SCT Inst scheme as a **separate new instant credit transfer scheme in euro** to respond to instant payment needs within SEPA countries⁶.

Each account servicing PSP interested in offering an SCT Inst service will have to make investments. Given the resilient infrastructures required for instant payments, this can form an obstacle for some interested account servicing PSPs to participate in the initial launch phase of an instant payment solution. The EPC suggests launching the SCT Inst scheme as an **optional** EPC scheme. All account servicing PSPs incorporated and/or licensed in any SEPA country will be allowed to adhere to the SCT Inst scheme.

The EPC recommends that if an account servicing PSP adheres to the SCT Inst scheme, **the account servicing PSP** will be considered **to be at least reachable** in the role **as Beneficiary account servicing PSP**. A number of account servicing PSPs might never be in the role of an Originator account servicing PSP (e.g., mortgage banks, PSPs not offering payment accounts) or they may want to plan their investments for instant payments in a staggered approach, providing in a first step a limited instant payment service as Beneficiary account servicing PSP.

If the participating **Beneficiary account servicing PSP** is **not reachable** under the SCT Inst scheme, the initiated **transaction** is not possible under the SCT Inst scheme and it **will be rejected**.

⁶ The countries belonging to the geographical scope of the EPC SEPA Schemes

An SCT Inst transaction is considered to be successful under the SCT Inst scheme when the process steps (1) up to and including (4) (2) under section 2.1 have been accomplished within a maximum permitted number of seconds. The EPC proposes that **the scope of EPC SCT Inst scheme**, and as a consequence also the counting of the maximum permitted number of seconds, **starts** from the moment **the Originator account servicing PSP receives the IP order from the Originator** (i.e. as of process step (1) under section 2.1).

The EPC will **re-use as much as possible** elements from the **current SCT Rulebook** (e.g., business rules, datasets, attributes and exception handling). This will allow future SCT Inst scheme participants to leverage the currently available payment infrastructure and internal systems to make the roll-out of an instant payment solution as cost-efficient as possible. It will have in particular the following consequences:

- Recalls and returns will follow the procedure (including the timelines) from the current SCT scheme as these r-transactions occur after settlement. This means that there will be no obligation to send instant Recalls or instant Returns.
- The use of the IBAN and the BIC in the inter-account servicing PSP space as account data format to identify the Originator and the Beneficiary, on the assumption that the SEPA End-Date Regulation applies to the SCT Inst scheme.

In case the SCT Inst transaction fails a sanction or anti-terrorist validation check or any other controls which prevent the SCT Inst transaction from being processed, the SCT Inst transaction will be rejected or stopped in line with the applicable legislation (as this is already done for SCT).

2.3. Proposed key differences of the SCT Inst scheme compared to the current SCT scheme

- 1) The IP Identifier (Header) in the messages used under the SCT Inst scheme.
- 2) The funds are immediately made available to the Beneficiary.
- 3) The requirement to complete the exchange of all messages - (1) to (4) (2) under section 2.1 - within a maximum number of seconds to successfully execute an SCT Inst transaction. If the maximum number of seconds is exceeded, the SCT Inst transaction will be rejected.
- 4) In order to make the SCT Inst scheme work, the Beneficiary account servicing PSP needs **settlement certainty of the funds** it has already made available to the Beneficiary. Therefore, the SCT Inst scheme will oblige the Originator account servicing PSP to settle a successfully completed SCT Inst transaction. In addition, the SCT Inst scheme will also oblige the Beneficiary account servicing PSP to settle a return of an SCT Inst transaction or the positive answer to a recall of an SCT Inst transaction.
- 5) The use of SCT Inst specific confirmation and notification messages:
 - i. Inter- account servicing PSP space:
 - **Mandatory** instant positive and negative confirmation messages to report if funds have been made available or not
 - ii. Originator account servicing PSP-to-Originator space:
 - **Mandatory** instant negative confirmation message in case funds have not been made available to the Beneficiary
 - Instant notification message if funds made available to the Beneficiary if agreed with the Originator
 - iii. Beneficiary account servicing PSP-to-Beneficiary space:
 - Instant notification message of funds made available if agreed with the Beneficiary

The arguments for having the instant notification message as an 'opt-in' feature for the Originator and the Beneficiary, can be found in Annex I of this document.

- 6) A reject message of an SCT Inst transaction is sent instantly in order that the Originator account servicing PSP can inform the Originator about the failed transaction.

- 7) The EPC further suggests setting four principles for maximum amount limits:
- i. A default maximum amount per transaction at scheme level between account servicing PSPs as a risk and liquidity management measure. The absence⁷ of such maximum amount might hold back the adherence from certain (groups of) account servicing PSPs. This maximum amount will be set as part of the first release of the SCT Inst Rulebook and thereafter be subject to regular review, including a 90 calendar day public consultation.
 - ii. However SCT Inst scheme participants may bi-or multilaterally agree on a higher maximum amount.
 - iii. The Originator account servicing PSP still has the freedom to set a lower maximum limit in the customer-to-account servicing PSP area.
 - iv. The Beneficiary account servicing PSP as SCT Inst scheme participant will have to honour the default maximum amount per transaction set at scheme level and thus cannot determine a lower maximum amount for the funds to be immediately made available per SCT Inst transaction to the Beneficiary.

⁷ Please note that account servicing PSPs and payment service users still have TARGET2, being the real-time gross settlement (RTGS) system owned and operated by the Eurosystem, to make urgent euro payments that exceed the default maximum amount per SCT Inst transaction.

3. Open Issues to be Resolved

The EPC wishes to draw the attention of the ERPB to the following open issues. These issues either require further investigation within the EPC to come to a suitable resolution or they lie outside the scheme layer and have to be resolved by or in cooperation with other stakeholders.

3.1. Settlement risk management

When the Beneficiary account servicing PSP receives a complete and correct SCT Inst message and the validation checks are successful, it will have to make the funds immediately available to the Beneficiary.

The EPC expects that the ECB will steer a coordination between the clearing mechanisms, the settlement mechanisms and the EPC to ensure that the clearing mechanisms and the settlement mechanisms have all the necessary information to develop suitable solutions to meet the settlement certainty demand from the PSPs.

3.2. Mandatory minimum performance requirements for an SCT Inst scheme participant

SCT Inst scheme participants will have to ensure 24/7/365 end-to-end SCT Inst service availability in order that the Originators and the Beneficiaries are able to send and to receive respectively SCT Inst transactions at any time and on any given day (working days, weekends or public holidays).

System maintenance and business continuity requirements are important aspects to be considered. Processing capacity must be resilient especially as instant payments can be exchanged between an Originator account servicing PSP and a Beneficiary account servicing PSP located in different SEPA countries.

SCT Inst scheme participants will also have to select clearing mechanisms and settlement mechanisms that are able to support SCT instant payments in compliance with the scheme's requirements.

SCT Inst scheme participants must be capable of processing instant payments within seconds while applying at the same time security and compulsory validation processes based on anti-money laundering (AML), anti-terrorism and sanction obligations and on anti-fraud measures each SCT Inst scheme participant has defined. SCT Inst scheme participants in their role as Beneficiary account servicing PSP will have to honour as well the obligation to provide immediate availability of funds.

In order to achieve such performance to satisfy end-user expectations, a maximum allowed number of seconds needs to be defined for SCT Inst scheme participants in their roles of Beneficiary account servicing PSP and Originator account servicing PSP.

An EPC processing mapping exercise to determine this maximum permitted number of seconds will be done by early 2016.

3.3. Anti-money laundering (AML) obligations

The EPC looked into the AML obligations imposed by the authorities in the different SEPA countries. The EPC took note of the non-paper⁸ from the European Commission on legal issues for pan-European instant credit transfers in euro with the focus on AML/ counter terrorist financing (CTF) compliance.

The only open issue identified is that the moment when the AML checks are executed by account servicing PSPs⁹ is different between SEPA countries for the current SCT transactions. They are done either during or after processing the SCT transaction.

The moment of these checks will influence the processing duration of an SCT Inst transaction within and across SEPA countries. The moment the AML check is done for an SCT Inst transaction (either during or after the SCT Inst processing) can impact the rate of SCT Inst rejects.

Further EPC investigation on this point will be done in conjunction with the EPC processing mapping exercise under section 3.2.

⁸ This non-paper was shared with the members of the ERPB HLG on instant payments after their 02 October 2015 meeting

⁹ Are done by both the Originator account servicing PSP and the Beneficiary account servicing PSP

3.4. Sanction and anti-terrorism validation checks

The time in seconds needed to complete the sanction and anti-terrorism validation checks will also influence the processing duration of an SCT Inst transaction.

The validation checks can lead to either a true or a false hit. The treatment of true and false hits still requires further investigation. This issue will be covered by the EPC processing mapping exercise under section 3.2.

3.5. Risk assessment by the scheme manager

Given that the Beneficiary account servicing PSP has to make the funds immediately available to the Beneficiary, additional measures or requirements to mitigate credit and liquidity risk will have to be developed which are non-existing in the current SCT scheme.

The SCT Inst scheme proposal foresees the use of a maximum amount per transaction at scheme level. The EPC has not yet defined a concrete initial maximum amount.

The EPC as scheme owner and manager still has to carry out a comprehensive risk assessment of the SCT Inst scheme and to evaluate the potential need for additional mandatory requirements in the inter-account servicing PSP domain.

3.6. Definition of business day (value dating implications)

There is an issue in the application of the concrete value date for incoming and outgoing SCT Inst transactions when an SCT Inst transaction has been initiated outside normal business operating hours (weekends, evenings, public holidays).

The definition of a “business day” as applied in PSD2 should be the starting point to resolve this issue. The EPC has conducted an internal legal review and considers that account servicing PSPs which participate in the SCT Inst scheme and which would consequently commit to a 24/7/365 end-to-end availability should be considered to be “open for business” specifically for SCT Inst transactions services on 365 days in a given year.

The EPC will liaise with DG FISMA of the European Commission to conclude whether this is a correct interpretation of PSD2.

3.7. Involvement of multiple clearing mechanisms and/or of indirect participants in clearing mechanisms for the processing of an SCT Inst transaction

It may be that the Originator account servicing PSP and the Beneficiary account servicing PSP do not use the same clearing mechanism to exchange the SCT Inst messages or are not direct participants in the relevant clearing mechanisms. As a consequence, the SCT Inst messages will have to be routed over the infrastructures of two or more clearing mechanisms and/ or one or more direct participant(s) in those clearing mechanisms. These instances will demand extra time to complete the cycle and require technical links between the clearing mechanisms.

The concrete extra time needed to cover such situations will be assessed during the EPC processing mapping exercise under section 3.2.

3.8. Impact from national labour laws

The possible impact of national labour laws with respect to out-of-hours working for instant payment-related services (e.g., customer hotline, technical staff) needs to be well understood. This is a matter for the relevant national public authorities.

3.9. Legal check with SEPA End-Date Regulation

Further investigation is needed whether instant payments and in particular SCT Inst fall under the scope of the SEPA End-Date Regulation.

The EPC has already conducted an internal legal review on this point and other aspects of the SEPA End-Date Regulation and will liaise with DG FISMA of the European Commission to conclude on these topics.

4. Next Steps

This EPC proposal for the design of an optional euro SCT Instant scheme will be submitted to the ERPB meeting of 26 November 2015.

Provided that the November 2015 ERPB meeting approves the EPC SCT Inst scheme design proposal and invites the EPC to proceed with the development of an SCT Inst scheme on that basis, the EPC will address the remaining open issues right after the November ERPB meeting and then start developing the EPC SCT Inst Rulebook and the related Implementation Guidelines¹⁰ whilst expecting that actions residing with other parties will be carried out by them in parallel.

The earliest possible date for publication of the first release of the SCT Inst Rulebook and Implementation Guidelines will be November 2016 including a 90 calendar days public consultation.

A comprehensive project plan will be put together by the EPC detailing all milestones for the development of an SCT Inst scheme, based on the outcome of the November 2015 ERPB meeting.

¹⁰ Taking into account the progress made by the ISO 20022 Real Time Payments Group (RTPG) on the development of XML ISO 20022 messages for instant payments

Annex I: EPC arguments for the notification messages to the Originator and the Beneficiary as an ‘opt-in’ feature

Point 5) under section 2.3 outlines that the Originator (Beneficiary) account servicing PSP can transmit an instant notification message to the Originator (Beneficiary) when the funds have been made available to the Beneficiary, if agreed with the Originator (Beneficiary).

Such notification message has to be interpreted as an ‘opt-in’ option i.e. it is not a mandatory scheme feature but the Originator (Beneficiary) can agree with Originator (Beneficiary) account servicing PSP to receive such messages. The following arguments support this ‘opt-in’ model:

Customer-to-account servicing PSP space

The SCT Inst scheme rules should not invade the customer-to-account servicing PSP space but rather leave it to commercial freedom and mutual agreement between the two parties concerned whether to develop/offer and take up any specific end-customer service.

Originators and Beneficiaries already have a range of possibilities (smart phone app, PC banking, ATM, phone banking) to check 24/7/365 the balance of their accounts. After having initiated the SCT Inst transaction, the Originator can check within seconds if his/her SCT Inst payment has actually been successfully carried out. There are already well-established alternative consultation sources available for Originators to check the status of the SCT Inst transaction or for Beneficiaries to check the availability of new funds.

Each Originator (Beneficiary) category should have the choice to receive or not (some type of) notification message and if yes, based on what message type/ standard and through which channel it wishes to receive such notification messages for which SCT Inst use case. For instance, certain corporate Originators (Beneficiaries) may not consider instant notification messages as the appropriate reporting tool for them. These customers use other channels of communication with their account servicing PSPs to be informed about movements on their payment accounts.

Therefore, each individual account servicing PSP should be given the freedom to investigate if and in what manner and for which SCT Inst use cases, an instant notification message service would suit their various client segments.

Originators or Beneficiaries are not used to and do not seem to demand systematic notification messages after each payment made when using other electronic payment instruments (SCT, SDD and card payments).

The Originator-to-Beneficiary space should also not be forgotten. The SCT Inst transaction will mostly constitute one step of a larger process of purchasing goods/services whereby the Originator receives a confirmation directly from the Beneficiary that the funds have been made available to the Beneficiary and/or the goods will be released or that the purchased service is made available.

Foster the widest possible choice to initiate an SCT Inst transaction

The EPC aims to allow the widest possible innovation in the area of instant payment initiation. Instant payments should be initiated in any physical circumstance (e.g., from the counter of a PSP branch) and from any type of channel (an ATM of a PSP, different types of devices such as smart phones apps, PC banking).

However not all physical circumstances during which an SCT Inst transaction is initiated and not all devices from which an instant payment is initiated, are suitable to receive notification messages. If the notification messages to the end-users would be mandatory in the SCT Inst scheme, we limit the use cases for instant payments.

The EPC expects that SCT Inst may be attractive for Payment Initiation Service business models. The EPC does not consider it appropriate to limit initiation channels through mandating a notification message from the corresponding account servicing PSP.

Implementation cost

The extra cost to foresee mandatory notification messages to the Originator (Beneficiary) in the SCT Inst scheme will form an additional challenge in the business decision process for (certain groups of) account servicing PSPs to offer or not SCT Inst. These PSPs may decide not to adhere to the SCT Inst scheme as Originator (Beneficiary) account servicing PSP in the first years and take a wait-and-see approach on how the instant payments market will develop.

The future SCT Inst scheme needs a strong adherence momentum within the three years after the SCT Inst scheme launch to meet the SEPA End-Date Regulation's coverage criteria.

In case there would be an opt-out for a mandatory notification message, there is the risk that Originators (Beneficiaries) will rather ignore and/or delete the notification message. Account servicing PSPs want to allocate their financial resources to develop features in their SCT Inst product offering which are expected to be of added-value to certain customer groups or in certain SCT Inst use cases.

Technical issues

If mandatory notification messages are requested, a common message would be needed to give the end-user the same notification experience across all account servicing PSPs. There are no real-time ISO 20022 XML versions of the notification message available.

Furthermore, notification messages to the Originator (Beneficiary) cannot be standardised via the SCT Inst scheme. The specifications for such messages will depend on the initiation device/channel used by the customer.

Regulatory

There is no obligation from the PSD1/ PSD2 or from the SEPA End-Date Regulation to submit notification messages to Originators (Beneficiaries).