

WHITEPAPER 2016

SCT INST: IS IT SEPA 2.0?

WHAT WILL HAPPEN TO SEPA AFTER INSTANT PAYMENTS BECOMES A REALITY?

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INTRODUCTION

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The SCT^{INST} scheme, the new (non-mandatory) SEPA instant payments scheme based on the SEPA Credit Transfer, is scheduled to be ready for first live adoption by November 2017, an ambitious date and one to which huge activity is being directed. However, whilst most attention is currently on the initial implementation of Instant Payments this paper focuses on what might happen in the years after.

Instant payments represent a massive step change to what has gone before. As an initial proposition, instant payments will offer new functionality, speed and availability that is highly attractive in basic use cases such as peer to peer payments. The ability to use instant payments as a platform to support innovative new use cases - for example in the business to business domain - and replace existing payments instruments is an even more compelling driver for their adoption.

This paper recognises the huge changes to technology and business process entailed in offering instant value transfer, 24/7 over digital channels. Such a change brings significant risks: any interruption to the 'always on' service, at any point in the payment chain will be visible and unacceptable to users in the real world.

If disruptions happen, as with failures of internet banking channels in recent years, consumers' complaints will be amplified through social media more loudly and more quickly than ever before. However in countries where Instant Payments have already been implemented such as the UK, Sweden, Poland and Denmark, these challenges have been met through development of stable infrastructures and instant payments are taking an ever increasing share of the payments market, moving from niche to mainstream.

In the UK, the Instant Payments through the Faster Payments scheme now represent 40%1 of all domestic credit transfers and are the de facto standard for all person to person, consumer to business and business to business payments and are beginning to make inroads into large volume business to consumer legacy payments types such as salary and benefit payments. Extrapolating this to the wider European environment we can envisage that instant payments usage will grow both by creating new volumes as well as by attracting volumes from existing SEPA Credit Transfer (SCT) and SEPA Direct Debit (SDD) payments instruments, card payments and elsewhere.

Therefore, in this paper, we consider how Instant Payments may eventually become as some have said "the new normal" for Europe or "SEPA 2.0", how this convergence to SCT^{INST} will affect the stakeholders and what levers there are to guide and tune the convergence process.

1. PAYMENTS COUNCIL: "UK PAYMENTS STATISTICS", 2014. ESTIMATED VOLUMES FOR 2016.

FACTORS INFLUENCING THE ADOPTION OF INSTANT PAYMENTS

Take up of any particular payment instrument is driven by a number of factors. For instance where there is a regulatory mandate to move to a new standard the process will be accelerated- as with SEPA. However SCT^{INST} is not mandatory (yet), but we believe that there is a strong possibility that it may become the platform to which a majority of payments in Europe migrate over time. This is driven by the interplay of a number of factors that affect all payment types; this section considers how uptake of immediate payments will be affected by each factor in turn.

UNIQUENESS AND UTILITY

The degree to which the payment instrument offers something which is unique, different and better than existing alternatives, in order to overcome the inertia associated with an existing system that is "just good enough". Instant Payments have 3 key features which are superior to other mechanisms:

- 24 X 7 availability; allowing payments to be made when they are required or due;
- instant transfer of (irrevocable) value in an electronic format, and, lastly;
- instant clarity on the status; instant feedback as to success or failure

eliminates traditional exception management and processing overheads across the value chain, a potentially massive benefit to PSPs and their customers.

Together these are a powerful set of advantages, differentiating instant from non-instant payments. However these advantages have to be considered alongside other factors.

FLEXIBILITY FOR RE-USE

The ease of being able to integrate the payment type into a range of use cases (high or low value, between personal or business customers, etc.) determines how widely it will be used. Many existing payments are limited in their applicability by being very specific to a particular uses case, (e.g. Cards which only address consumer to business situations effectively). Instant Payments are essentially very simple, symmetrical (you can easily be both a payer and a payee, unlike Direct Debits or Card payments where the role of payer an beneficiary is fixed) and generic and hence able to form the core payments process within many use cases across P2P, P2B, B2P and B2B. The functionality specific to the use case is external (the use of overlays), but an instant payment can integrate with it in real-time. This is especially true

of new digital payment types such as mobile P2P and m-commerce. Because SCT^{INST} is also based on ISO20022 and the original SCT, it is also compatible in data terms with existing SEPA use cases, and it is possible to see existing SEPA volumes (e.g. salary payments) migrating to SCT^{INST} as it becomes established [and when critical mass or technology determine the direction of travel]. As communities implement Instant Payments that comes with a new risk profile and settlement mechanism it is likely that limits will be placed on the amount that can be transferred with Instant Payments. Whilst this is sensible initially, limits will cut down the universality and hence attractiveness of the payment mechanism to particular value sector. In the UK the system limit for a Single Immediate Payment was originally set to £10,000, but has subsequently been raised to £100,000 and is likely to be raised still further. The consultation from the Dutch Payments Association suggests that there should be no centrally imposed limit on its proposed Instant Payments system. This does not mean, however that PSPs should not apply limits to their customers or types of transaction, but rather emphasises the importance of managing risk at the appropriate point: counterparty risk managed by the system, credit risk by the participant (Account Servicing) PSPs.

COMMUNITY/ UNIVERSALITY / REACH

The need to achieve network effects across a community are well known in the (especially retail) payments business. SCT^{INST} is designed for pan-European availability, but initially this will not be the case. However national implementations (e.g. in NL) will enable sufficient concentration within national communities to drive adoption hotspots which will later connect to provide a pan-European solution through interoperability. The latter will be important as the crossborder ecommerce shopping statistics show that some 15 % of consumers shopped abroad in 2015², a trend that is increasing.

INDIRECT REGULATION

The indirect effect of regulation, especially that which seeks to open up the market may be significant. Market entrants tend to avoid legacy and move to state of the art ways of doing business, as with the move to electronic trading which went hand in hand with the de-regulation of stock markets. The PSD2 regulation bearing on Payment initiation is likely to create a similar appetite for Instant Payments. As well the core benefits mentioned above, Instant payments provide cleaner handoffs between the Third Party Payments Service Provider (TPP) and the Account Servicing Payments Service Provider (ASPSP), with operational benefits to both parties.

PROMOTION

Promotion of SCT^{INST} is a key factor. Whilst SCT^{INST} is primarily an inter-PSP service which supports multiple customer propositions, the instant nature and 24/7 ability will appeal to users and they should be made aware of the additional service through some form of explicit branding. In the UK the term "Faster Payments" has become a trademark, and through time has created understanding and demand amongst consumers and businesses for it to be used to support new use

cases. With new, high profile overlay services such as mobile P2P, promotion may create strong demand for Instant Payments. In Sweden the promotion of the local real-time payments service BiR has been primarily through the mobile instant payments service SWISH (an overlay service). Common branding amongst PSPs and active promotion through the media has seen impressive uptake. The SWISH brand is now being carried to other use cases which use instant payments. Effective promotion may be further enhanced by early engagement of stakeholders representing the end user, regulators and supervisors and public authority. This was the case in the Netherlands where demand, originally from the end-user community has been recognised and a broad number of important payment stakeholders have been involved in the planning and requirements definition for the proposed Instant Payments service. Such consultation and planning may also enable the industry to initially target services where there is strong economic potential - for example in business to business transactions. The Clearing House in the United States has placed much emphasis on the development of such revenue earning services in the planning for its forthcoming real-time payments service³, but with significant promotional effort devoted to the underlying core functionality of Immediate Payments as an enabler.

ECONOMIC MODEL

As described above, the general features of IP make for a potential business case based on lower operating cost and retention of customers by supporting the demands of changing consumer behaviour. In addition to these benefits IP may have more direct economic benefits. Good fee revenues and margins for payment providers together with a willingness to pay by users has been the basis for successful payment business models, notably in the areas of card payments (through interchange) and cross-border remittances. The increased value

delivered to users by Instant Payments will enable higher fees where services are chargeable, and where IP enables a specific use case - often in the P2B or B2B domain. Evidence from countries where the IP model already exists indicates that this is the case - PSPs in the UK have been able to charge premium fees for Faster Payments and businesses have accepted this depending on the importance of the Instant nature of the payment to their business.

Some businesses in the UK and Scandinavia - such as those providing temporary loans or requiring the immediate payments of fees, duties and charges to facilitate the release of goods - have business models that are entirely based on characteristics of Instant Payments, PSPs have been able to command significant fees for providing the service to them.

^{2.} E-COMMERCE EUROPE; "BARRIERS TO GROWTH", 2015.

^{3.} THE CLEARING HOUSE; "US REAL-TIME PAYMENTS BUSINESS PLAYBOOK" VERSION 1.03, MARCH 2016
ACCESSED APRIL 2016 VIA WWW.THECLEARINGHOUSE.ORG/PAYMENTS/REAL-TIME-PAYMENTS

THE COST OF INSTANT PAYMENTS

IMPACTS ON STAKEHOLDERS

TECHNOLOGY INVESTMENT FOR PSPS

Real-time adoption in PSPs is essential for AS-PSPs to be able to offer instant payments, in order to enable the beneficiary to make immediate use of funds, normally by a posting direct to the current account. Real-time accounting is not yet universal, which may impact on the ability to offer realtime payment services. However as PSPs face technology renewal cycles Instant Payments is only one factor driving real-time adoption, other examples being: the need to manage liquidity more actively; automate back-office processes; offer customers digital banking channels; and support APIs to meet the needs of PSD2. PSPs are increasingly looking to technology vendors to provide the solutions to enable gateways, payment platforms and core accounting systems. Such systems, if designed for real-time operation (as most now are), will be a key enabler for future payments. Increasingly we see vendors of banking platforms and gateways offering this technology on a software as a service

(SAAS) basis, reducing the initial investment overhead particularly for smaller PSPs and new market entrants.

Availability also becomes a major issue for PSPs as discussed in the introduction to this paper, and any solution must be highly resilient to ensure availability 24/7, as well as be able to handle high volumes and ensure financial integrity. In addition whilst having the initial capacity to meet the needs of initial propositions (e.g. mobile P2P), such systems must have the ability to scale to equivalent to or greater than all existing ACH volumes. Within major economies this means reliable benchmarks.

CENTRAL INFRASTRUCTURES

Clearing and Settlement Mechanisms for instant payments have fundamentally different requirements to those designed for batch or asynchronous systems. This makes it highly unlikely that an existing batch system can be adapted to run instant payments, (although infrastructure designed to support instant payments may be readily adapted to support

batched transactions - see below). As with PSPs the key requirements are for high availability, both in terms of the ability to operate 24/7 and meet peak demand whilst meeting service levels: end customers will not tolerate a high level of capacity related failures or even planned down time for maintenance. Systems need to have a guaranteed ability to transact volumes and proven ability to scale. In addition the range of value added services they provide for example "stand in processing" i.e. continuing processing on behalf of a PSP if it is temporarily disconnected can include support of PSPs in terms of providing additional resilience.

END CUSTOMER TECHNOLOGY ADOPTION

For personal customers technology adoption will be easy: P2P and P2C services may only require that they download an app from their PSP, or in the post PSP world from an independent TPP. In the corporate world the degree of integration across the enterprise makes this a more complex task. Whilst new entrants

will look to fully realise the benefits of instant payments across their business, established users may see it more as a staged process:

- Stage 1 use Instant payments for bill settlement where no adaption of systems is required. Adapt manual processes.
- Stage 2a adapt merchant interface to take advantage of P2C Instant Payments in retail transactions.
- Stage 2b adapting existing ERP systems. Typically the ERP systems will create bulk files (salary payments for example) and send them to the PSP for processing. Instant Payments is essentially a single payment transaction process and for corporates to use it they will need to change the payment initiation and delivery method into single payments. This will require changes from the ERP vendors. Also other providers (including PSPs and CSMs) may offer services that transfer batches into individual Instant Payments to benefit from the new infrastructure.

■ Stage 3. building instant payments into core business by adapting core processes. This is the ultimate stage of the process for corporate users, and will enable innovations particularly in B2B and trading environments. At this point many key processing benefits such as the full automation of payments processing and elimination of post-event reconciliation can occur.

Instant Payments initiatives both in Australia (NPP) and the United States (The Clearing House) have identified the need to involve business users of real-time payments early. Not only will businesses drive adoption generally, but are a more certain source of revenue than personal payment, where competition between providers often means payments earn low to no revenues. Collaboration between PSPs, infrastructures and suppliers of corporate technology platforms (e.g. ERP systems) is therefore a key enabler in this area.

MOVING TO SEPA 2.0

GUIDING THE MIGRATION

The adoption of IP will take the form of both recruitment of new payments and migration from existing payment types. Based on experience of existing markets and the likely stance taken in those now planning to adopt IP, a number of payment adoption trajectories may be anticipated based on the sector addressed and type of end user proposition offered to the market. The order and relative speed of implementation will vary according to the different priorities of individual markets and communities within Europe.

To date, experience has indicated that simple, person to person payments are the first to migrate, and only then followed by sectors requiring more complex infrastructure to support them, (see figure 1). This has the benefit of ensuring a broad base of the population are reachable in a short timescale and requiring minimal investment outside the financial network. However, given that the global market is now more mature, and benefits better understood it looks feasible to guide the process of migration to enable revenue earning customer to business (e.g. e- and m-commerce), business to customer (e.g. payroll, broker/dealer payouts), or business to business (data-rich trade payments) in the earliest phase of migration. Whilst this may incur some additional investment, it will also realise revenues earlier, with consequent business case improvements.

The launch of IP within a community will be accompanied by an initially small number of generic use cases: for example use within the on-line banking channel as a faster alternative to SCT, or extension through the mobile channel to create a mobile P2P service. Whilst this process will migrate certain volumes from existing SCT, experience form the UK suggests that a change in behaviour will lead to new volumes being recruited from cheques (where present) and cash.

After the initial implementation, the availability of the new IP platform will create the opportunity for PSPs (individually or collaboratively) to develop innovative services which use IP (overlays) or adapt existing services (such as on-line banking e-payments - OBeP). As mentioned earlier, the higher margin B2B and B2C payments services⁴ are likely to be the focus of innovations building on the IP infrastructure. This is likely to drive significant new volumes as well as recruit transactions from a broad spread of existing instruments including not only SCT, but also:

- cash (driven by the immediacy of instant payments combined with easy to use service like P2P smartphone transfers based on mobile numbers);
- card (especially debit card) payments (driven by emerging B2C overlay services), as well as

 SDDs (driven by overlay services that support requests for payment or by a potential instant DD scheme - see below).

With retail mobile and web banking channels connected directly to IP, the migration of existing volumes described above will be significant. Assuming the local community in which the PSP operates has close to 100% receiver capability, UK experience suggest that the majority of PSPs will default all payments made by personal customers via IP in a very short timescale such that it becomes a consumer expectation. One-off payments by businesses (i.e. for settlement of invoices, etc) are also likely to take this route soon. In fact it is true to say that by building Faster Payments many payments were recruited from non-electronic channels such as cash and cheques. Volumes of other electronic channels (in the UK CHAPS and BACS) remained constant as Faster Payments was introduced: the predominant volume increase in UK payment volumes has been the growth in Faster Payments.

One impact of the first stages of migration will be increase of the effective cost of (non-IP) SCTs and SDDs processing platforms as volumes decrease, limiting the already challenging business case for operating these instruments for both PSPs and CSMs. Adding to the challenge is the

4. THESE OF COURSE REQUIRE A TWO SIDED MODEL (BOTH PSPS AND USERS) WHICH REINFORCES THE NEED TO HAVE WIDE EARLY USER/STAKEHOLDER INVOLVEMENT TO DEFINE PROPOSITIONS THAT ARE SUITED TO THE THEIR (EMERGING) REQUIREMENTS.

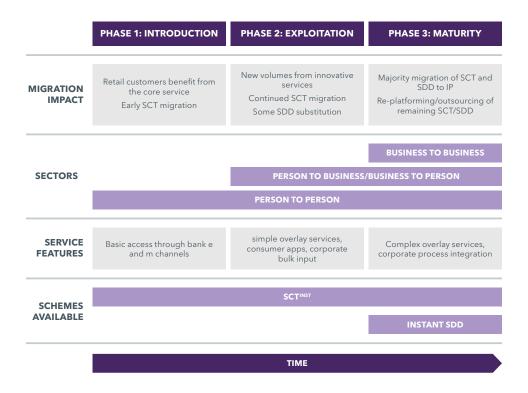


FIGURE 1: INSTANT PAYMENTS MIGRATION - BASIC PHASING

REMOTE BANKING SINGLE PAYMENTS

TRANSACTIONS / MONTH

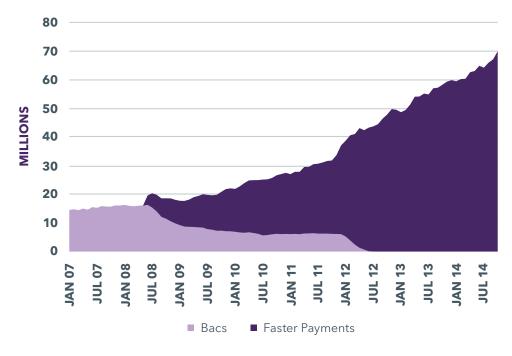


FIGURE 2: EFFECT OF FASTER PAYMENTS IMPLEMENTATION ON REMOTE BANKING DEMAND

fact that the migration from regular SEPA to SCT^{INST} is likely to be initially fast and then decrease slowly over many years due to two reasons: adoption speed of IP across all SEPA communities will take place at different speeds and as mentioned above, SDD does not (yet) have a logical migration counterpart. As communities become comfortable with Instant Payments, we think stimulating convergence to Instant Payments will become increasingly important. We believe that an effective programme will look to accelerate the simplification of platforms to reduce costs through three elements

- convergence of SCT to SCT^{INST};
- migrating or substituting SDD, and;
- addressing the remaining non-IP SEPA payments.

An approach to solving this problem is to explicitly accelerate or "guide" the process of migration to Instant Payments by using the levers mentioned earlier in this document, alongside the provisison of key technical capabilities.

It is logical to expect that SCT volumes will migrate more easily and organically to SCT^{INST}. Here existing experience (see Figure 2) suggests that in the early days the focus will be on P2P transactions, requiring little additional investment beyond the core platform and channel linkage. Migration of SDD to SCT^{INST} is less obvious. It could happen if requestfor-payments services are launched either based on overlays or a new scheme, or if an "Instant SDD" scheme is developed. The latter instrument would need to include a strong debtor driven mandate considering the very high risks associated with instantly debiting accounts!

PSPs and processors can provide facilities targeted to support migration from the existing SEPA instruments to the world of Instant Payments. These are describe below.

Bulk payment initiation applications related to bulk B2C processes like salary payments are often designed around the concept of paying many

items on a given "value date". Whilst applications may be adapted to use IP more natively in due course, in the interim, PSPs (or processors or other providers) may be able to offer a service which accepts bulk payments "de-bulks" them or separates them such that they can be sent as individual payments and the results (success or failure reconciliation) reported to the sender. This has a significant advantage over an existing SCT as any failed payments (e.g. account closed or incorrect) will be detected immediately and returned to the originator for investigation, (a process which can take at least a banking day with existing instruments). Such a service could be provided within the PSP, but may be best provided as a shared service by a central provider. This is the case in the UK, where VocaLink provides its Direct Corporate Access bulk service to enable bulk payments to be submitted the Faster Payments system, with delivery of payments and results reported within an hour.

USE OF A DE-BULKING SERVICE

Will require careful interpretation of the SCT^{INST} scheme rules. Timings dictate that point of payment confirmation (by the payer) will be only after the payment is de-bulked on behalf of the customer. Alternatively it could be treated from a rules perspective as a standard SCT, to avoid compromise of timing restrictions. Whatever the approach, the key SLA is that offered between the sending customer and PSP which must be transparent.

SEPA DIRECT DEBITS

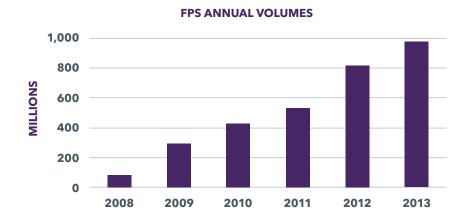
As currently defined SCT^{INST} is a 'push' payments method. Thus it fits poorly with instruments such as SEPA Direct Debit (SDD) which work on a "pull" basis and are especially deeply embedded in the processes of PSPs and their corporate customers. However as stated earlier there may be two factors at work which see SDD volumes migrate to IP:

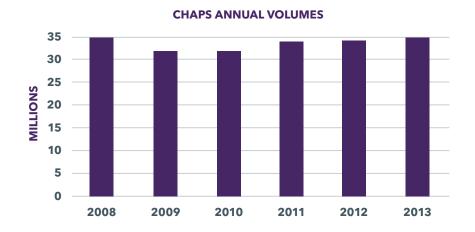
 SDD's may be replaced by a variety of "request to pay" overlays enabling a customer to respond to regular

- requests for payment with a SCTINST, i.e. a push payment. One advantage for creditors in promoting this model may be the finality associated with a customer approved payment (unlike a SDD where a scheme rules give the customer a right to a refund up to 56 banking days after the debit is made).
- The future development of an "Instant SDD" scheme in a similar vein to SCT^{INST} where emphasis is needed on a solid debtor driven mandate process and messaging takes place across the IP infrastructure to mitigate the risks that an instant direct debit can have; the advantages for creditors over regular SDD's are believed to be around immediacy allowing it to be used for ecommerce activities.

TECHNICAL MANAGEMENT OF REMAINING NON-INSTANT PAYMENTS

Where some PSPs remain unreachable by SCT^{INST} the PSP will be obliged to make a transfer under SCT rules. It is likely that this will become an exceptional situation for those communities where IP is implemented sooner rather than later, related primarily to certain cross-border transfers. From the outset the use of a "reach table" to determine to which destination IP as opposed to SCT can be used will be essential as this information needs to be given to the customer as the payment is initiated. As the volumes of SCTs and perhaps SDDs reduce it may make sense to re-think how they are processed within both PSPs and CSMs to ensure cost effectiveness. This could take the form of adapting the Instant Payment platform to process non-instant SCTs and SDDs, or using an outsourcer to provide back office processing services, (where, through consolidation, scale economies can be achieved).





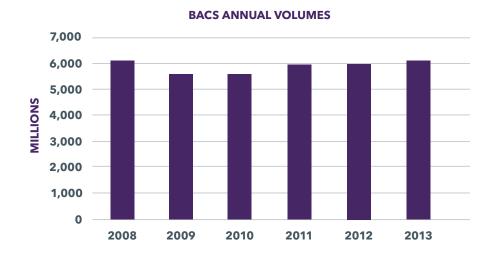
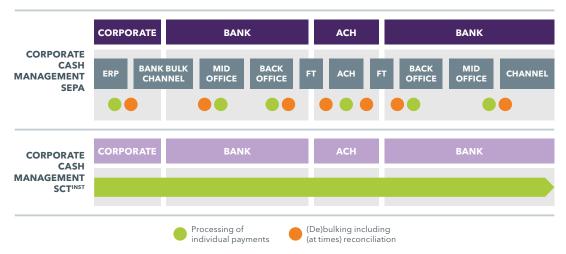


FIGURE 3: ANNUAL UK PAYMENTS SYSTEM VOLUMES AFTER INTRODUCTION OF INSTANT PAYMENTS (FASTER PAYMENTS)

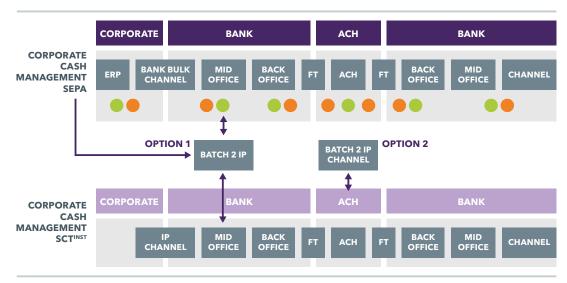
SEPA value chain is a mix of individual and batch payments processing with payments statuses that can change over days (max. 56 with SDD) and as such is error prone



The Instant Payments value chain is simple, direct and processes individual payments with clarity about its state within seconds

FIGURE 4: COMPARISON OF EXISTING SEPA AND INSTANT PAYMENTS PROCESSES

Options for providing SEPA Credit Transfer batch processing of payments via the instant payments infrastructure



Option 1: SEPA CT Payments batches are de-bulked and converted into individual SCTinst payments through a 'Batch2IP' capability; the IPs are fed into the SCTinst value chain (at controlled pace); based on the notifications returned from the CSM reconciliation of the batch is done and reported back to the SEPA batch value chain.

Option 2: SEPA CT Payments batches are sent from the corporate to the 'Batch2IP' capability; the 'Batch2IP' capability de-bulks and converts the batch into individual SCTinsts on behalf of the bank; it either sends a debit requests for the batch (or for individual payments to the bank if required to meet SCTinst time lines) upon confirmation feeds the IP (at controlled pace) into the CSM; reconciliation reports are created based on notifications and sent to the corporate and the bank.

FIGURE 5: OPTIONS FOR PROVIDING SCT BATCH TRANSFER VIA INSTANT PAYMENTS INFRASTRUCTURE

WAY FORWARD

IP provides a solid foundation for developing a compelling set of new payments services. Currently many communities in SEPA are in the process of planning or developing their IP infrastructure and see it as an enabler for the new digital economy. However the impact of IP will go much further and we believe IP will be the platform for a much wider replacement of existing SEPA instruments over time. It is therefore important that the new IP infrastructures are designed and built to be able to process 24/7 at very high availability and are ready to scale up to large volumes as uptake materializes.

It is also important for the industry to develop a vision together with users of the potential areas for innovations as these will be a key element in the overall business case. Providers of instant payments could also consider providing a sand box environment to be able to demonstrate planned developments and educate the market - for example in development of overlay services. Furthermore, plans should also be put in place to actively promote migration from SCT to SCT^{INST} and eventually SDD to an instant debit service in order to fully realise the benefits of instant payments. Finally, the ability to deal effectively with a "long tail" of unmigrated SCT and SDD payments will be essential, and may take the form of outsourcing, consolidation of volumes or re-platforming to share infrastructure with IP.

APPENDIX A

INTEROPERABILITY

One of the key attributes sought by the Euro Retail Payment Board and the EPC is the interoperability of all Instant Payments systems in Europe. Not only does this require the adoption of a standard customer proposition to be offered by PSPs as we see with SCT^{INST}, but also a common approach from Clearing and Settlement mechanisms (CSMs) such that they interoperate to (eventually) create pan-European reach. Within SEPA pan European reach for services could be achieved through a variety of routes such as banks acting on behalf of other banks, links between ACHs, bilateral links etc. Instant Payments need to achieve an uniform SLA of a few seconds between participants whatever the beneficiary destination, requiring a far higher degree of compliance and standardisation by CSMs. SCT^{INST} is an optional service for banks and it is likely that there will be significantly different

timetables for implementation in different communities. For example the Netherlands was already considering IP before the ECB published its Vision for Pan-european Instant Payments in December 2014. Consequently the Dutch initiative is well advanced (due to launch in 2019). Others such as Belgium, France and Italy are likely to be fast followers. However at the other end of the spectrum some countries have no plans as yet to start the process.

Within national communities it is likely that take up will be if not actually, effectively mandated such that close to 100% of bank accounts in the community will be reachable via SCT^{INST}. This means that initially there will be islands of SCT^{INST} capability that will interoperate to provide reach as it is available. Of course, within the euro zone the standardisation of SCT^{INST} may enable consolidation of 2 or more of

these communities onto a single CSM platform. The enforced standardisation, level of investment required and clarity of future direction that is emerging with SCT^{INST} may drive CSM consolidation to a degree that was absent in the move to existing SEPA standards, with a number of highly efficient, scale processors each meeting the needs of a range of communities.

APPENDIX B

PSD2 AND INSTANT PAYMENTS

The development of PSD2 sees the advent of non-account holding Account Information Service providers (AISPs) and Payments Initiation Service Providers (PISPs). These organisations working on behalf of customers will use the services of an Account Servicing Payments Service Provider (ASPSPs) to make payments (or retrieve data) on behalf of their mutual customers. It is likely that the implementation of SCT^{INST} will be beneficial both to PISPs and ASPSPs, compared to existing instruments. Not only are the PISPs likely to be operating over digital channels and seek to provide their customers with an "Instant" experience, but both PISPs and ASPSPs will benefit from the operational simplicity of Instant Payments; exceptions are immediately visible to the PISP and their resolution is in the hands of the PISP and customer. With existing SCTs, an apparently complete payment may fail after

initiation causing the PISP and ASPSP reconciliation and tracking headaches which may consume considerable resource to resolve, with significant inconvenience to the customer. The "cleaner handoff" of Instant Payments is thus highly attractive and the only model that some PISPs wish to work with, and may drive additional migration from SCT to SCT^{INST}.

APPENDIX C

WHAT WOULD MIGRATION TO INSTANT PAYMENTS LOOK LIKE?

We know from existing implementations that Instant Payments such as those in Sweden, Denmark and the UK have moved from being a niche to a more mainstream payment method. In fact some economies (for example Australia) have envisaged a form of instant payments as being the backbone for all domestic, retail payments.

We believe the current activity in Europe will make Instant Payments a reality. It has the potential to become the dominant form of retail payment across the Eurozone, given its: unique proposition which significantly differentiates it from existing mechanisms; flexibility enabling it to meet a range of different use cases from new digital propositions to legacy models, and the impact of indirect regulation in the form of PSD2 encouraging and enabling many more potential use cases suited to instant payments. Set against this will be the inertia inherent in network markets which is offset by the activity of public authorities and industry associations at both a European and national level. Whilst there is (as yet) no pan-European mandate, we know of an increasing

number of national initiatives as well as those at a pan-European level such as that of the EBA Clearing.

Looking at these factors we have tried to model some scenarios for the uptake of Instant Payments in the Eurozone, (for clarity we have for the time being excluded the existing non-Euro IP systems in Sweden, Denmark, Poland and the UK). Of course these must be heavily caveated: we cannot say how the service will be promoted or how it will be priced. However, we can make some assumptions about uptake based on our observation of other systems across the world and compare these to the situation emerging in the Eurozone. For the following reasons we think uptake of the service will be faster than in most economies:

- The case for instant payments to enable digital propositions is already well understood from other countries, (contrasting with the limited understanding in the UK when Faster Payments was launched); Europe can be a "Fast follower".
- "Overlays" such as mobile P2P and request to pay models (like Zapp,

- Swish, Ideal, EPS and MyBank) already exist and await instant enablement
- PSD2 will encourage growth of an ecosystem which will rapidly create demand for Instant Payments
- SCT^{INST} is built on the ISO20022 message structure of SCT with well understood data content and usage.
- Technology to implement instant payments has been proved in live operation by leading providers to operate at high levels of availability for high transaction volumes (in excess of 1 billion per annum).

Our volume estimates are based on an extrapolation of existing electronic payment volumes for SEPA instruments (SDD and SCT). We also see some payments won from debit cards, and (as is the experience with the UK) a significant volume of transfers form cash. We have modelled a similar adoption for each Eurozone country based on a known or estimated implementation date for the 10 years from the first full year that SCT^{INST} will be in "live" use.

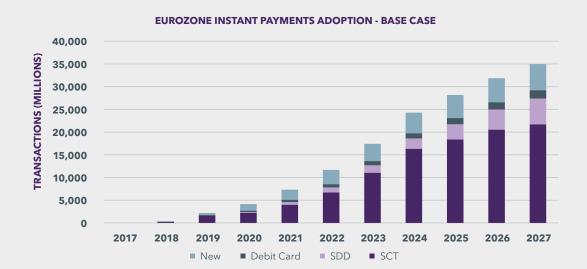
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The base case sees existing SCT volumes fully migrating to by the 8th year after country-specific implementation, (assuming all countries migrate between 2018 and 2023). It also assumes that based on the availability of overlays and possibly a scheme, a gradual, but delayed transition from SDDs such that by 2027, 40% are migrated to instant payments by 2017. However we only estimate substitution of a maximum of 5% of debit card payments in the same timeframe. More significant will be the attraction of an additional volume of "new" transactions from cash and cheques or by increased payments frequency, reflecting UK experience.

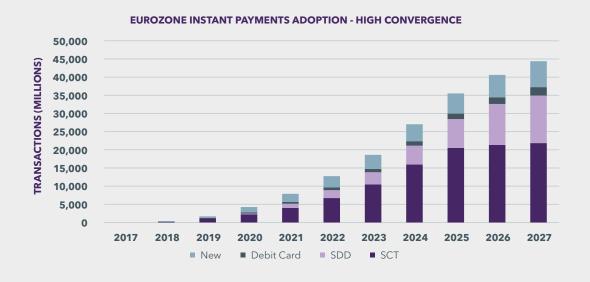
As a contrast we have modelled a "niche" scenario. This sees only a portion of SCT migrating, together with very limited volumes of card and SDD transactions. However there is still a strong component of "new" transactions. The key difference here would be the PSPs focussing the promotion of SCT^{INST} as a digital enabler whilst retaining existing SEPA instruments for high volume, traditional uses wherever possible. Such an approach as outlined elsewhere in

this document may be facilitated by outsourcing and consolidation of these legacy transactions. This bears some resemblance to the situation in the UK, Sweden, Denmark and Poland at present, although discussions regarding platform/instrument harmonisation are already taking place in these markets.

A final scenario is based on highly active promotion and migration to instant payments, perhaps enabled by regulatory intervention at some time post 2020, as well as the definition of an "instant SDD" scheme. Although not complete at the end of this graph, this sees a definite migration to a common Instant payments platform. However even in this scenario, we have not modelled a wholesale migration from cards. Whilst in some markets (e.g. France) where card and ACH/CSM processing are closely intertwined, this may happen earlier, we have at present assumed they continue to follow a parallel path, (although within the cards world some "Instant" features may be adopted).









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