

Title: Moving Towards a SEPA-Compliant Payments Infrastructure

Author: Jan Willem Mars, Equens

Section: sepa - infrastructure

The introduction of the single euro payments area (SEPA) will transform the eurozone's payments infrastructure by creating an open network of payment service providers and payment processors that will effectively make borderless payments a reality for all end-users. In order to achieve this, however, the industry faces the challenge of eliminating existing domestic boundaries at an infrastructure level.

As a result of national infrastructures developing on an individual basis within each member state, the pre-SEPA payments infrastructure is fragmented along domestic lines. For SEPA to be a success a new EU-wide infrastructure must be created and the following key architectural elements are vital:

- The Payments Services Directive (PSD), which will harmonise the legal and regulatory environment.
- Shared European oversight via the European Central Bank (ECB) and national central banks (NCBs).
- TARGET2, the common settlement platform, which will overcome national boundaries for settlement purposes (and is due to go live with the connection of the first migration group on 19 November 2007).
- The EPC's SEPA Credit Transfer (SCT) and SEPA Direct Debit (SDD) rulebooks that will provide common payment products.
- The ECB's SEPA compliance framework for infrastructure and the EPC's clearing and settlement mechanism (CSM) framework, which guarantees that CSMs will jointly realise full reach by forming a multi-party PE-ACH.
- EACHA 'interoperability' to allow any payment service provider or payment processor to use the same technical conventions to send or receive payments from any other party based on this ability.
- Standardised (ISO20022) UNIFI messages introducing XML as a mainstream technology in payments to leverage IP-related developments.

The introduction of all of these architectural elements is crucial in ensuring that SEPA fulfils its ambitions and, most importantly, these elements will be available equally to all.

Moving Towards a SEPA-Compliant Infrastructure

The Fifth Progress Report on SEPA from the ECB in July this year outlined the Eurosystem's criteria for the SEPA-compliance of infrastructures processing payments and identified the following key components:

1. Comply with the requirements of the PE-ACH/CSM Framework, the SCT Rulebook and/or the SDD Rulebook, the Implementation Guidelines and the associated UNIFI (ISO 20022) XML standards and be ready to support scheme testing as planned by the EPC.
2. Adopt interoperability rules, i.e. interface specifications and business procedures for the exchange of SCT and SDD payment orders between payment service providers and infrastructures, and between infrastructures, that are preferably mutually agreed upon by the relevant CSMs, and undertake to establish a link with any other infrastructure upon request, based on the principle that the cost for establishing the link is borne by the requesting infrastructure.

3. Be able to send or receive euro payments to and from all banks in the euro area, either directly or indirectly through intermediary banks, or through links between infrastructures (in other words, to provide full reachability).
4. Enable financial institutions to make infrastructure choices based on service and price, and therefore not apply undue access restrictions or set obligations for users to process certain types of payment in a specific infrastructure, or via other infrastructures, and to ensure full transparency of services and pricing.

The underlying message is that reachability ('all can reach all') and interoperability, (all participants use the same technical conventions for realising STP and competitive processing) are critical requirements in developing the infrastructure for SEPA, and one that Equens wholeheartedly supports.

Reachability is Vital

Reachability is a fundamental factor in the successful implementation of SEPA. The European Commission and the European Central bank have stated that, in order for customers to fully reap the benefits offered by the new pan-European payment instruments, payments need to successfully travel from any originating payment service provider to any beneficiary payment service provider in SEPA in a timely manner without there being any gaps or hurdles. Any payment service provider that offers SEPA services needs to ensure it can reach any other SEPA compliant payment service provider in the EU, the European Economic Area and Switzerland.

There is no doubt that reachability is critical to the success of SEPA; the question is how will it be achieved? It has become evident that individual payment service providers, payment processors and CSMs will not be able to create reachability across the eurozone on their own to the extent that general market structures can be based upon them. Full reach will, therefore, only be realised by 'sharing' reach between participants. In a networked SEPA environment, and to structurally realise reach in SEPA, payment exchanges via CSMs is inevitable. Reach will be provided through intra-CSM agreements (because the majority of payment service providers will need at least one SEPA compliant CSM), as well as inter-CSM agreements (because any CSM will need at least one other CSM to become SEPA compliant). This proposition was supported by the ECB in its report where it stated that 'each payment service provider should put into place whatever arrangements are necessary, either by agreeing suitable mechanisms with other payment service providers and/or connecting to one or more CSMs'.

With this in mind, it is becoming clear that the original notion of a single pan-European automated clearing house (PE-ACH) for clearing and settlement across SEPA is no longer applicable and a multi-party PE-ACH is inevitable.

The bilateral exchange revisited

As a consequence of SEPA, payment service providers will have more freedom of choice regarding clearing processing and the manner and location of settlement. A payment service provider can join a clearing community based on multilateral netting while exchanging payments directly, or it could settle bilaterally while using the advantages of information exchanges via a payment processor. Of course a payment processor could keep the clearing and settlement aligned. For payment service providers the Settlement and clearing can optionally be 'unbundled' in the new environment.

With the SEPA induced commoditisation of payments many payment service providers will decide to outsource their payment processing business as a result of the high investment costs in becoming SEPA compliant. Sometimes payment service providers will choose payment processors like Equens to perform BackOffice processing. This development further blurs the former distinctions of parties involved in payments exchanges. E.g. Is a payment that is originated by Equens as backoffice processor and sent to another payment service provider now to be considered as direct exchange, or will this in the Swift CSM topologies be seen as an intra-CSM exchange?

Equens considers the exchange of the payment information as the basis for market topologies. Three topologies are considered: direct exchange between two payment service providers, intra-CSM and inter-CSM. In any of these topologies it is arbitrary whether the settlement occurs bilateral or multilateral, or who is actually initiating settlement. Therefore the term 'bilateral' is reserved for settlement purposes only.

Combined with the use of the PSD terminology of the roles parties have in the SEPA network and a clear view on how interoperability could be used (based on underlying message flow concepts as described by the EACHA framework on interoperability), Equens believes we do not need to make arbitrary distinctions at all.

Although payment processors will continue to provide transaction clearing and not perform a settlement function, payment service providers do not have to stick to just one settlement engine. TARGET2 will become the main SEPA settlement agent for CSM exchanged payments in our view. From a processing point of view though, payment processors will need to be able to accommodate their clients regardless of the settlement engine or process they wish to employ. This also includes bilateral settlement, which is most likely to continue in certain countries or between specific payment service providers.

Common Interoperability

In a networked environment, a common interoperability framework will also be essential in structurally facilitating inter-CSM agreements. Interoperability is the ability for any payment service provider to connect to any SEPA participant based on the SCT Rulebook and/or SDD Rulebook and technical conventions in the euro area. Payment service providers can, if they wish, easily connect to or switch processing partners directly. This will invoke competition between payment processors. This is vital if the industry is to ensure STP processing and open, competitive payments processing within the SEPA.

In order to move forward quickly, the industry should build on progress already made by the ECB, the Euro Banking Association (EBA) and the European Automated Clearing House Association (EACHA). For example, EACHA's Framework version 3.0, released in August 2007, creates the grounds for a SEPA Interoperability Framework for industry-wide interoperability. The framework complements the SEPA standards created by the EPC and adheres to the SEPA scheme rules. EACHA designed the framework to help establish interoperability between payment service providers and CSMs as well as interoperability between European CSMs for payments that will have to be cleared and settled for payment service providers participating in different CSMs.

In fact, CSM interoperability is already at the market realisation stage following the announcement that VocaLink, Equens, Iberpay, Seceti and STET have jointly

agreed to establish interoperability for the exchange of SEPA payments. The group has commenced testing over SWIFTNet FileAct and is preparing for the necessary arrangements to ensure interoperability is a reality for the launch of SEPA. This agreement is the first implementation of EACHA's Framework version 3.0.

In addition, as described earlier, the ECB's SEPA compliant infrastructure supports a multi-party PE-ACH environment where all CSMs will need to ensure 100% reach for their clients, directly or indirectly, within the next three years.

In order to achieve interoperability from a technical point of view, common interface specifications are necessary to allow infrastructures to link to each other easily. From a business perspective, interoperability requires common business procedures and standardisation. This will ensure the network environment is as efficient, transparent and functional as possible. Standardisation must therefore be universal and an integral element within the payment service provider-to-payment service provider and payment service provider-to-CSM environment.

Interoperability will also benefit the direct exchange between payment service providers without the interference of one or more CSMs. Payment service providers, such as ING and Deutsche Bank, however, are moving forward in this area and discussing interoperability standards for payment service provider-to-payment service provider communications and direct exchange. Ideally the payment service provider-payment service provider interoperability would be aligned with the payment service provider-CSM and CSM-CSM interoperability. The EACHA framework has been defined for a possible use between payment service providers directly.

Is standardisation likely within the banking community though? Probably not, as standardisation might not be a priority for all payment service providers, particularly those that decide to outsource their payments processing capability. The ECB initiative on infrastructure compliancy can be seen as an indication that common interoperability is needed to create SEPA as envisaged by the EC and ECB. This compliancy will have bearing for CSMs as payment processors but also for 'banks' that perform payment processing roles for other payment service providers. A level playing field will be established between all that are in the business of payment processing. The banking industry is only starting to realise the paradigm shift invoked by this development.

BOX START

Benefits of Interoperability

Common interoperability will create the following advantages for payment service providers:

- No need for proprietary interfaces with CSM(s).
- Easy link up to CSMs or other payment service providers at comparatively low costs.
- Message flows and use of fields compatible for all three topologies.
- Generic exchange process and transaction information (STP).

Interoperability will also lead to an inherently competitive and innovative payments arena where:

- Payment service providers have the option to participate in any CSM(s) of choice.
- CSMs must differentiate and create value-add to attract clients in a networked SEPA environment.
- Flexibility for all organising clearing channels and market models.

BOX END

Conclusion

Full interoperability will create a competitive market for CSM services by allowing payment service providers to choose the processor or processors that best meet their needs. Bilateral interoperability agreements between CSMs will enable the simple and efficient exchange of SEPA payments between CSM communities and other players, such as payment service providers and their customers, within the payment chain.

Initially, the battlefield among CSMs will be in achieving reach for their clients. We will see consolidation within the CSM market with some processors choosing not to invest in SEPA compliance while other CSMs merge in order to increase volumes and extend their reach. Once everyone has established 100% reach, however, processors will start to compete based on the volumes they attract, the quality of their reach and the services they provide.

Intra-CSM, inter-CSM and the multi-party PEACH proposition are all inevitable in the SEPA environment. By 2010, all entities performing payment processing within the SEPA environment should adhere to one interoperability framework. More work is needed but the industry has already made significant progress and should continue to work collaboratively in order to create a truly efficient SEPA-compliant infrastructure.

Jan Willem Mars (1962)



After graduating as a business economist at Erasmus University (Rotterdam, the Netherlands) Jan Willem Mars fulfilled management positions at Shell, Technische Unie and KPN Mobile. Eight years ago, he established himself as an independent business counsellor. His area of expertise is focused on strategic management and business development issues. Since then he successfully carried out a wide variety of projects in business areas as diverse as telecom, banking, logistics, energy, industry and wholesale.

The last three years Jan Willem has consulted Equens on a large variety of strategic and business development related issues. Mid 2006 he initiated the interoperability concept at Equens for SEPA payments that later was used as the basis for the EACHA taskforce on interoperability. On behalf of Equens he acted as the EACHA taskforce leader. The collaborative work of the associated CSMs in EACHA has resulted in the EACHA framework on interoperability version 3.0. Since early 2007 Jan Willem is SEPA program manager CSM Equens.