

## BUSINESS JUSTIFICATION

### FOR THE DEVELOPMENT OF NEW ISO 20022 FINANCIAL REPOSITORY ITEMS

#### A. Name of the Request

Card Clearing Payment Messages (CCPAY)

#### B. Submitting Organisation

This request is submitted by the Berlin Group on behalf of its members from the European Card Payments Industry, which include Atos Worldline, Borica, BKM, Ceca, Cetrel, Dias, Euro Alliance of Payment Schemes, Euro Kartensysteme, Equens, Equens Italia, First Data International, MBU, National Bank of Serbia, PAN Nordic Card Association, Payfair, SIA-SSB, SIBS, Trionis, Visa Europe, VocaLink, Zentraler Kreditausschuss and others.

#### C. Scope of the new development

The Berlin Group intends to specify common messages to be used in the clearing and settlement of card transactions, reusing the clearing infrastructures that have already been developed for the clearing and settlement of payment messages, e.g. Credit Transfers and Direct Debits.

The intended development shall be based on the business and message models of the existing payment standards within the ISO 20022 financial repository. The extensions needed will cover relevant card attributes taking into account the work of the ISO 20022 Cards SEG.

This development will cover

- the initiation (pain) messages (acquirer to acquirer bank),
  - extensions of pain CustomerDirectDebitInitiation and
  - extensions of pain CustomerCreditTransferInitiation with all related messages
- the interbank (pacs) messages ,
  - extensions of pacs FIToFICustomerDirectDebit and
  - extensions of pacs FIToFICustomerCreditTransfer with all related messages

After the development, the impact on the bank to customer report (camt) messages (issuer bank to issuer) will have to be studied. Up to now, no impact is expected.

The extension of the Direct Debit message types will be needed for pulling clearing mechanisms, while Credit Transfer messages will be needed for pushing clearing mechanisms like for card based credits or certain merchant refunds. R-Transaction messages will be needed in the case of direct debits and credit transfers.

In total, 10 new messages will be needed for CCPAY.

The Berlin Group suggests that the Payment SEG and Cards SEG perform the evaluation of the candidate messages. It is further suggested that the Payments SEG is the lead SEG, since this approach is based on the business and message models as used for the existing payment messages.

#### **D. Purpose of the new development**

A major part of domestic European card payment systems use inter-bank debit instruments to clear and settle card transactions at a domestic level, using domestic payment standards as the clearing format rather than ISO 8583 based messages. The European banking industry has implemented a SEPA Direct Debit and SEPA Credit Transfer relying on the ISO 20022 standard.

With the migration of domestic payment instruments to these SEPA payment instruments, banks and clearing infrastructures alike need a new European solution for the clearing and settlement of card based transactions. Further analysis has identified that the clearing infrastructure used to process the ISO 20022 based SEPA payment instruments can also be used to clear and settle card transactions through analogous messages and formats.

Thus, a solution which reuses the new SEPA clearing infrastructure will generate synergies by allowing banks to reuse the same infrastructure for direct debits, credit transfers and card clearing within Europe, replacing the domestic payment infrastructure used for card clearing in the mid-term with a common European infrastructure. The banks will then be able to switch easily between different market solutions for clearing, be it a solution using a clearing infrastructure or a bilateral clearing solution between banks. Consequently, this solution would strongly support the SEPA objectives of the ECB and the European Commission.

The Berlin Group as a European standardisation organisation had first developed an ISO 8583 based approach for card clearing, which was designed for cross-border traffic of card processors. This was seen as not sufficient for the migration of the high volumes of domestic card clearing traffic. Thus, the Berlin Group has been working since two years on a payment model and a message format for the clearing of card transactions based on ISO 20022 payment messages like "pain" and "pacs" messages.

Whilst the ISO 20022 repository is fully sufficient for the clearing process between the Debtor Bank and Creditor Bank itself also for card transactions, more data elements are required to transport card transaction related data from the *Creditor* (i.e. the Acquirer) to the *Debtor* (i.e. the Issuer) or their respective reference parties (i.e. the Cardholder and the Card Acceptor) e.g. for the account management towards the bank customers, internal reconciliation and dispute management between the Acquirer and the Issuer.

The Berlin Group first suggested to ISO 20022 in a change request to extend the existing messages by new fields, to be used to transport the card related data elements mentioned above. This change request had been rejected by ISO 20022 in December 2009: The Payments and Cards SEGs had favoured the development of a new dedicated set of messages, while agreeing in the general idea to transport card related data in payment like message for the clearing and settlement of card based transactions.

The Berlin Group recognizes the work that is currently undergoing within the ISO TC68/SC7/WG9 on the ATICA business justification submission and intends to liaise with this working group in order to ensure alignment of the standards being created and the

underlying business models being used. The Berlin Group believes that a payments focused development of ISO 20022 card clearing messages rather than an ISO 8583 reengineering focused approach like ATICA is needed in order to realize the synergies mentioned above.

Thus, the purpose of this registration request is to create card clearing messages based on the existing pain and pacs messages of the ISO 20022 repository in addition to the ATICA approach.

## **E. Community of users and benefits**

### **1. Benefits/Savings**

In the following, benefits for stakeholders are given.

#### *Advantages for and Expectations of Card Issuers and Acquirers*

The most important advantages offered to Creditors (Acquirers) and Debtors (Card Issuers) by an extension of the payment messages for card transaction data are:

- Use of the same message formats for all card based clearing transactions within SEPA.
- Support of STP from the Creditor Reference Party (Card Acceptor) up to the Debtor Reference Party (Cardholder) is feasible.
- Reduced processing cost by reuse of the same formats as for payments.
- Fully automated reconciliation of received payments.
- High reachability for Creditors independent of the underlying card scheme.
- Unbundling of card processing and card scheme, thereby creating choices and competition and potentially reducing processing costs.

#### *Advantages for and Expectations of Banks*

The most important advantages offered to banks by an extension of the payment messages for card transaction data are:

- Processes are highly automated and cost-effective
- The increased volumes on the payment engines by using formats very close to payment formats will decrease processing costs.
- The standard enables the achievement of full STP of all transactions, including R-Transactions.
- Ease of implementation
- Ease creating new card schemes and to construct a more competitive and challenging card market.

- Use of ISO standards such as BIC and IBAN as bank and account identifiers is supported.

## 2. Adoption Scenario

Within the SEPA area, several domestic formats for clearing of card based transactions are in place. With the migration to SEPA formats for direct debits and credit transfers, the market need for card clearing formats as introduced by the SEPA Card Clearing Framework (SCC) of the Berlin Group is growing. The Berlin Group will issue in 2010 the final specification for a short term solution that is relying on the pain and pacs messages as in place today for the SEPA Direct Debit messages. For this solution, the main information on involved parties and amounts to be cleared is contained in the payment data elements already provided by the ISO 20022. Additionally, specific card transaction data e.g. needed for dispute management like EMV data is contained within the unstructured remittance information. The latter data will be ISO-TLV encoded in the unstructured remittance information like the EMV data in ISO8583 based authorisation or clearing message formats.

The short term SCC solution is intended to be implemented as soon as possible. The German banking industry as the first market has already started an implementation project for the short term SEPA Card Clearing formats, since a full XML encoded ISO 20022 solution is not available in time for the SEPA market needs in Germany. Other markets or cooperation partners of the German banking industry in Europe are expected to follow this implementation. This shows the adoption needs for ISO 20022 formats in the area of card clearing in Europe as such.

The involved banks intend to migrate afterwards to a full flavour XML version, as proposed by this business justification, to profit from the full XML technology also in the backend systems for dispute management and other downstream issues. The adoption efforts for the new message types in a second step then are expected as low, since the payment messages today already offer XML fields for 80 to 90% of all data elements needed for card clearing messages.

In general, the adoption efforts for the SEPA Card Clearing based on new message types are expected to be low within the SEPA area, since the banks have already implemented SEPA data models to be reused within their payment IT infrastructure for providing the SEPA Direct Debit and SEPA Credit Transfer Scheme to the market.

## 3. Volumes

An ACH based card clearing is existing in different markets in Europe, based on domestic formats. For example the volume for the German market mentioned above is around 4 Billion Transactions per year, growing every year, used by more than 3000 banks. Other markets in Europe addressed by this business justification have similar volumes and numbers of players.

## 4. Sponsors and Adopters

As mentioned above, the German market is a first mover to ISO 20022 formats for card clearing mechanisms for its domestic card scheme. All German banks and ACHs intend to be part of this implementation. Main ACHs in Europe already have shown their interest in supporting in clearing these volumes by SEPA formats as specified within SCC. This volume

is expected to be migrated to the full XML solution as proposed by this business justification in a midterm perspective.

## **F. Timing and Development**

The banking industry in some European countries is planning to migrate the card clearing from domestic debit instruments to SEPA standards in 2012 inline with SEPA migration plans. Even if the banks will start with a short term solution, based on the actual ISO 20022 message standards, an early migration to the solution proposed by this business justification is planned as soon as possible to profit from the full XML coding of the data elements.

Since the model for the card clearing is, in the view of the Berlin Group, simply an extension of the existing ISO 20022 payment models, it is expected that the new candidate business and message models are developed and ready for submission in Q4 2011, depending on results of the other cards related initiatives within ISO 20022.

The Berlin Group will involve main European market players within the group of banks, card processors and ACHs into the development of the messages.

The Berlin Group has already carried out part of the data modelling process resulting in:

- Business and functional requirements on the process flow and data sets
- Identification of the messages of the ISO 20022 repository to be adapted for card clearing
- Sequence flows for these messages, matching card requirements

The proposed ISO 20022 data modelling process would require:

- The adaptation/extension of the existing ISO 20022 business models and data flows for payment messages with card clearing items
- The identification of missing data elements
  - to be added to the ISO 20022 repository as a new data element
  - to be taken from the Cards related ISO 20022 elements into the payment messages
  - to be updated in the ISO 20022 repository.

Some members of the Berlin Group are also members of the ISO WG 9 working on the models for card transactions. These members will guarantee a communication between the ATICA and the CCPAY development to reach a consistency for the end results of both initiatives.

## **G. Commitments of the submitting organisation**

The Berlin Group is willing to undertake the extension of the existing ISO 20022 business models and message models. This work will include the extension of the Business Process Diagram, the Message Flow Diagram and the Message Definition Diagram, resulting in a submission of new business and message models to the RA. Further additional descriptive material for the use in the Message Definition Report will also be provided to the RA.

The Berlin Group will promptly inform the RA about any changes or more accurate information about the number of candidate messages and the timing of their submission to the RA.

The Berlin Group will address any queries related to the description of the models and messages as published by the RA on the ISO 20022 website.

Further, the Berlin Group will define and publish common test cases for the implementation of the clearing messages once the RA has published the candidate messages on the ISO website. This test methodology has already been followed by the Berlin Group for the ISO8583 based message definitions. The actual implementation of the standard cannot be confirmed by the Berlin Group as such: The implementation is decided by the members on their own.

The Berlin Group confirms that it is willing to initiate and/or participate in the future message maintenance regarding card based clearing messages.

The Berlin Group confirms its knowledge and acceptance of the ISO20022 Intellectual Property Rights policy for contributing organisation, as follows.

*“Organizations that contribute information to be incorporated into the ISO 20022 Repository shall keep any Intellectual Property Rights (IPR) they have on this information. A contributing organization warrants that it has sufficient rights on the contributed information to have it published in the ISO 20022 Repository through the ISO 20022 Registration Authority in accordance with the rules set in ISO 20022. To ascertain a widespread, public and uniform use of the ISO 20022 Repository information, the contributing organization grants third parties a non-exclusive, royalty-free licence to use the published information”.*

## **H. Contact Person**

The following persons can be contacted by the RA, RMG or SEG to get additional information on the project and/or its business justification:

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## **I. Comments from the RMG members and relevant SEGs and disposition of comments by the submitting organisation**

**Submitter of Comment: Switzerland, Matthias Meier**

Date: 30th April 2010

Switzerland does support this Business Justification.

In general a standardisation of this business area is a important step and is supported by the Swiss Community. However the existing solution (Switzerland KTB) still fullfills the immediate needs of the involved parties, there are of course room for improvement.

An implementation of the ISO 20022 messages needs a worldwide co-ordination and participation of all important players. The implementation costs are considered as high and the appetite to launch such a investment is not high.

For at least the next 5 years Switzerland will keep the existing solution.

### **Berlin Group Response to Swiss Comment, May 2010:**

As far as the Berlin Group understands, the Swiss Community is supporting the CCPAY Business Justification for the standardisation of the proposed messages.

A coordination of an implementation of clearing messages is out of scope of ISO 20022, but up to schemes or banks using them. For example, the implementation of the ISO 20022 based European direct debit and credit transfer schemes SDD and SCT was coordinated by the scheme editor European Payment Council (EPC).

## **USA Comments on Card Clearing Payment Messages Business Justification**

April 23, 2010

### *Section C – Scope of the new development:*

We understand this to be between the Acquiring Institution and the Issuing Institution. We would be concerned if this is meant to include settlement messages to the merchant. We strongly recommend communication and if necessary a dialog for reconciliation with TC68/SC7/WG9 on the ATICA business justification.

### *Section F – Timing and Development:*

If requirements and models are available the US would like to see them.

### **Berlin Group Response, May 2010:**

#### *Section C:*

SCC is agnostic towards the underlying accounting business model. The clearing and settlement is done between accounts of the acquiring institution and the issuing institution

whereas the eligibility criteria for both are up to the respective card scheme, or up to bilateral agreements between acquirer and issuer.

Further, the Berlin Group assumes that the ISO Payment SEG will reconcile the CCPAY proposal with the ISO Cards SEG, where also the WG 9 work is coordinated. The coordination management is done by ISO 20022 entities.

#### *Section F:*

The Berlin Group will provide the US a white paper on the basic modeling of the proposed card clearing approach through the Registration Authority. This model is used within the "SEPA Card Clearing Framework", a framework to extend the SEPA payment infrastructure for direct debits and credit transfers by the function of clearing of card based transactions. Please note that the white paper was used last year within a European public consultation process in 2009. The ISO 20022 Change Request mentioned in the paper for extending the remittance information with specific card data has been rejected in between. The CCPAY Business Justification is resulting from this rejection.

#### **French comments on BJ CCPAY are:**

Card messages between acquirers and issuers are already covered by ATICA under the responsibility of ISO/TC68/SC7/WG9. The Berlin Group is invited to work in the framework of WG9 and to cooperate and make contributions to WG9 in order to address the issue of card clearing.

In its Business Justification, ATICA (WG9) suggests a scope including (but not limited to) financial transactions (such as presentment), reconciliation between and among financial institutions, and other functions, which represent more than the traditional card transaction domain. Consequently, clearing of cards appear to be an appropriate candidate for such a new development under the ATICA umbrella. This will, furthermore, ensure a proper consistency throughout the whole acquirer to issuer domain.

#### **Berlin Group Response, May 2010:**

As explained in the CCPAY Business Justification, the Berlin Group is expecting from ATICA an ISO 8583 like approach, where clearing messages are modelled very similar to authorisation messages, as typically used by card processors. The CCPAY approach is to use a payment like approach for the clearing and settlement of card transactions, reusing the ISO 20022 based ACH infrastructure built up for example in Europe for the SEPA payment schemes. This is the main reason to use the Payments SEG as the leading SEG for these messages.

For the detailed modelling of CCPAY, experts from the payments and the cards sectors will be needed together, with the main focus on payments expertise. The Berlin Group taskforce working on this subject is linking experts from both areas within the CCPAY work. The WG9 is expected to consist mainly of cards experts and to submit the results to the Cards SEG.