BUSINESS JUSTIFICATION
FOR THE DEVELOPMENT OF NEW ISO 20022 FINANCIAL REPOSITORY ITEMS

A. Name of the request:
ATICA, Acquirer to Issuer Card Messages.

B. Submitting organization:
ISO TC68 SC7 WG9 ‘Cards and related retail financial services’ on behalf of ISO Technical Committee 68 ‘Financial Services’ and Sub-committee 7, ‘Core Banking’.

C. Scope of the new development:
To specify a common interface by which retail financial and non-financial transaction card-based messages can be interchanged in the acquirer-to-issuer domain as specified in ISO 8583.

The following table represents the types of business processes that will be represented in the proposed candidate messages. (The definitions of the processes in this table are sourced from ISO 8583.)

The messages exchanged may include all or some of the following functions:

- Request
- Request response
- Advice
- Advice response
- Notification
- Notification response
- Instruction
- Instruction response

---

1 ISO 8583 Scope: "This part of ISO 8583 specifies a common interface by which financial transaction card-originated messages can be interchanged between acquirers and card issuers. It specifies message structure, format and content, data elements and values for data elements. The method by which settlement takes place is not within the scope of this part of ISO 8583. **NOTE** With the proliferation of technology available to financial institutions to offer services to customers, a range of tokens (financial transaction cards, digital certificates etc.) now exist for identifying account relationships. In order to maintain clarity, this part of ISO 8583 will continue to refer only to financial transaction cards as the token. However, readers should be aware that the actual token issued by a financial institution may be different."
<table>
<thead>
<tr>
<th>Process</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authorisation</td>
<td>An authorization is an approval or guarantee of funds given by the card issuer to the acquirer. An authorization is not intended to permit the application of the approved transaction amount to the cardholder's account for billing or posting.</td>
</tr>
<tr>
<td>Financial presentment</td>
<td>A financial presentment permits the application of the approved transaction amount to the cardholder's account for billing or posting.</td>
</tr>
<tr>
<td>Reversal</td>
<td>A reversal is the partial or complete nullification of the effects of a previous authorization or financial transaction.</td>
</tr>
<tr>
<td>Reconciliation</td>
<td>Reconciliation is the exchange of totals between two institutions (acquirer, card issuer or their agents) to reach agreement on financial totals.</td>
</tr>
<tr>
<td>Fee collection</td>
<td>Fee collection is the activity that supports the collection and disbursement of miscellaneous service fees between financial institutions.</td>
</tr>
<tr>
<td>Administration</td>
<td>Administrative activity is anything that supports the business and technical infrastructure between financial institutions and their agents.</td>
</tr>
<tr>
<td>Network management</td>
<td>Network management is the range of activities carried out to control the system security and operating condition of the interchange network and may be initiated by any interchanging party.</td>
</tr>
</tbody>
</table>

The exchange of messages may either be direct between the acquirer and issuer or through one or more intermediary agencies.

This development will take account of work in other card domains with the objective of harmonising data modelling across these domains to facilitate straight through processing.

It is proposed that the lead SEG for this development be the ‘Cards and related retail financial services SEG’. As this development will need assessment for any mutual impact on the work of the Payments SEG, it is recommended that this SEG take on the secondary role.

D. Purpose of the new development:

As the result of receiving two card based submissions to the ISO 20022 RMG, the RMG requested that TC68 form a study group on the standardisation strategy for the cards environment. The study group was to analyse the business case for using ISO 20022 and its toolbox (methodology, registration process, central repository and underlying technology such as XML) for the development of card-related messages within the card payment
industry. Essentially to answer the question, should the ISO 20022 RMG consider submissions for card related messages to be included in the ISO 20022 repository?

Along with recommending that a new SEG should be created to process card related submissions to ISO 20022, the study group report recommended the following:

- SC7 should constitute a new Working Group to carry out the following activities:
  - Capture the business processes currently addressed by the card environment, (including that which is currently addressed by ISO 8583), utilising ISO 20022 methodology.
  - Identify any security issues and refer to the relevant SC.
  - Analyse the existing implementations of ISO 8583 in order to define and contribute harmonised Business and Message components to the ISO 20022 repository. It is this aspect of the work that will be critical to the effective reverse engineering of the ATICA messages.

- SC7 should create a group to provide an ongoing harmonisation function. The members of this group should be formed with members of the dedicated SEG.

The Cards and Related Retail Financial Services SEG is now in operation and considering submissions from EPAS and IFX. The EPAS submission covers messages across the ‘acceptor’, (POI) to acquirer space. The IFX submission is focusing on communication between the ATM and host, including transaction processing, security, ATM inventory, state of health, and terminal management.

The recommendations of the Study Group were endorsed by ballot of TC68/SC7. The creation of a new Working Group, WG9, was later endorsed by TC68/SC7 plenary in New York by the following resolutions:

**2008/0045: Creation of a Working Group in charge of Cards and related retail financial services**

The WG will be responsible for maintaining ISO 8583 as needed. Its work plan should be:

- To redraft terms of reference with due deliverables. These ToR will have to be approved by a SC7 ballot,
- To evaluate the lack of consistency in the implementation of ISO 8583, to identify the elements that can then be reverse engineered into ISO 20022 models,
- To initiate the reverse engineering of ISO 8583 messages into ISO 20022 models and repository,
- To identify any security issues and to refer them to the relevant subcommittee.

The plenary also passed the following resolution in support of the general move towards ISO 20022 for Cards and that the new working group shall be responsible for any further development of ISO 8583.

**2008/0046: Cards and related retail financial services**

ISO/TC68/SC7 confirms the decision taken in April 2008 regarding the use of the methodology and the repository of ISO 20022 for card related activities.

The usage of ISO 20022 will match the customers future needs.
The usage of ISO 20022 will match end to end needs namely from point of interaction to cash reporting.

The usage of ISO 20022 will allow full interoperability between different payment instruments.

The usage of ISO 20022 will bring overall cost efficiency end to end and any new business identified will be modelled according to ISO 20022. ISO 8583 will be maintained by the SC7 WG 9 Cards and related retail financial services, taking into account the current business needs. Changes to the ISO 20022 model approved by the Cards and related retail financial services SEG will not automatically generate the ISO 8583 message equivalent. It will be up to SC7 WG Cards and related retail financial services to propose update of ISO 8583.

This Business Justification is therefore submitted to seek RMG approval for the submission of candidate messages from TC68/SC7/WG9, produced as a result of the reverse engineering process of ISO 8583 as sanctioned by the resolutions above.

E. Community of users:
Categories of parties/actors that would use/benefit from the new messages:

This submission is intended to provide a migration path for financial institutions, payment service providers and end users who wish to take advantage of the convergence of payment methodologies and technologies and stream line their business processes around ISO 20022.

It is expected that with the launch of SEPA within Europe Banks and card transaction processors will wish to take advantage of the SEPA payment instruments for settlement of these transactions in the very near future as well as the potential to authorise transactions as and when their infrastructure and business case allows.

This current development will provide the requisite data elements and messages for this to take place.

F. Timing and development:

Although this Business Justification relates specifically and is focused on the Acquirer to Issuer domain and ISO 8583 in particular; it is understood that this effort will require urgent and close co-ordination across all Business Justifications covering the entire transaction chain.

ISO TC68 SC7 WG9 ‘Cards and related retail financial services’ is undertaking this development at the request of ISO TC68 SC7, ‘Core Banking’ as the result of decisions taken in plenary session.

The EPC in Europe has identified the acquirer to issuer domain as an area that would benefit from coordinated standardisation effort.
ISO TC68 SC7 WG9 ‘Cards and related retail financial services’ is an international standardisation body consisting of eleven national body representatives and three liaison organisations,² and actively seeks both national body and liaison membership world wide.

The date of delivery of candidate messages is expected to be 2nd quarter 2010.

G. **Commitments of the submitting organization:**

WG9 Cards and related retail financial services, confirms that it can and will:

- undertake the development of the candidate ISO 20022 business models and message models that it will submit to the RA for compliance review and evaluation. The submission will include Business Process Diagram (activity diagram), Message Flow Diagram (sequence diagram) and Message Definition Diagram (class diagram) and other descriptive material that will be used by the RA to generate the Message Definition Report;

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

WG9 Cards and related retail financial services confirms that it does not intend to organize any testing or the actual implementation of the messages once the related documentation has been published by the RA.

WG9 Cards and related retail financial services confirms it is committed to initiate and/or participate in the future message maintenance.

WG9 Cards and related retail financial services confirms its knowledge and acceptance of the ISO 20022 Intellectual Property Rights policy for contributing organizations, 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 persons:**

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

Mr Christopher Starr
Convenor WG9 Cards and related retail financial services
APACS Admin Ltd.

---

² National body representatives: Australia, Denmark, China, Finland, France, Germany, Japan, Netherlands, Sweden, UK and USA. Liaison organisations: Visa, MasterCard and AMEX.
I. Comments from RMG members and disposition of comments

Only the US sent comments which are reproduced below and *the disposition of comments by WG9* is integrated in the text. Some changes have been made to the original text of the BJ in track change mode.

**US comments and disposition of comments:**

The United States supports the proposed *Business Justification for the Development of New ISO 20022 Financial Repository Items* submitted by ISO TC68/SC7/WG9 “Cards and Related Financial Services” with comments. Expansion of international card processing networks and associated transaction complexities require increasing standardization to ensure timely, accurate and efficient transaction processing. The U.S. offers the following *comments and observations* on the Business Justification:

**Scope.** The scope of the group’s work should be clarified as to whether the resulting interface covers the entire transaction chain (from a terminal or other Point of Input all the way through to the Card Issuer) or whether it is intended to cover only the stated “Acquirer to Issuer Card Messages” (ATICA). Section C. suggests a scope in excess of ATICA (cited under Section A of the Business Justification), including (but not limited to) financial transactions (such as presentation), reconciliation between and among financial institutions, and other functions, which represent more than the traditional card transaction domain. Section F seems to indicate a focus on the acquirer to issuer domain but adds that with this BJ it is expected to coordinate with the entire transaction chain. On page 2, second paragraph the reference to “straight through processing” is a process the US market desires, however may not be reflected in this scope. Is the scope expected to be truly end-to-end or in line with ISO 8583? The BJ appears to suggest expanding beyond the ISO 8583 scope with its proposal that the new BJ “capture the business processes currently addressed by the card environment, identify any security issues and refer to the relevant SC, and analyze the existing implementations of ISO 8583 in order to define and contribute harmonized business and message components to the ISO 20022 repository”. The US would benefit from greater clarity of the scope.

We request that the following specific points by addressed:

Because page 1 section C initial paragraph refers to “as specified in ISO 8583” the scope of the ISO 8583 standard, as set forth in the standard itself, should be added as a footnote, as: “ISO 8583 specifies a common interface by which financial transaction card-originated messages can be interchanged between acquirers and card issuers. It specifies message structure, format and content, data elements and values for data elements. Note: With the
proliferation of technology available to financial institutions to offer services to customers, a range of tokens (financial transaction cards, digital certificates etc.) now exist for identifying account relationships. In order to maintain clarity, this part of ISO 8583 will continue to refer only to financial transaction cards as the token. However, readers should be aware that the actual token issued by a financial institution may be different.

The scope of ISO 8583-1:2003 has been added as a footnote to the section C statement, namely:

“This part of ISO 8583 specifies a common interface by which financial transaction card-originated messages can be interchanged between acquirers and card issuers. It specifies message structure, format and content, data elements and values for data elements. The method by which settlement takes place is not within the scope of this part of ISO 8583.

NOTE With the proliferation of technology available to financial institutions to offer services to customers, a range of tokens (financial transaction cards, digital certificates etc.) now exist for identifying account relationships. In order to maintain clarity, this part of ISO 8583 will continue to refer only to financial transaction cards as the token. However, readers should be aware that the actual token issued by a financial institution may be different.”

On page 2, the first paragraph under the chart appears to not be needed.

“The exchange of messages may either be direct between the acquirer and issuer or through one or more intermediary agencies." This paragraph was added to emphasise that messages would not necessarily be exchanged purely between entities known as the 'Acquirer' and 'Issuer'. For example, 'stand in processing' where an agent is responsible for authorising a transaction.

On page 2, second paragraph, the US would like to see clarification or specific examples of "taking account of work in other domains", and will these "solutions" be in the same "scope space".

This paragraph relates to the other card related submissions that are already approved by the RMG, namely the IFX and EPAS Business Justifications. It is essential that as each of these individual submissions forms as a group the end-to-end processing of a card type transaction, there is sufficient co-ordination between them of their data models. It is implicit that there will need to be some formal co-ordination and governance. The wording "other domains" has been replaced with "other card domains".

Although we understand the deference to the Payments SEG, it would be helpful and beneficial to detail a couple of examples demonstrating why the Payments SEG would have the lead on retail transactions including payments.

This appears to be a misunderstanding. It is the Payments SEG that would have the secondary role. There are aspects of card and retail payments that necessitate cooperation between the Payments and Card SEGs. For example the submission of change requests to the Payments SEG by the Berlin Group relating to the clearing of card settlements using Payments messages.
**Community of Users:** Statements made as to impact, need and views should reflect a worldwide, global perspective, not merely regional requirements. In today’s global economic and financial environment, it is critically important that international standards reflect and accommodate diverse worldwide requirements of financial institutions and their associations, processors and trading partners, and use encompassing and common language and descriptions. Otherwise we run the risk under ISO that this becomes a regional standardization forum.

*The mention of the SEPA project shows that there is a current need for the Business Justification as presented to proceed. It is to show that a community of users exists. This is supported by the submission of change requests to Payment messages by the Berlin Group which required card transaction data elements developed from ISO 8583. It is to retain the Global and Worldwide perspective that this work is being conducted by a ISO working group.*