XML Formatted Remittance Data in the ACH:
A Feasibility Assessment

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1.0 PURPOSE STATEMENT AND SCOPE

Should the ACH enable the exchange of XML remittance data?

The purpose of this document is to summarize the issues pertaining to this question through a SWOT (strengths, weaknesses, opportunities, and threats) analysis of the:
• current state of ACH business-to-business (B2B) payment and remittance processing;
• emerging usage of XML in payments and remittance; and
• perceived future of Internet-based B2B payments.

The scope of the analysis is limited to evaluating ACH-based remittance origination and receipt in business-to-business (B2B) payment transactions.

This paper is targeted toward business managers and other decision makers among current ACH stakeholders, to help them evaluate the arguments for – and against - using XML formatted remittance data in ACH remittance processing - through their electronic lockbox, integrated payables, and/or other related services.

This question has significant implications, not only for the NACHA Operating Rules, but also for the ensuing changes in the processing infrastructure that would be required. The goal of this paper is to facilitate a dialog amongst the Internet Council membership, and then to achieve a consensus for a Council course of action.

There are at least several potential outcomes to this initiative:

1. The Internet Council may agree there is sufficient need for XML formatted remittance data in ACH addenda records. In this case, the ACH community may be engaged through a “Request for Information” via the ACH Rules Department at NACHA.
2. The Internet Council may decide that XML formatted data in ACH addenda records is of interest, but that the need is not imminent. In this case, members may identify “triggers” for re-evaluating the question.
3. The Internet Council may find the business case lacking for XML formatted data in ACH addenda records, and may table any further action.

2.0 ASSUMPTIONS

For the purpose of this analysis, the authors are assuming that the audience has some general familiarity with ACH (Automated Clearing House) corporate payment processes, as well as data exchange technologies like EDI (Electronic Data Interchange), FEDI (Financial EDI), and XML (eXtensible Markup Language). As such, this paper will not provide extensive background material on these topics.
3.0 CURRENT STATE OF ACH B2B PAYMENT AND REMITTANCE PROCESSING

Businesses frequently require remittance information in order to reconcile payments within accounts receivable systems; remittance data provides additional information about the payment that is often necessary for reconciling B2B transactions (e.g. why the invoice is not being paid in full amount).

The ACH has an established payment and remittance capability – and capacity – and stakeholders (ODFIs, RDFIs, ACH Operators, payment processors, related vendors, etc.) have made the required infrastructure investments to support the payment and remittance process.

The ACH permits remittance data to be transmitted with an ACH payment instruction; the remittance data is placed in an “addenda” record, which supplies additional information about the SEC (Standard Entry Class Code) entry (type of payment). The NACHA Operating Rules require that the remittance data in the addenda record be structured in EDI (Electronic Data Interchange) format according to American National Standards Institute (ANSI) American Standards Committee (ASC) X12 Interchange Control Structures (governing body for EDI), or in NACHA-endorsed banking formats.

Corporate payers typically use a CCD+ (Cash Concentration or Disbursement with Addenda) or CTX (Corporate Trade Exchange) entry when making payments through the ACH that need to include remittance data. The CCD+ or CTX may be a debit or credit entry, though a credit entry is more likely for B2B transactions.

The decision to use the CCD+ or the CTX will depend on such factors as the amount of remittance that needs to be transmitted (CCD+ allows only one addenda record of 80 characters, CTX can accommodate 9,999 addenda records of 80 characters each). Another factor is whether or not the payment is being made for a single or for multiple invoices. The CCD+ is typically used to pay a single invoice that is identified in the addenda record. It may also be used for multiple invoices, providing references for the source of the remittance data. The CTX format is typically used to pay multiple invoices that are listed in the addenda records, although it may be used for a single invoice.

3.1 ACH B2B Process Models: EDI Remittance Data

There are two basic models for the ACH B2B payments and remittance process:
(1) Association Model: The payment instruction(s) and the remittance data are transmitted and received through the ACH in the same transaction (“data and dollars” together).
(2) Reassociation Model: The payment instruction(s) is sent through the ACH, but the remittance information is transmitted via a non-ACH channel (“data and dollars” separate). Corporate receivers processing disassociated payment(s) and remittance(s) frequently must reassociate the payment with the remittance data before subsequent processing can occur.

In the association model, an Originator may create and format the entries and remittance data, or its ODFI (Originating Depository Financial Institution) may provide this service, depending upon the agreement between the Originator and the ODFI. The ODFI then passes the file to the ACH Operator, which, in turn, creates a batch file for the RDFI (Receiving Depository Financial
The RDFI, as specified by the NACHA Operating Rules, provides all payment-related information to the Receiver in a format specified by the agreement between the RDFI and the Receiver (if the Receiver requests it).

The reassociation model follows the same process for the payment instruction. The difference here is that the remittance data is sent from the Originator to the Receiver via another channel, such as a Value Added Network (VAN), a private network, or a virtual private network (VPN), which then provides a service to have the data “reasssociated.” In this case, the ACH addenda record may reference the separate transmission of remittance information that flows outside of the ACH network.

With respect to these two models, the latest information available indicates that corporations prefer the association model. A cross-industry survey completed by NACHA in 1995 showed that businesses prefer to keep the dollars and remittance together for both payment disbursement (82% of respondents) and payment receipt (85%).

Regardless of the remittance model, however, the ACH is a batch processing, store, and forward system. ACH entries that are received during the day by financial institutions are stored and processed in a group, or batch, mode. ACH transactions are accumulated and sorted by destination for transmission during a predetermined time period.

**Figure 1: ACH-EDI Association Model - Credit Entry**

- **Originator**
  - CCD+/CTX or EDI
  - (1) Payment and remittance initiation.
  - (2) Formatting (if applicable) and batch initiation.

- **ODFI**
  - CCD+/CTX or EDI
  - CCD+/CTX or EDI

- **RDFI**
  - CCD+/CTX or EDI
  - CCD+/CTX or EDI
  - (4) Payment and remittance receipt (reformatting if applicable).

- **Receiver**
  - CCD+/CTX or EDI
  - Proprietary format
  - (5) Posting to accounts receivable.

- **ACH Op.**
  - CCD+/CTX or EDI
  - CCD+/CTX or EDI
  - (3) Batch processing and routing.
3.2 Revenue Model

Financial institutions, as a potential revenue source, offer a number of EDI-related products and services to support corporate payment and remittance processing. For example, a financial institution, as an ODFI, may translate proprietary files from an Originator into ACH and X12 formats, or it may actually create the entries and remittance data if the Originator desires an outsourced payables solution. The Originator is also charged a fee for the credit origination.

As an RDFI, financial institutions offer electronic lockbox services, including “reassociation” services to consolidate data streams from ACH as well as other channels. RDFIs are required to provide all “payment related info” transmitted in addenda records to the Receiver. The method will be determined by agreement between the RDFI and the Receiver (e.g. human or machine readable). RDFIs also charge Receivers a fee for receiving the payment.

To generate additional revenue from corporate payments, ODFIs and RDFIs, may provide other support services too, including translation software, programming, operations, help line, security, VAN relationship management, etc.

Many financial institutions track their B2B/EDI services as a separate profit center. Others may include the profit/loss statement from these services with another bank product, such as ACH services. While it is difficult to obtain data illustrating the “health” of a stand-alone B2B/EDI business within the financial services community, anecdotal evidence suggests that these services are a high cost delivery channel to financial institutions, and some would not consider them to be profitable.
3.3 Costs

From the corporate (Originator/Receiver) perspective, accounts receivable and accounts payable operations are cost centers, and corporations pay for the ACH payment and remittance services provided by the financial institutions. Transmitting remittance data in EDI adds to the cost as this process requires its own infrastructure (e.g. data translation, integration, storage, etc.). Reliable, cross-industry studies on how much the EDI remittance process costs are difficult to find, but one industry source, citing an estimate by “analysts,” says that EDI adds $1-20 per transaction.\textsuperscript{8} It is unclear, however, how much of this relates to payment and remittance processing (vs. the entire value chain of all the B2B transactions, including VAN transmission costs).

There is also anecdotal evidence that corporations incur significant start-up costs for supporting EDI. For example, Hilton Hotels spends up to $500,000 to develop each new EDI trading partner interface.\textsuperscript{8} Again, it is uncertain how much of this cost specifically relates to payment and remittance processing.

From the financial institution perspective, it may be assumed that ODFI/RDFIs have already incurred much of the costs related to developing the infrastructure. However, there seems to be significant costs related to implementing new clients, and maintaining the current client base.

3.4 Usage

More than 20,000 financial institutions are connected to the ACH network. As B2B e-commerce continues to grow, corporations are increasingly using the ACH for payment transactions. In the year 2000, corporate electronic payments over the ACH exceeded 902 million, an increase of 10.3% from 1999. The dollar amount of these transactions was more than $11.6 trillion (figures include B2B, business-to-government, and intra-cash concentration).

Within the ACH corporate payment transactions, EDI/addenda usage in the ACH is increasing as well. The number of addenda records grew from 206 million in 1999 to 267 million in 2000, a 29.8% increase. CTX payments, which allow corporates to pay multiple invoices with one transaction, increased nearly 40% in this time to 20.1 million transactions. (And these figures do not include “on-us” transactions, which would certainly increase the overall numbers).\textsuperscript{9}

Despite the growth of ACH/EDI corporate payments, however, the overall penetration of B2B e-payments remains low when compared to payments made by check. Gartner estimates that only 14% of all corporate payments are made electronically. While ACH accounts for nearly 87% of these electronic payments, the high implementation costs of using EDI in addenda records limits its use to larger corporations which regularly invoice and pay one another, thus excluding most of the small/medium enterprises (SME).\textsuperscript{10}

As a way to bridge the gap to the lower volume trading partners, many corporations (through their vendors) are now offering Internet-based EDI services, which were previously only available through the use of special software and a VAN connection. For example, Web EDI converts on-line forms data into EDI formats (suited for low volume activity), while Internet EDI supports file transfer over the Internet, bypassing the need for a VAN (better for high volume
activity). Estimates vary, but analysts predict that from 24%-80% of all EDI file transfers will occur through the Internet by 2003. Internet-based EDI may help lower some of the B2B e-commerce barriers SMEs face when conducting business with larger entities, particularly related to transaction fees, transmission fees, service costs, network availability, IT infrastructure, and data mapping/integration.

In fact, a number of companies are integrating SME partners into ecommerce programs via Web and Internet EDI (sometimes the larger companies even pay for smaller partners’ related costs). Cessna, for example, now provides a web interface for its 1,300 smaller suppliers. Similarly, Covisint’s (the automotive industry-sponsored emarketplace) “Supplier Connection” is directed toward enabling “tier 2 and 3” suppliers to participate in automotive EDI networks.

3.5 SWOT Summary – Current State of ACH B2B Payment and Remittance Processing

Strengths:
- Corporations prefer “data and dollars” together, and the ACH has a well established process for facilitating ACH B2B payment and remittance processing.
- The volume of EDI payment/remittance data through the ACH has been increasing considerably in recent years.
- Financial institutions have a range of revenue opportunities available by providing a number of support services in this area.

Weaknesses:
- Using EDI in this process increases costs for some users (Originators and Receivers), as well as the service providers (ODFIs and RDFIs).
- The high costs to financial institutions for providing ACH-B2B remittance processing and EDI-based services means that this is not a profitable venture for some organizations.
- Overall, the penetration of ACH B2B payments remains low compared to check, and usage is primarily confined to larger corporations with established trading partners.

Opportunity:
- Internet and web-based EDI may be an opportunity to incorporate SMEs into ecommerce programs, and may expand the potential market for financial institution services.
4.0 STATE OF XML IN PAYMENTS AND REMITTANCE

XML is a document description language, used to define data fields and documentation presentation in an Internet environment. Similar to EDI, XML may also be used to exchange structured business data (orders, invoices, payments, etc.) between trading partners. Instead of using a “transaction set” to define the business data, XML users apply a Document Type Definition (DTD) to specify structure and meaning. Software – in this case “parsers” – may be used to interpret the meaning of a document (which function much like EDI translators), or XML documents may be interpreted by people, as XML is “human readable” and can be displayed in most browsers.

4.1 ACH B2B Process Model: XML Remittance Data

As noted previously, ACH rules currently permit the transmission of remittance data with a payment entry, provided the remittance data is in an approved EDI X12 format. The essential proposition in the ACH-XML remittance model is whether or not XML formatted remittance data may be used in addition to EDI formatted remittance data.

The process model for using XML formatted remittance data in the ACH would therefore function similarly to the association model described earlier. That is, Originators (or their agents – like the ODFI) would create ACH payment instruction(s) in a CCD+ or CTX entry, as well as the accompanying remittance data, and then pass this file to the ODFI for processing. The difference in this model is that the remittance data would be in an XML format, instead of EDI. All of the remaining ACH processes would remain the same. (The reassociation process model will not be described or analyzed further as this would have no impact on the ACH.)

**Figure 3: ACH-XML Association Model - Credit Entry**

1. Payment and remittance initiation.
2. Formatting (if applicable) and batch initiation.
3. Batch processing and routing.
4. Payment and remittance receipt (reformatting if applicable).
5. Posting to accounts receivable.

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<thead>
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<th>Originator</th>
<th>Receiver</th>
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<td>CCD+/CTX XML or</td>
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<tr>
<td>Proprietary format</td>
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<th>ODFI</th>
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<td>CCD+/CTX XML</td>
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<th>ACH Op.</th>
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<tr>
<td>CCD+/CTX XML</td>
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4.2 Revenue Model

The financial institutions’ revenue model for supporting XML remittance services would be similar to the EDI remittance services model. That is, ODFIs and RDFIs would still offer the same range of services for Originators and Receivers, and the services could be based on XML or EDI.

ACH stakeholders have already developed an infrastructure to support EDI-based payment and remittance services. On the surface, it seems that the proposition to allow XML formatted remittance data creates a new use for the same channel, thus leveraging the current investment to generate new revenue. However, several assumptions need to be evaluated to determine the potential number of new participants (and new revenue), which will be described in the “usage” section below.

4.3 Costs

From the corporate perspective, anecdotal evidence suggests that XML is a cost effective tool for supporting overall e-commerce activities, especially when compared to EDI. At a minimum, XML-based e-commerce participation only requires Internet access and a web browser for appropriately enabled e-commerce sites. The XML support infrastructure is also evolving. Software vendors are providing readily available integration solutions, and some XML components, such as parsers, are freely available in the public domain. These facts appear to indicate a lower entry cost barrier for SMEs.

More sophisticated users may also experience cost savings as well. Hilton Hotels, which was previously cited as spending up to $500,000 to develop a trading partner interface for EDI, anticipates that an XML interface may be only $50,000. (Again, it is unknown whether this figure includes the specific functions related to payment and remittance processing and support.)

On the other hand, costs may increase for businesses that need to support both EDI and XML interfaces and processes. The true reduction in costs can only occur if businesses are able to migrate all their trading partners to XML, or if the XML and EDI processes can be fully integrated.

From the financial institution perspective, supporting XML remittance processing will require a significant investment in start-up costs to upgrade corporate payment and remittance services. XML files, for example, generally require more data than EDI to describe the same business information, which means that XML files can be 10 times the size of comparable EDI files. Besides the need to possibly upgrade hardware and communications bandwidth, supporting XML remittance data may also require software changes and additional staff with new skills (or training of current staff).

While it may be possible to drive down the per transaction cost to financial institutions through the use of XML, overall costs may increase if it is necessary to support both XML and EDI until EDI can be shelved (which may not happen without U.S./global XML payment standards).
4.4 Usage

The momentum seems to be building for using XML to support B2B transactions. A number of major corporations – in various industries - have announced support for adopting XML in supply chain management (e.g. Home Depot, Nokia, J.B. Hunt Transport, to name a few). Intel recently announced an even more ambitious plan to integrate XML with all its trading partners, and to completely phase out EDI by 2006, potentially saving up to $564 million annually. (It is unclear, however, if the supply chain migration will affect payment and related transactions).

Perhaps the more compelling allure of XML for ODFIs and RDFIs is the potential to expand the e-business community, and reach new customers. In general, implementing XML will require less capital expenditures as it facilitates greater “portability” of data across applications, and may reduce the need for custom integration. This means that XML offers greater flexibility to facilitate both external, and internal, exchanges of data.

XML also supports both computer-computer, and computer-human data exchanges, which is important as the majority of businesses still rely on “traditional” methods such as faxes, floppy disks, and paper copies.

Thus, the obvious potential market for XML-based payment and remittance services is SMEs ($1-500 million in annual revenue), which have historically been unable to engage in e-commerce due to the high entry costs associated with EDI and data integration. According to one estimate, only 15% of SMEs have e-commerce capabilities at the moment, but this figure is expected to increase up to 75% by 2003.

The assumption here is that the growing installed base of e-commerce enabled SMEs will translate into a greater demand for electronic payment and remittance services from financial institutions. However, while SMEs migrate toward e-commerce for “front-end” applications (e.g. order placement, negotiation, status check, etc.), there remains the more difficult task of integrating data on the “back-end” (e.g. accounts payable and accounts receivable). In fact, according to a survey conducted by the Association of Financial Professionals, “the major barrier to increased use of electronic payments continues to be the lack of integration between an organization’s electronic payment and accounting systems.” Simply allowing SMEs to integrate with larger companies via a web browser does little to solve the SME data integration issue, and does not necessarily promote more demand for electronic payment and remittance services.

The lack of standards further complicates potential usage of XML in payments and remittance processing. In contrast to EDI, there may be as many as 500 XML specifications. A number of these are payment related DTD’s that are in production under the auspices of standards bodies or industry consortia (e.g. Open Financial Exchange [OFX], Interactive Financial Exchange [IFX], RosettaNet, XMLPay, xCBL, ebXML, and the list could go on). The lack of a recognized industry-wide standard inhibits the integration of payment systems into the XML supply chain, meaning that payment will continue to be performed outside of the supply chain system.
Furthermore, despite the aggressive public stance of some companies like Intel, the actual use of XML in the supply chain is negligible – and it is nearly non-existent in payment and remittance transactions. Currently, less than 1% of Intel’s entire trading volume is done with XML.

4.5 SWOT Summary – The State of XML in Payments and Remittance

Strengths:
- The XML proposition in this paper corresponds with the EDI “association” model, which is preferred by corporate users, and leverages the current ACH infrastructure for an additional use.
- Financial institutions would be able to offer a range of payment/remittance services as a way to generate revenue.

Weaknesses:
- There is no national standard for using XML in payments and remittance.
- Most businesses (particularly SMEs) do not have integrated systems, and are not ready for “end-to-end” processing.
- The large size of XML files may impact data storage needs and file transmission throughput.
- Costs for everyone will likely increase during a lengthy “migration” period, while both XML and EDI need to be supported.
- Current XML usage in the supply chain is negligible, and demand from end users remains low.

Opportunities:
- XML implementations for payment/remittance may cost less than a comparable EDI installations, and software vendors are developing a range of solutions (some free).
- Major corporations have announced their intention to migrate toward XML in supply chain-related activities. If the whole supply chain moves toward XML, it probably makes sense for the payment/remittance function to migrate as well.
- SMEs may become more involved in e-commerce, with XML providing a more flexible interface, thus increasing the potential market for payment/remittance services.

Threats:
- Will the XML remittance option be a sufficient reason to convert the large number of check writers to e-payments?
- Does the proposition make it easier for XML-enabled “intelligent” hubs – or vendor hosted solutions – to intervene in the current ACH processing and revenue models?
5.0 THE FUTURE OF INTERNET-BASED B2B PAYMENTS AND REMITTANCE

What are the requirements for the future of Internet-based B2B payments and remittance, what is the emerging model(s) for meeting the expectations, and what are the prospects for legacy systems, like the ACH? These are some of the key questions to evaluate, and the various scenarios described will have different implications for the applicability of XML formatted remittance data in the ACH.

The anticipated growth in B2B e-commerce indicates these issues will significantly impact how the payments and related services pie is sliced among current and emerging participants. No one is predicting a decline in B2B e-commerce. Rather, while estimates vary, B2B e-commerce is expected to have phenomenal growth, and could be as much as $6-7 trillion worldwide by 2004. At the moment, the ACH is by far the dominant method for facilitating electronic B2B payment and remittance exchanges, but Internet commerce may challenge this status.

In the worst case scenario (for ACH stakeholders), the ACH could be bypassed in favor of new and emerging payment systems if it cannot meet “value-added” expectations for the Internet environment. In this worst case scenario, the ACH might become a mere net-settlement facilitator. This would obviously entail a loss of revenue opportunity from current ACH-based payment and remittance services, and could possibly affect customer retention if businesses turn to other sources (i.e. non-financial institution) for these services. Will the ACH be stuck with just the check? The only way to assess this question is to consider some of the emerging requirements and model(s) for Internet-based B2B payments and remittance.

5.1 The Future of Internet-Based B2B Payment and Remittance Models

It is difficult to precisely describe how the future of B2B payments and remittance services will evolve. However, it is possible to identify some of the key issues that will help determine the future direction of this industry, including, for example, user requirements and network (i.e. private vs. public) participation.

When evaluating user requirements, one must consider the need for real-time, “event driven payments” as opposed to batch payments. The ACH store and forward, batch-processing mode of operations may not satisfy real-time needs for online payments. A real-time, event-driven payment system may provide features such as: online funds guarantee; fast cash; payment finality; low transaction fees; and remittance data integration from e-market sites. (A key enabler for this scenario is of course an open, interoperable standard, which has yet to emerge.)

The ACH does offer special formats for data integration and low transaction fees. However, the ACH batch payment system, with a 2-day timeframe for settlement, and a 48 hour period to return a payment, would not meet these other B2B e-payment requirements. The failure to meet these expectations, should end-users demand it, may create an opportunity for non-ACH solutions. In fact, some vendors are now providing payment and escrow services that completely bypass the ACH, particularly in e-markets. Here, customers send funds to the e-market vendor, which are held in escrow, then released after satisfactory fulfillment.
However, the role of e-markets needs to be evaluated, for e-market participation may or may not significantly impact the payments environment. When assessing network participation, it is important to consider the prevalence of public versus private networks. There are different opinions about the key drivers for the future of B2B e-commerce growth. Perceptions often hinge on the importance of the Internet enabling a flurry of trading activity amongst businesses previously unknown to one another, versus the value of incorporating established trading partner relationships into the electronic supply chain.

For example, some sources cite increased participation in open exchanges and e-markets as the primary drivers for ecommerce growth. These marketplaces, it is believed, can facilitate e-commerce without the necessity of a pre-existing relationship. On the contrary, other assessments minimize the importance of e-markets, especially where the buyer and seller do not have a pre-existing relationship. Large companies, which will ultimately drive B2B e-commerce adoption, are less likely to use a public e-market. At the moment, these entities are implementing private networks to organize their trading relationships. This allows the corporations to focus on integrating their own systems, and minimizes exposing their competitive advantage to “public” eyes. Another reason that large corporates prefer private networks is that businesses may participate in multiple markets, and the requirements for integrating their e-business applications would increase with each e-market association.

Given the uncertainty surrounding the future model(s) for Internet payments (e.g. user requirements for real-time payments, private vs. public networks), it is difficult to assess the implications for the ACH, particularly with respect to XML formatted remittance information. Without a clear understanding of the Internet payment/remittance model, an evaluation of the revenue model, costs, and usage would be merely academic. As a next step, it will be necessary at some point to clearly define the future model, and to conduct a gap-analysis, comparing the current ACH payment/remittance capabilities to the emerging requirements.

5.2 SWOT Summary - The Future of Internet-Based B2B Payments and Remittance

Conducting a SWOT analysis on the future of Internet-based B2B payments/remittance, particularly with respect to XML formatted remittance information, is not a practical exercise at this time. Rather, this section will identify a number of issues that need to be evaluated as prerequisite to any SWOT analysis. Some of these issues include:

- What are the requirements, and what is the supporting operational model(s) for Internet-based B2B payment and remittance?
- How does the future model impact the current ACH revenue model, and what new revenue opportunities will be created for financial institutions (and ACH stakeholders in particular)?
- What are the anticipated costs for supporting the future model?
- What is the projected usage of the future model?
6.0 SUMMARY AND NEXT STEPS

Should the ACH enable the exchange of XML remittance data?

This paper has presented a summary of issues pertaining to this question, by analyzing the:
• current state of ACH business-to-business (B2B) payment and remittance processing;
• emerging usage of XML in payments and remittance; and
• perceived future of Internet-based B2B payments and remittance.

There is some evidence to support both a “yes” and a “no” response. However, it is clear from this research effort that significant issues remain, and it is not possible to definitively answer the question at this time.

Based on this conclusion, the Internet Council recommends that the question of XML remittance data in the ACH be tabled for the moment; not enough data exists to move forward in promoting ACH network changes at this time.

Yet, significant interest remains in the potential for using XML in the ACH, and there is a desire to “keep an eye” on related payment developments that would lead the members to re-evaluate this question. Regarding the next steps that were identified in Section 1.0, the Internet Council has identified some “triggers” that may lead the membership to propose that the question of XML remittance data be re-evaluated. Triggers are marketplace events that would change the environment, or perception, for answering the XML in the ACH question. Examples include, but are not limited to, the following:

- Competitive concerns (e.g. a competing bulk-payment network commits to XML remittance data, and the network users adopt this new practice);
- Customer/constituent requests (e.g. large-volume ODFIs, ACH operators, or other dominant payment industry companies request this capability);
- Government/regulatory demands (e.g. a new law or regulation requires the use of XML-formatted remittance data);
- Legal/risk assessments (e.g. if stakeholders are somehow at risk – or have some liability – for not providing this capability);
- Related industry developments (e.g. the banking community adopts and begins to use a particular XML payment standard).

These examples are not exhaustive, nor are they weighted in any particular order of importance. The purpose is to provide some general guidance for when a re-evaluation of XML formatted data question may occur. As a next step, members of the Internet Council may propose a re-evaluation – or other followup work, according to the work proposal processes established by the Council.
7.0 ENDNOTES

3 Ibid.
13 Ibid.
31 Ibid.