Interactive Financial eXchange

Understanding the ISO 20022

Stand-Alone Remittance Messages

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Introduction

Purpose

The purpose of this white paper is to provide the reader with some in-depth background about the ISO 20022 Stand-alone Remittance messages; why they were developed, how they were developed, the use cases they address and the case for adoption of the messages by industry and financial service providers. Many examples are provided in order to familiarize the reader with structure and capabilities of the messages. However, this paper does not explain all of the data elements in detail. Items that are self-explanatory or not structurally significant may not be shown. When implementing these messages the reader is referred to the ISO 20022 repository where the formal definitions of the messages are maintained.

Background

Since the introduction of the ISO 20022 payment initiation messages in 2005 there has long been a recognition that more robust capabilities for handling remittance information associated with payments would be needed, particularly to support business-to-business requirements.

The payments-handling infrastructure around the world is optimized for the throughput of payment transactions where regulatory requirements for timely processing and risk management must be considered. Although, businesses require the associated remittance information for proper accounting, that data is not subject to regulatory pressures for timeliness and auditability so it has not been a high priority for financial institutions to handle this data in the payment and clearing channels. Furthermore, remittance data is sometimes quite voluminous and often reflects individual business practices and industry-specific terminology rendering it resistant to general purpose standardization.

Nevertheless, the ability to electronically exchange remittance information and re-associate it with processed payments seamlessly and automatically is a capability with real business value. An interesting variety of solutions have evolved as a result. Unfortunately, most businesses interact with so many partners that they find themselves automating the process using many different techniques as they respond to the needs and capabilities of those partners. While some number of specialized solutions is likely to persist, there are opportunities for improvement.

The ISO 20022 remittance messages are designed to standardize remittance data exchange in a way that is flexible enough to adapt to current business practices and uniform enough to provide a better way forward.

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Key Concepts

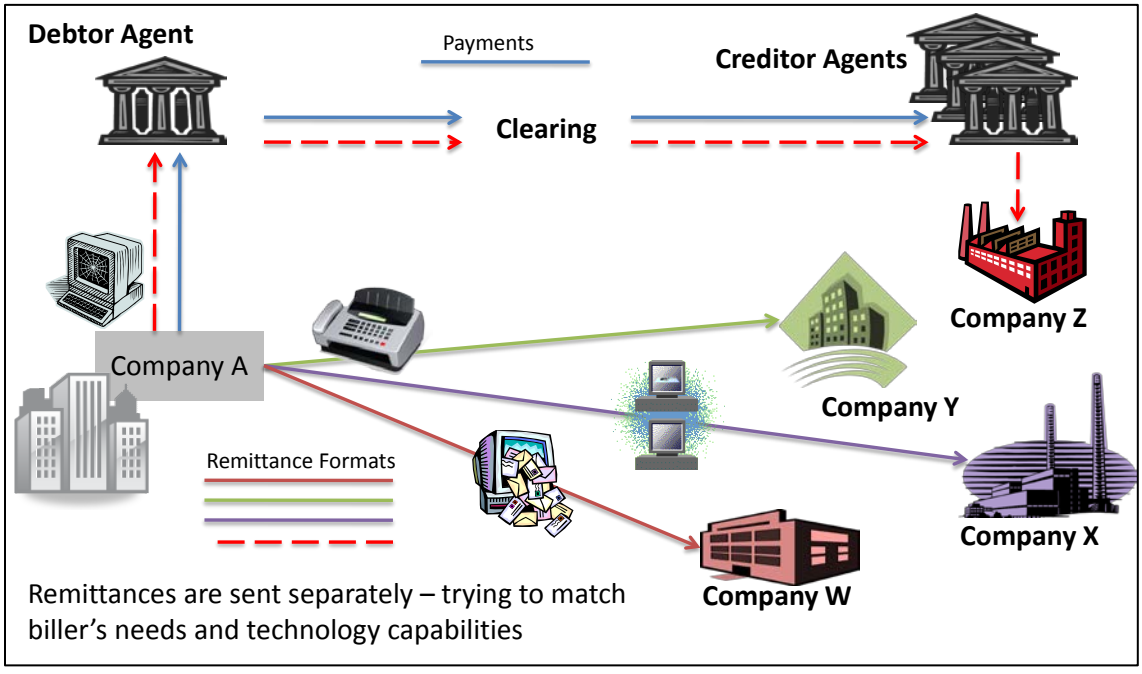
The first concept to understand is that there are now two stand-alone messages in the ISO 20022 repository. The message content received by the creditor is either the full remittance detail or it is the location where such detail can be retrieved.

- The Remittance Advice (RemittanceAdviceV01) message (remt.001.001.01) contains full detail.
- The Remittance Location Advice (RemittanceLocationAdviceV01) message (remt.002.001.01) fully specifies the location where the details can be found.

The second important concept to recognize is that the debtor, the creditor or both parties may rely upon their respective financial institution to provide services on their behalf. This opens up several opportunities for the banks, as agents, to provide value-added services and it also results in several alternative pathways for electronic data exchange.

- Either agent may choose to store the remittance details provided in a Remittance Advice message and forward a Remittance Location Advice message to the creditor.
- Either agent may receive the remittance information in a non-compliant format and convert it to the ISO 20022 format as a value-added service for their customer.
- Either agent may be positioned to receive the remittance information in its standard format and convert it to a customer-preferred format.
- Either agent may be able to provide access to a bank service or to third-party providers (portals, etc.) where remittance content may be stored.

This diagram illustrates the data exchange pathways between creditors, debtors and their respective agents. It also highlights the challenge that Company A faces trying to match remittance formats and technical capabilities with its creditors – challenges the new messages are meant to address.



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The next important fact to consider is that the remittance information may be sent in the same message as the payment message (as shown by the dashed red line). Although the remittance messages are designed as stand-alone messages, the content is carefully designed to be amenable to inclusion as part of the payment message payload.

- If the debtor sends the remittance information in a payment initiation message, both agents may be in the position to separate the remittance data from the payment and send a stand-alone message to the creditor. That stand-alone message may be either the Remittance Advice or the Remittance Location Advice.
- The creditor agent may be in a position to provide the re-association services on its customer's behalf, providing full cash-management services.

Finally, by virtue of the fact that the messages can stand-alone the direct debit model can also be easily supported. For that scenario, the roles are reversed. The creditor applies payment to outstanding debts and sends the Remittance Advice message (or Remittance Location Advice) to the debtor.

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Common Use Cases

With the key concepts fully understood, it is easy to recognize that the following use cases described in the Message Definition Report (MDR-Part1) available in the ISO 20022 repository are readily supported.

1. **Remittance Advice is sent directly from debtor to creditor.**
   The Debtor is able to send the Remittance Advice directly to Creditor while the payment is sent through the Debtor Agent to the Creditor Agent. The payment has been issued so the payment identifier (EndToEndId) is known by the Debtor and included in Remittance Advice message.

2. **Remittance Location Advice is sent directly from debtor to creditor.**
   This Use case is similar to Use case 1 but the debtor sends a Remittance Location Advice message rather than the Remittance Advice. The Remittance Location Advice informs the Creditor where the remittance details will be found.

3. **The Debtor's Agent separates remittance information from a payment message and sends a message to Creditor Agent.**
   In this scenario the debtor sends the remittance along with the payment in the *CustomerCreditTransferInitiation* (pain.001) and the debtor's FI separates the RemittanceInformation and sends as a separate Remittance Advice message to the Creditor Agent. Alternatively, the Debtor's Agent may send a Remittance Location Advice instead of the Remittance Advice to the Creditor Agent who would then forward that to the Creditor.

4. **The Creditor's Agent separates remittance information from the payment and delivers Remittance Advice to Creditor.**
   This scenario is similar to Use case 3. However, in this scenario the Creditor Agent rather than the Debtor Agent separates the RemittanceInformation from the payment message(s).
   Again, as an alternative, the Creditor Agent can provide a Remittance Location Advice to the Creditor rather than Remittance Advice. For example, the Creditor Agent might provide a service to store Remittance Advice and present the remittance on demand.

5. **Debtor Agent separates Remittance from Payment and sends Remittance Advice to Creditor.**
   This scenario is also similar to Use case 3. However, in this scenario the Debtor Agent sends the Remittance Advice directly to the Creditor rather than the Creditor Agent. As before, the agent may send a Remittance Location Advice to the Creditor.

6. **Payment is Direct Debit; Creditor sends Remittance Advice to Debtor.**
   In this case the roles are reversed and the Remittance Advice will be sent from the creditor to the debtor. The creditor already knows what the payment is for because the creditor is using a Direct Debit against the debtor's account for payment.
   The creditor sends a *CustomerDirectDebitInitiation* (pain.008) to its Creditor Agent which, in turn, sends the direct debit message to the Debtor Agent. At the same time, the creditor sends both an

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invoice and remittance advice to the debtor. As with other scenarios, the creditor may send a Remittance Location Advice rather the Remittance Advice to the debtor.

7. **Full bank-operated cash management.**
   The creditor's bank links the remittance data to the credit transfer and reports the remittance information on an account statement using *BankToCustomerStatement* (camt.053) or credit notification using *BankToCustomerDebitCreditNotification* (camt.054).

As one can readily imagine, there are endless variations on these basic scenarios that can be supported. To point out a few:

- Combining typical paper-based lock box services with parallel "electronic lock box" services
- Providing translations to-from industry-specific remittance formats
- Various cash management services
- Managing the communications to-from payment portals

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RemittanceAdviceV01 and RemittanceLocationAdviceV01

In the ideal world, payment and remittance data would travel together on the same electronic rails, arrive at their destinations simultaneously and require no re-association at the end of the trip; straight-thru-processing (STP). But, as has been pointed out, the real world does not generally operate that way today and STP is often an isolated capability with select partners. The most common means of electronic remittance exchange today include:

- Common data exchange formats standardized within particular industries such as Rosettanet, EDI, others;
- Shared access to common data repositories, sometimes internally managed by one of the trading partners, sometimes managed by a third party;
- Using common data exchange formats that are a by-product of partners using the same accounting packages such as SAP, Oracle, Microsoft Dynamics GP, others;
- Bi-lateral arrangements between buyer and seller including such arrangements as emailing spreadsheets;
- Pseudo-electronic exchange of paper-based information such as PDF files, which are often incorrectly characterized as “electronic”, particularly in the domain of small businesses.

In order to accommodate these practices and many others, IFX Forum proposed and developed two types of messages that can either stand-alone or be supported within the existing payment channels around the world. As will be seen, this strategy will facilitate adoption in some very important ways.

The Remittance Location Advice message (remt.002)

The Remittance Location Advice message is a fairly simple, uncomplicated message. In addition to the obligatory Group Header the Remittance Location Advice message contains a Remittance Location component which consists of an optional Remittance ID, one or more Remittance Location Details components and a Transaction Reference component.

The Remittance Location Details component includes a Method indicator which indicates how the remittance is being delivered or made available. Typically, the Method indicates “URL” and the Electronic Address would contain the actual URL text. Alternatively, the Method may indicate “Email” and the Electronic Address would contain the email address to which the Remittance Advice was sent. The Method may also indicate ”Postal” and provide a Mailing Address to indicate that the remittance details have been sent to a conventional postal address.

Since the Remittance Location Details can be repeated, it is also possible to indicate that the remittance advice was sent to multiple recipients by simply repeating the component.

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The Remittance Advice message (remt.001)

The Remittance Advice message is a robust message capable of carrying a significant amount of data structured in such a way as to facilitate a wide variety of business practices and common use cases.

Understanding the Remittance Information Structure

When providing remittance information to a creditor, it is common practice to indicate that the payment amount is intended to pay specific invoice(s). In the Remittance Advice message, the invoice is a *Referred Document*.

Other examples of Referred Documents include credit memos, purchase orders, bills of lading, shipping documents and monthly statements. These documents share a common trait that there may be many line items on the document. More than one of these documents might be associated with a single obligation to pay and, of course, a single payment may refer to more than one invoice.

Importantly, it is also possible to refer to multiple payments in a single consolidated Remittance Advice message.

> Note: In the following examples, most of the message content is not shown. The focus is on the nested structure of the *RemittanceInformation*, *StructuredRemittanceInformation* and *ReferredDocuments* components for the moment.

Single Payment Remittance Advice

Many payments don't require a lot of explanation, just a simple reference to an item that is being paid, such as an invoice, and a reference to the payment itself. This structure is illustrated below.

```
Remittance Advice message
   Remittance Information
      Structured Remittance Information
      |   Referred Document Information
      Original Payment Information
End of message
```

It's also quite easy to list multiple invoices that are being paid with a single payment. In the following example the amount of each invoice is included. It is worth pointing out at this time that the *ReferredDocumentAmount*s are optional. As such, the sum of those amounts may or may not equal the amount shown in the Original Payment Information.

```
Remittance Advice message
   Remittance Information
      Structured Remittance Information
      |   Referred Document Information
      |   Referred Document Amount
      Structured Remittance Information
      |   Referred Document Information
      |   Referred Document Amount
      Original Payment Information
End of message
```

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Here's another simple case that illustrates one payment made for one invoice with 2 line items. As will be seen later, the Line Details provide an opportunity to itemize such things line items adjustments.

```
Remittance Advice message
   Remittance Information
      Structured Remittance Information
      |   Referred Document Information
      |   |   Line details
      |   |   Line details
      |   Referred Document Amount
      Original Payment Information
End of message
```

Another common case is for a single payment to be made with references more than one document – for example an invoice and a purchase order or credit memo. Here's how the nested structure might be represented.

```
Remittance Advice message
   Remittance Information
      Structured Remittance Information
      |   Referred Document Information (e.g. Invoice)
      |   |   Line details
      |   |   Line details
      |   Referred Document Amount
      |   Referred Document Information (e.g. Purchase Order)
      |   Referred Document Amount
      Original Payment Information
End of message
```

All of the examples so far have been to explain a single payment. Remittance Advice messages of this type are often simple enough, and the messages short enough, that the content can easily be sent along with the payment through the payment communication channels.

> Note: During the 2014-15 maintenance cycle all of the ISO 20022 messages that contain the *StructuredRemittanceInformation* component will be updated to use the version of that component that was developed for the stand-alone messages. Until that maintenance is complete, the enhanced content of *StructuredRemittanceInformation* is only available in the new stand-alone messages.

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Multiple Payments Remittance Advice

A single Remittance Advice message may refer to multiple payments. There are a number of situations where such consolidation might be desirable.

- When trading partners have a great deal of activity between them it may be advantageous to reduce the number of message exchanges by consolidating remittance information messages.
- One trading partner may generate multiple invoices for distinct goods and services and the debtor chooses to pay periodically based on (monthly) statements.
- Regular recurring payments may be made by a debtor but additional "extras" are paid separately.
- An invoice or obligation is paid in multiple installments.

As has been seen, each instance of *RemittanceInformation* refers to one, and only one, payment. Rather than require a separate Remittance Advice message for each payment the message provides a structure that allows for multiple payments to be itemized and the invoices, statements, etc. to be properly associated with each payment. This is accomplished by repeating the Remittance Information component.

First, a simple case where the invoices referred to do not require much detail is shown. There are two instances of Remittance Information, each of which references a different payment. Note that the amount of detail provided for each payment is different and easily accommodated. Note also that if the two payments described were installment payments against a single obligation, it is quite likely that the Referred Document Information would be identical.

```
Remittance Advice message
   Remittance Information (1)
      Structured Remittance Information
      │  Referred Document Information
      Original Payment Information (1)
   Remittance Information (2)
      Structured Remittance Information
      │  Referred Document Information
      │  │  Line details
      │  │  Line details
      Original Payment Information (2)
End of message
```

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In this final example multiple payments are made against multiple obligations some of which require more explanation than others.

```
Remittance Advice message
   Remittance Information (1)
      Structured Remittance Information
      |   Referred Document Information (Invoice)
      |   |   Line details
      |   |   Line details
      |   Referred Document Information (Purchase Order)
      |   Referred Document Amount
      Structured Remittance Information
      |   Referred Document Information (Credit Memo)
      |   Referred Document Amount (Credit Note Amount)
      Original Payment Information (1)
   Remittance Information (2)
      Structured Remittance Information
      |   Referred Document Information
      Original Payment Information (2)
   Remittance Information (3)
      Structured Remittance Information
      |   Referred Document Information (Packing List)
      |   |   Line details (disputed)
      |   |   Line details (backordered)
      |   |   Line details (damaged)
      |   Referred Document Amount
      Original Payment Information (3)
End of message
```

Adjustments, Discounts, etc.

It's quite common to "short pay" invoices. The total invoice amount might be reduced by discounts taken, goods not received, damaged goods, backordered goods, disputed amounts, etc.

The Referred Document Amount supports detailed explanations of such things including the Due Payable Amount, Discount Applied, Credit Note Applied, Adjustments and Reasons and ultimately the Remitted Amount.

The Line Details in a Referred Document can be used to itemize those same attributes at a line item detail level.

Special Case Remittances

There are a few types of payments that have distinct data requirements and that are common enough to warrant standardization. Currently, the Remittance Advice message addresses two of these specifically, **Tax Remittances** and wage **Garnishment Remittances**.

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For these cases, the information typically required or supplied:

- is unique to the payment type,
- includes different attributes for required/optional data,
- uses particular terminology.

Rather than force-fit these requirements into the more general Referred Document and Referred Document Amount separate components are provided which also leverage existing ISO 20022 components for party identification, tax payments, etc.

Alternative Processing Scenarios

Support for a variety of use cases related to data content has been demonstrated thus far. The messages support the simplest and the most complex data requirements likely to be encountered. This is a good time to examine how the messages work in use cases concerned with business processes, service offerings and electronic communication channels.

The messages are designed to work in cases where debtors, creditors, their agents and third party providers might interact in diverse and creative ways.

In the discussion thus far, it has been implied that the debtor creates the remittance advice and sends it to the creditor. Whether the message is sent directly to the creditor or sent via financial agents has not been a material consideration; the assumption has been that the Creditor receives the Remittance Advice message generated by the Debtor. Consider these alternate processing scenarios.

1. If the Debtor's agent manages a payment portal, that agent may store the remittance data received in the Remittance Advice and substitute a Remittance Location Advice to be sent to the creditor or creditor's agent.
2. If the Creditor's agent manages a payment portal, that agent may store the remittance data received in the Remittance Advice and create a Remittance Location Advice to be sent to the creditor.
3. If the Debtor's agent is also the Creditor's agent there may be some 'on-us' optimization opportunities for payment handling, remittance communication and re-association.
4. If the Creditor's agent handles lock box services for the Creditor, it may be possible for that agent to combine information received via Remittance Advice messages with other lock box reports.
5. If Remittance Information is included in payment messages, it is conceivable that a bank may separate that information from the payment message and create stand-alone messages to transmit remittance information to creditors.

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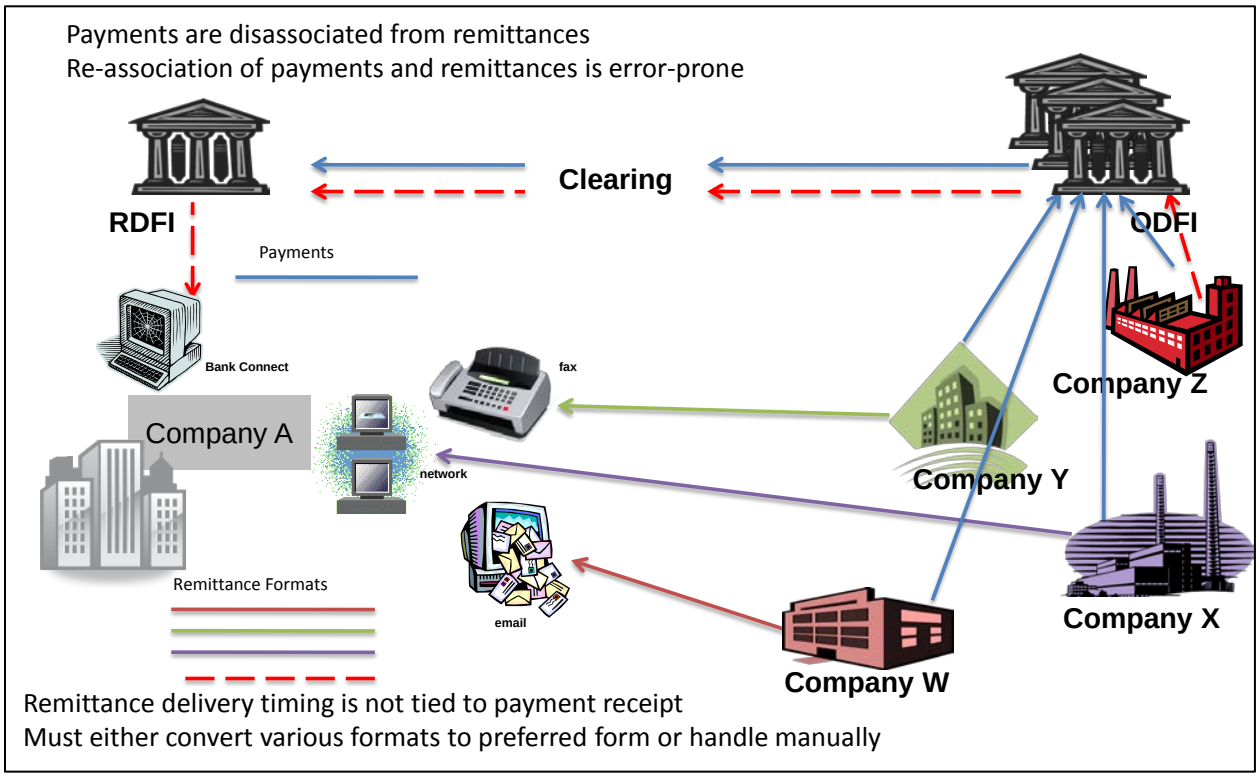
Payment Re-association

Businesses face a number of challenges creating and delivering remittance information to trading partners, each with distinct preferences and capabilities. As a recipient of remittance information the challenges are equally difficult.

As a recipient of remittance data, businesses face the same daunting task of trying to match formats and delivery channels with their partners. This time, though, the challenge is made more acute by the need to match that remittance data with payment data in order to reconcile accounts receivable.



The ideal situation, of course, is that the payment and remittance data arrive together and are readily understood by automated systems that can reconcile payments and receivables reliably and without human intervention; in other words, Straight-through Processing (STP).

Consider these dynamics, all of which interfere with achieving the STP ideal.

- Unequal partners
  - Larger companies often dictate solutions to smaller companies
  - Not all large companies use the same formats and technologies
- Expense of automated systems
- Low level of software vendor support, especially for very small business.
- Low level of support from financial institutions for remittance services.
- Industry specific requirements
- Ubiquity of paper-based solutions

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Given those dynamics, is it any wonder that electronic payment handling has the lowest level of adoption in business-to-business scenarios involving all but the largest of business partners? Large corporations have the resources to bring to bear on the problems and the most to gain from incremental improvements. Consumers' needs are comparatively simple and are being met by banks providing on-line bill payment services. But small to medium sized businesses face complexity that has resisted standardization with resources too limited to solve the problems effectively.

The Remittance Advice and Remittance Location Advice messages do not solve the re-association problem, but they do represent an evolutionary step along the way. The payment EndToEndID is available in both remittance messages to support re-association. It is part of the Refs component in both remt.001 and remt.002. The extensive support of Referred Documents contributes significantly to the ability to associate the remittance information with payment obligations.

Fostering Adoption

The availability of these new Stand-alone Remittance messages and the design principles underlying them offers some very promising prospects for adoption of electronic remittance data exchange.

The most important factors influencing adoption of these standards include:

- Support for prevailing business practices
  - The most common technique for exchanging remittance data between trading partners today is direct debtor-to-creditor communication
  - Payment portals, another common practice, are supported by the Remittance Location Advice.
- Independence from payment channels
  - The messages are constructed in such a way as to be 'agnostic' about payment channels. Whether the payment is made via SWIFT, ACH, Wire, SEPA-compliant ISO 20022 messages or otherwise, these messages support efficient re-association of payment and remittance data
  - Cross-border payments are as easily accommodated as in-country payments.
- Support for richer content within payment channels
  - In the US, NACHA was an active participant in the development of these message ensuring compatibility with EDI STP 820 and other formats commonly transmitted in the ACH network
  - NACHA has initiated an opt-in program to support XML Remittance information in the ACH network, specifically referencing the ISO 20022 remittance message formats.
  - The unbounded repetition of Remittance Information, Structured Remittance and Line items provide significant enhancements over previous versions.
- Compatibility with other ISO 20022 messages
  - The Remittance Information and Structured Remittance Information, as enhanced by this effort, will be retro-fitted to existing pain, pacs and camt messages.

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- Value-added service opportunities for banks
  - Banks and other agents have tremendous opportunity to provide message translation, cash management, electronic lock box and other services by handling these messages on behalf of their clients.
- Elimination of the risk of being an early adopter.
  - Businesses can adopt these messages bi-laterally or through service providers without fear that the FI agents (banks) will not support them or do something completely different in the future.
  - Banks will be able to see that there is demand for these solutions as stand-alone capabilities are exploited.
  - Either banks or businesses can "go first" knowing that their providers, partners and clients are referencing the same standard thus eliminating the risk of adopting the wrong strategy.

Conclusion

IFX Forum has provided a significant forward-looking development in the arena of business-to-business payment processing and electronic remittance handling. By encapsulating significantly enhanced components for remittance information in a manner that supports prevalent business practices of direct communication between trading partners yet can also be handled within payment channels around the globe, IFX has lowered both the risks and costs of adoption of a significant standard.

IFX Forum has also committed to providing the necessary work to bring all ISO 20022 messages that use Remittance Information into alignment with these new developments further improving the ability to support enhanced remittance capabilities in the payment channels.

* * * * *

References

ISO 20022 Message Definition Report for Stand-Alone Remittance Messages; www.iso20022.org

IFX Forum, Inc. development notes; www.ifxforum.org

Business Justification 46 for Stand Alone Remittance Messages; www.iso20022.org, www.ifxforum.org

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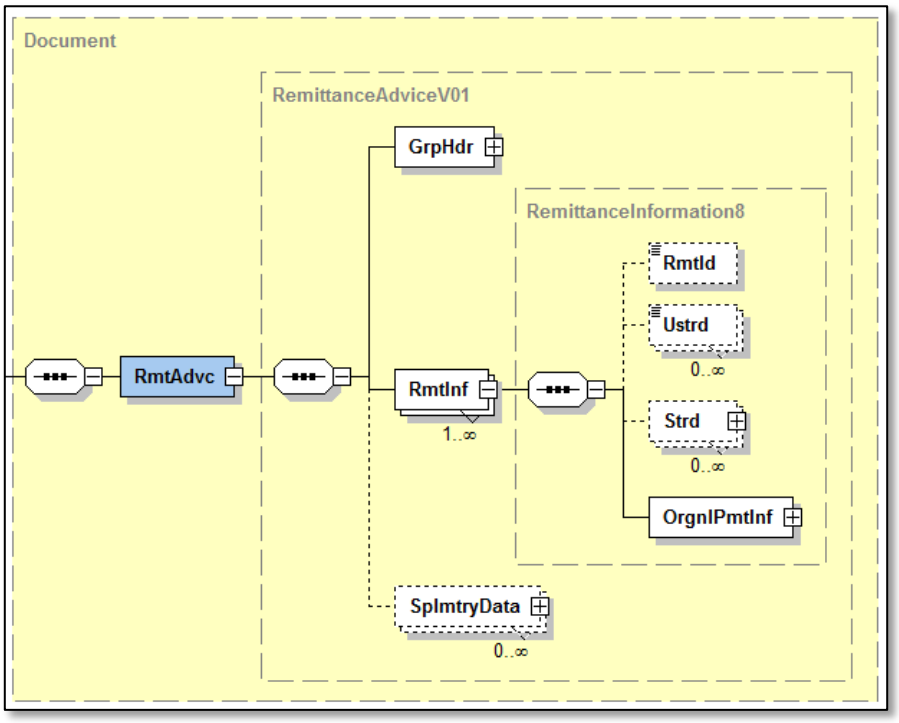
Appendix A – RemittanceAdviceV01

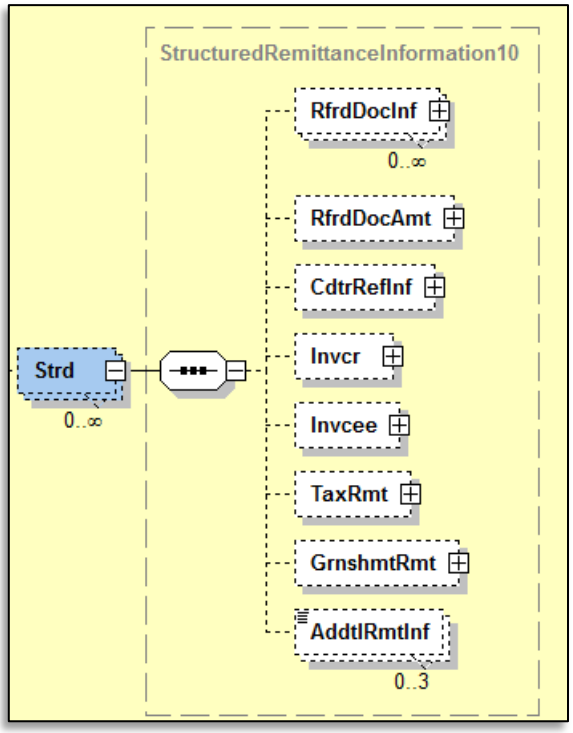
The structure of the *RemittanceAdvice* message is illustrated in the following diagrams.



The *RemittanceInformation* component allows for detailed explanations of a single payment (Original Payment Information) with references to as many other documents as needed.

Multiple payments are accommodated by repeating the Remittance Information Component.

The Structured Remittance Information component was significantly enhances during the development of the Stand-alone Remittance messages. Any number of supporting documents can be referenced. Tax remittances and garnishments are handled with details unique to those kinds of payments. Credit memo references are also explicitly identified.



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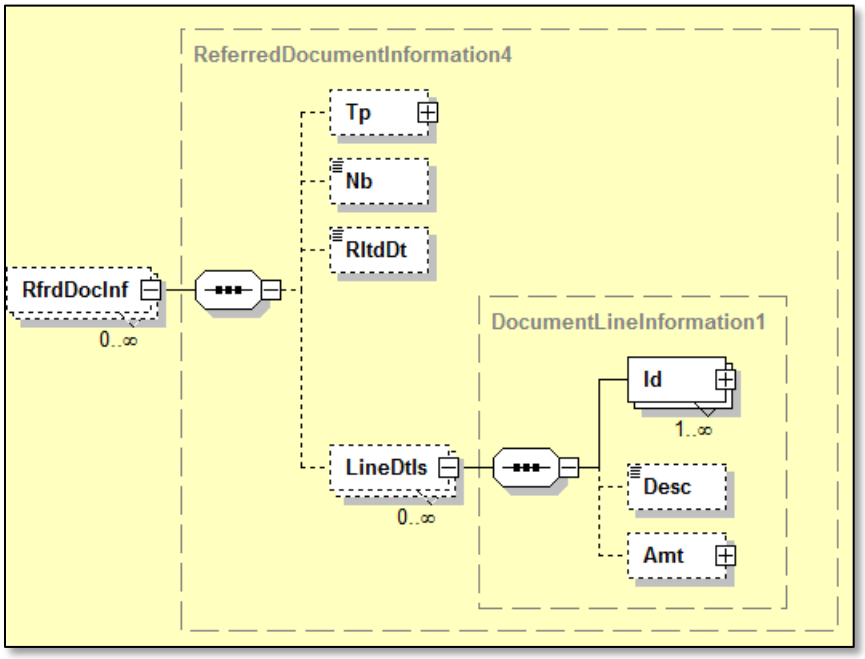
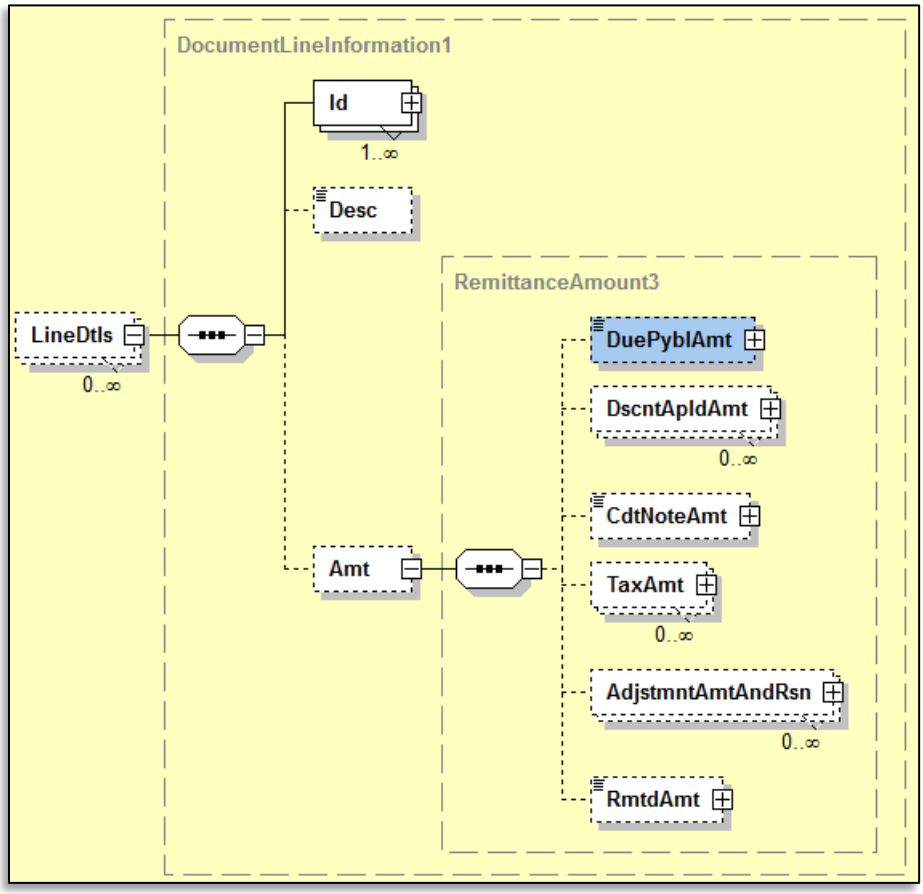
Within the Referred Document component, it is now possible to itemize details at the line-item level.



The Remittance Amount component within line items provides ample support to describe the amount due, payment amounts, discounts, adjustments and more.



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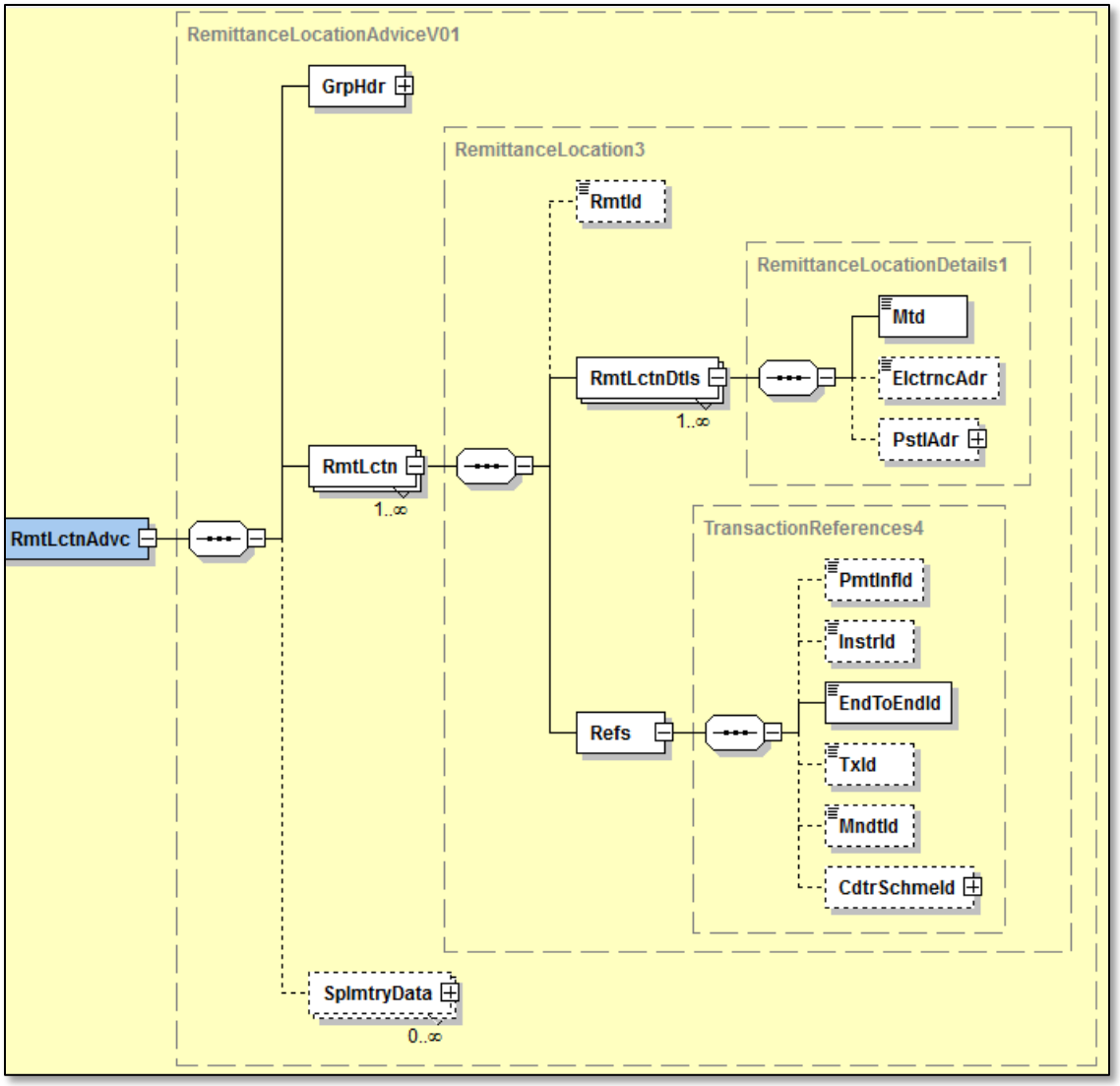
Appendix B – RemittanceLocationAdviceV01

The RemittanceLocationAdvice message does not contain the remittance details. It offers a simple mechanism to advise a creditor of where the remittance details can be found.

Typically, Method (Mtd) will indicate “URL” or “Email” and the Electronic address will be the URL text or email address(es) where the details are located.

The Transaction References component contains the information necessary to begin the payment-remittance re-association.



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