



Business Payments Coalition

## Business Payments Coalition Meeting Recap: In-person meeting at the CRF Forum August 9, 2022

An in-person BPC meeting was held August 9, 2022, at the Credit Research Foundation (CRF) August Forum and Expo in Louisville. Thanks to CRF for arranging meeting space and to the attendees for their participation in the meeting. The meeting provided an update on current BPC initiatives and gave an opportunity for discussion.

### Current BPC Initiatives

The BPC has been working on an e-invoicing exchange framework for several years. It began as a concept and is now becoming reality. An exchange framework is a set of prescriptive standards, policies and guidelines enabling businesses to connect once and exchange documents with anyone on a virtual network.

An exchange framework addresses difficulties that all stakeholders have with invoices and remittance information sent through emails and portals. By delivering electronic information, it addresses some invoice and remittance processes that are currently handled manually.

### Ideal State Vision for Invoice and Remittance Exchanges

The virtual exchange network operates similarly to e-mail exchange frameworks that deliver e-mails. E-mail users sign up with an email provider, like Gmail or a local internet provider, to send and receive email. The email providers serve as access points into email exchanges and deliver emails between users over the internet using prescribed exchange standards for interoperability. There is a process to look up, or discover, where to send an email.

In a virtual exchange network, service providers act as access points to deliver and receive data and information for their business clients. Instead of email, they deliver business data. This virtual network allows access points to find and connect business end points. Like emails, there are prescriptive standards and rules to assure exchange interoperability. The virtual network is independent of, and complementary to, payment systems.

The process is depicted on slide 4. First, a supplier engages with their e-invoicing provider, or access point. They issue the invoice and send it to the access point in a format their systems already support. The supplier's access point transforms the invoice into the exchange standard format and delivers the invoice to the buyer's access point, who then converts it to the buyer's required format and sends it to the buyer. The buyer processes the invoice and pays through whatever payment type they prefer (instant payment, ACH, card payment).

The remittance information can be sent through access points in the same way as invoices, except the process is flipped: the buyer sends remittance information through access points to the supplier. The discovery and delivery standards are the same; however, remittance information uses a different data standard.

This virtual exchange network minimizes the need for businesses to change their AP or AR systems because access points map and convert invoice and remittance data for them. The network is secure



because access points are authenticated, and data is encrypted during delivery. The network is a delivery mechanism only and does not store data.

## Benefits for Providers

- Electronic document delivery complements existing provider services for invoices, remittance information, and cash application. Providers can send and receive both invoices and remittance information on behalf of their clients.
- Expands the reach of current networks without onboarding individual companies, or achieves network effects without setting up a new one
- Reduces development, operational and maintenance costs

## Status

The BPC has two exchange framework initiatives underway.

- **E-invoicing:** The e-invoicing exchange framework is currently in pilot, with production planned for 2023. Participants, including service providers, B2B networks, corporates, EDI providers, and banks, are connecting and exchanging e-invoices.

Zack Dikhtyar of DocStudio, a participant in the e-invoicing pilot, talked during the meeting about his participation and showed examples of invoice and remittance information.

- **Remittance:** Earlier this year, a BPC and Federal Reserve work group concluded that an exchange framework is feasible to deliver remittance information and is now in a validation testing phase to demonstrate operational feasibility to continue building momentum.

Importantly, the remittance validation phase is leveraging the e invoice pilot infrastructure to “hit the ground running.” Sharing the infrastructure may create synergies that increase adoption potential for both e invoicing and e remittance.

The exchange framework addresses delivery of structured remittance information. Businesses need to receive the right remittance data to apply cash to their accounts receivable system. The standards group ASC X9 recently published the [ISO 20022 Remittance Content Market Guide](#) that provides guidance to the industry about what remittance content to provide with B2B payments to facilitate straight-through processing.

The key elements needed for automation of remittance information are now coming together: electronic delivery of complete and correct structured remittance information.

## Attendee Discussion

Meeting participants asked questions and offered perspectives during the meeting.

### General Observations and Questions

- Security is very important.
- The exchange framework should help with bad data and keying mistakes due to current manual processes.



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- There is no repository that stores documents for retrieval. It is a delivery mechanism only.
- ISO 20022 is not commonly used today for remittance information. Service providers will bridge current data formats to ISO 20022 for businesses.
- How do you know a business is in the network to receive documents? Receiver businesses provide their IDs to senders. A mechanism to do mass/batch searches is undetermined.
- Who is operating and governing the network? It will be the industry. The Fed will not be involved.
- What are the network IDs? Seven identifiers in wide use today are available, such as DUNS number. Identifiers are not proprietary to the exchange framework.
- A FAQ document would be helpful.

### Providers

- A common framework is a benefit because currently providers have to handle many different business systems and payment systems. Service providers still need to integrate with client systems. This provides a single channel and standard for delivery.
- How does this compete with current provider services? It is complementary to most services and extends reach while reducing costs.
- A single provider can be in different roles to provide multiple services, for example an AR provider can send invoices and receive remittance information.
- What is the value proposition for both the AR (accounts receivable) and AP (accounts payable) sides? Currently, AP providers push AP work onto AR and their incentive to participate may be limited. This will need to be worked through.
- What will the cost be to send and receive documents? The amount that access points charge their clients is outside of the framework and determined by each provider. There is no per-document cost to send and receive documents through the network, but access points may charge their customers for any type of conversion and servicing fee.
- How easy is it to set up an access point? Current e-invoicing providers have been able to set up the base network capabilities in approximately two to three weeks. Integrating those functions to current related services requires more time, including translation and mapping services.
- How can this help collectors who need to get copies of invoices, remittance, and other information? This could be a future use case as the framework evolves. It sounds interesting.

### Market/Ecosystem

- How will the market become aware of the exchange framework? The e-invoicing providers are currently working on marketing and adoption plans and activities.
- What companies are participating? For invoicing, IBM, Microsoft, Basware, Tungsten, and Pagero are some participants. The [full list](#) is on the BPC web site.



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- Is this global? This framework is using the same standards as an operational European e-invoicing framework. The framework currently being developed is for North America.
- Can it accommodate industry verticals that have their own standards? Industry extensions can be developed.

\* \* \*

Thanks to attendees for great engagement during the meeting and offering perspectives.



Business Payments Coalition



# BPC meeting at the August CRF Forum

## August 9, 2022



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# Agenda

1. Welcome and Introductions (15 min)
2. Overview (10 min)
3. Exchange Frameworks – Vision (20 min)
4. Remittance Data (10 min)
5. Zack Dikhtyar, DocStudio (15 mins)
6. Open Discussion (45 min)
7. Closing (5 min)



# Who is the BPC?

The Business Payments Coalition (BPC) is a volunteer group of organizations and individuals working together to promote greater adoption of electronic business-to-business (B2B) payments, remittance data, and invoices



- Goal: to make B2B electronic payments more efficient across the end-to-end process, that is, to achieve straight-through-processing across both the procure-to-pay and order-to-cash cycles
  - Addresses problems and barriers that make it difficult for businesses to use electronic alternatives to paper checks, remittance data and invoices
  - Sponsors and facilitates work groups that develop educational, technical and standards material
- Open to any individual or organization and there is no cost to join or to participate
  - More than 650 members representing 468 organizations

<https://BusinessPaymentsCoalition.org>



# Introductions:

Name

Organization

Your role



# Overview

# What Problem Are We Trying to Solve?

## An Exchange Framework Delivers Electronic B2B Data for STP

What problems are addressed?

- Difficulties that all stakeholders have with invoices and remittance information sent through emails and portals (manual processes)
- Manual processes
- Costly development, implementation and maintenance of automation tools

How does an exchange framework help?

- Virtual open network to deliver electronic invoices and remittance information to enable automation and STP
- Information for all payment types – from bread-and-butter B2B ACH payments to new instant payments
- Can be used for businesses of all sizes and addresses the "long tail" of non-strategic counterparties

What doesn't it do?

- Replace current EDI solutions
- Replace remittance information sent within a payment
- Deliver payments

Where are we today?

- E-invoice market pilot 2022 (30+ providers), production in 2023
- Remittance is being validated to demonstrate suitability

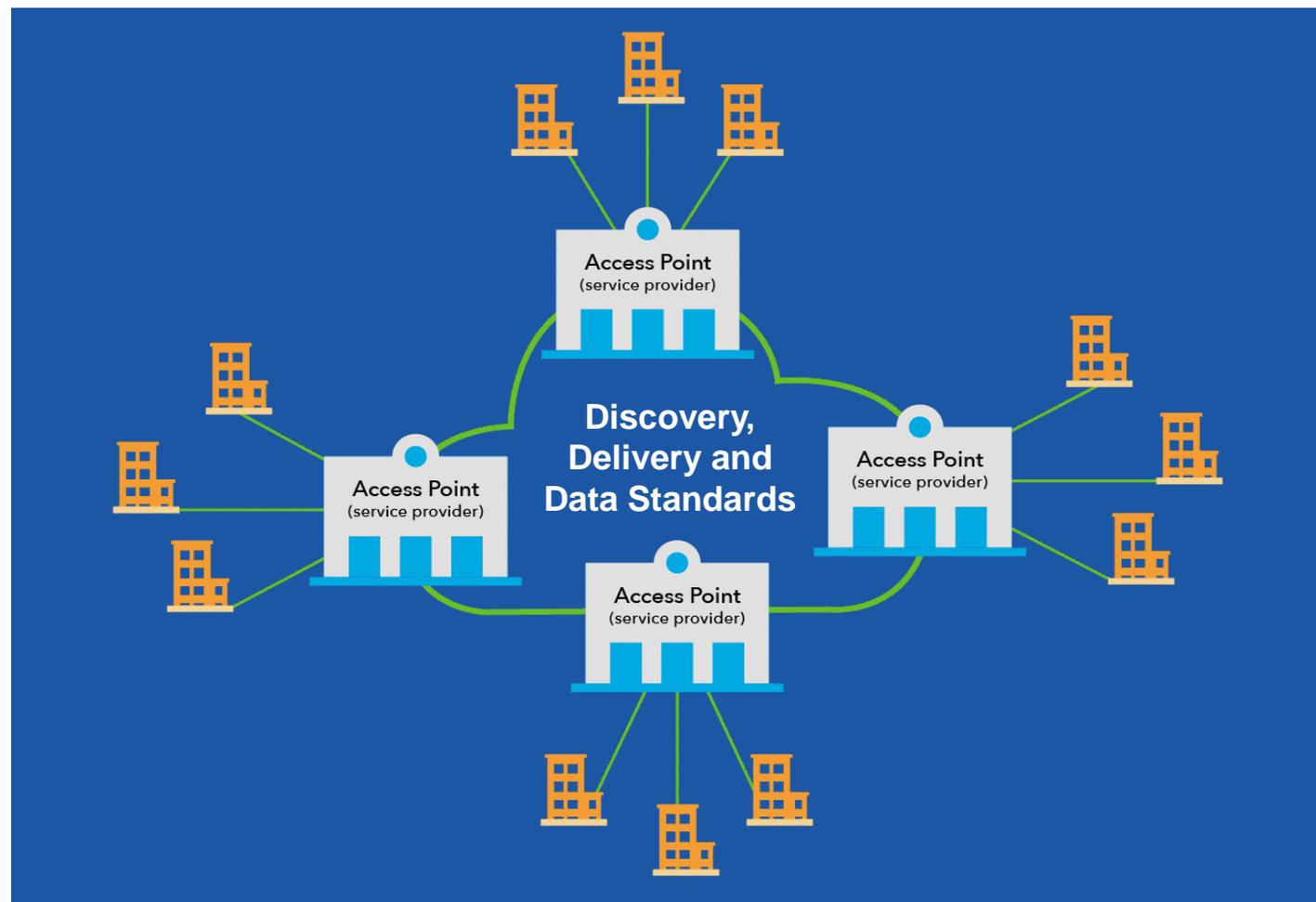


# Exchange Framework

# What is an Exchange Framework?

An exchange framework is a set of standards, policies and guidelines that enables document exchange with many through a single connection

It extends the reach and opportunities for all participants while also reducing costs

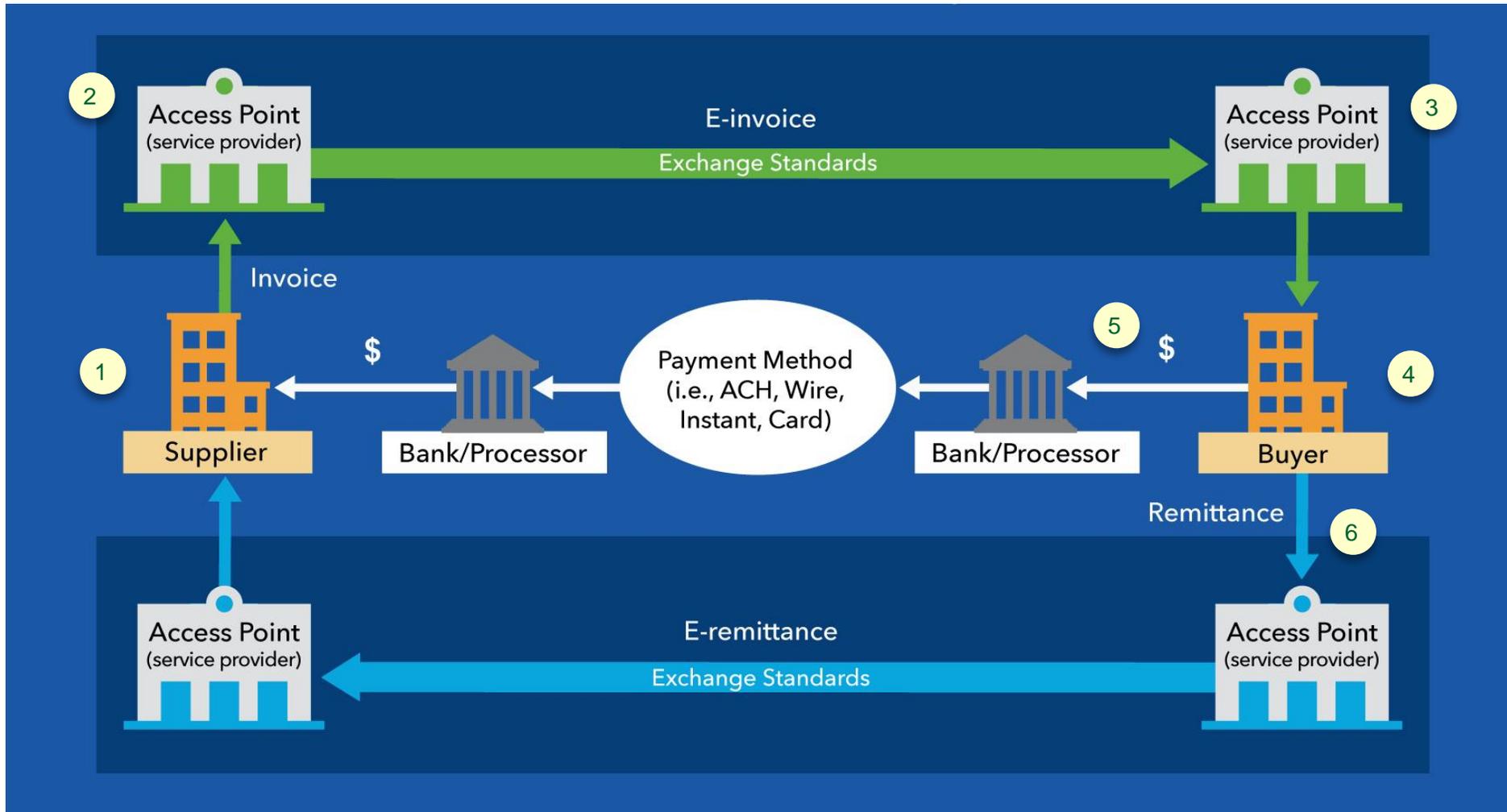


# How to Operationalize

- How to participate:
  - As an Access Point: integrated receivables providers, lockboxes, integrated payables providers, B2B networks, EDI providers, e-invoicing providers, FI technology providers and FIs
  - Partner with Access Point providers: FIs, ERPs and other providers
- Implement for multiple payment types, especially B2B ACH
- Implementation resources are available
- Join the e-invoice and/or remittance pilot



# The Ideal State Vision for Invoice and Remittance Exchanges



- Supports all payment methods
- Minimizes changes to corporate systems
- Reduces processing time and cost
- Simplifies automation
- Addresses the most challenging efficiency pain points: invoice and remittance processing

# Benefits for Providers

- ✓ Complements existing services for invoices, remittance information, and cash application
- ✓ Allows enhanced services, creating new revenue opportunities across the value chain
  - Double benefit for many providers:
    - On the AP side, receive invoices and send remittance
    - On the AR side, receive remittance and send invoices
  - Automate cash application for electronic remittance data received
  - ERPs: integrate invoice and remittance delivery into AR and AP software as an additional service
- ✓ Expands the reach of current networks without onboarding individual companies, or achieves network effects without setting up a new one
- ✓ Reduces development cost and risk
  - Prescribed standards vs. many bilateral delivery arrangements
- ✓ Reduces operational and maintenance costs



# Status

## Exchange frameworks are coming to fruition

### E-invoicing

Major milestone achieved! Participants are successfully connecting and exchanging e-invoices

- Market pilot through 2022
- Oversight and market awareness efforts underway
- Production in early 2023

Wave 1 (April 1 – June 30)	Wave 2 (July 1 – Sept 30)	Wave 3 (Oct 1 – Dec 30)
20 Participants <u>Types of participants:</u> <ul style="list-style-type: none"><li>• Access Points (10)</li><li>• Certificate Authority (1)</li><li>• Registries (10)</li></ul>	28 Participants <u>Types of participants:</u> <ul style="list-style-type: none"><li>• Access Points (16)</li><li>• Certificate Authority (1)</li><li>• Registries (9)</li><li>• Corporates (8)</li></ul>	34 Participants <u>Types of participants:</u> <ul style="list-style-type: none"><li>• Access Points (20)</li><li>• Certificate Authority (1)</li><li>• Registries (10)</li><li>• Corporates (16)</li></ul>

### Remittance Information

Assessment determined the exchange framework is feasible for remittance information

- Validation Phase: Demonstrate operational feasibility to continue building industry momentum, confidence and support to move to a market pilot
- Leveraging the e-invoice market pilot infrastructure for remittance validation testing – through the end of 2022
  - Keeps the momentum by “hitting the ground running” with an existing infrastructure
  - May create synergies that increase adoption potential for both e-invoicing and e-remittance
- Subsequent steps: market pilot and production



# Remittance Data

# What About Remittance Data?

## ISO 2022 Remittance Content Market Guide

Focus: Information a payee needs to apply cash

What problems are addressed?

- Businesses need complete and correct remittance data
- Recommendations for remittance content apply to all payment types – ACH, card, wire and instant payments

How does the guide help?

- The guide uses ISO 2022 remittance data elements to promote correct and complete remittance content
- Data elements are native to AP and AR systems

Why use ISO 2022 remittance data?

- Robust data model
- Payment systems are moving to ISO 2022
- Education to prepare for the future

How can providers use the guide?

- Providers can help clients get good data by implementing consistent data and the tiers in the guide



### INFORMATIVE REPORT

ASC X9 IR 01–2022

#### ISO 2022 Remittance Content Market Guide

By the ASC X9 ISO 2022 Market Practices Forum Remittance Content Group

An Informative Report approved and released by:  
Accredited Standards Committee X9, Incorporated

Date Released: February 14, 2022  
First edition

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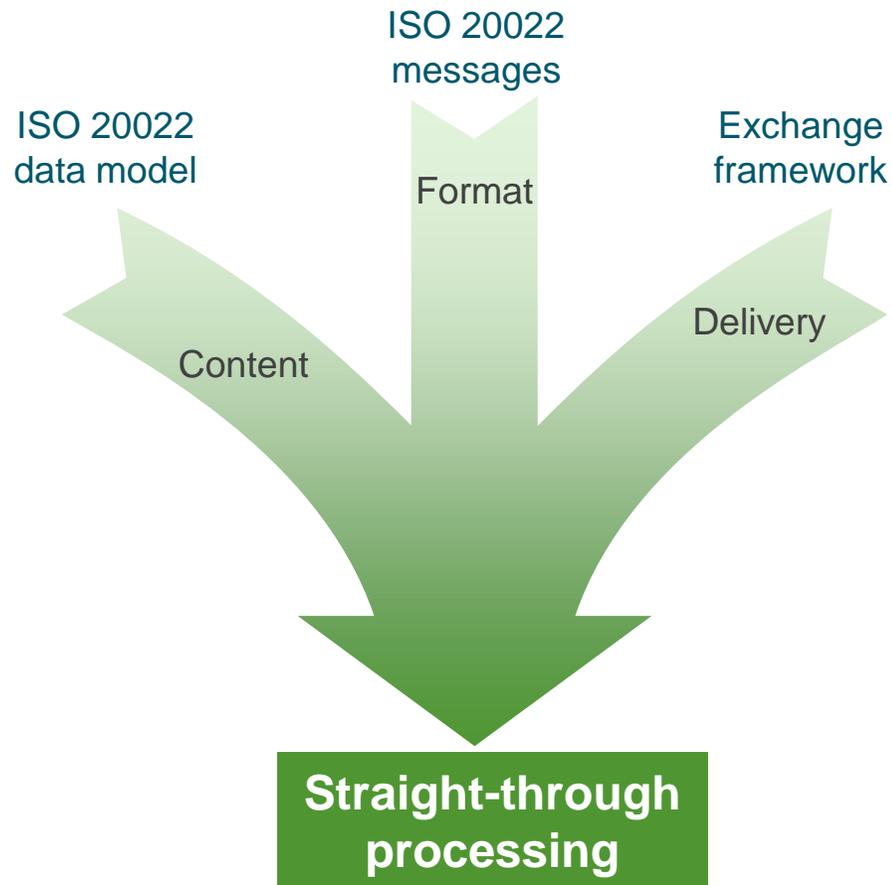
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<https://x9.org/iso-2022-remittance-market-practices-guide/org>



# Bringing It All Together for Remittance

## Solving the whole problem



The exchange framework solves for the three primary problems with remittance information:

- The proper content
- Structured data in standard messages
- Delivered electronically through the same channel for all payment types
- Access points translate remittance information to/from ISO 20022 for corporate clients

# Zack Dikhtyar

## DocStudio



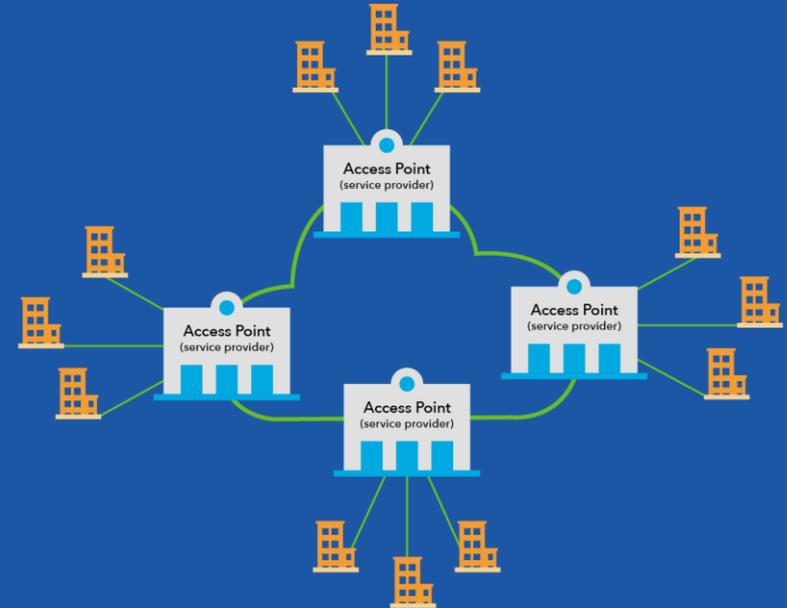
A dark, semi-transparent background image showing a business meeting. A person's hand is pointing at a laptop screen, while another hand holds a pen over a document with charts. A blue diagonal graphic element is on the left side.

# E-invoice Exchange Framework in the US

## **E-invoicing - an easier way to invoice**

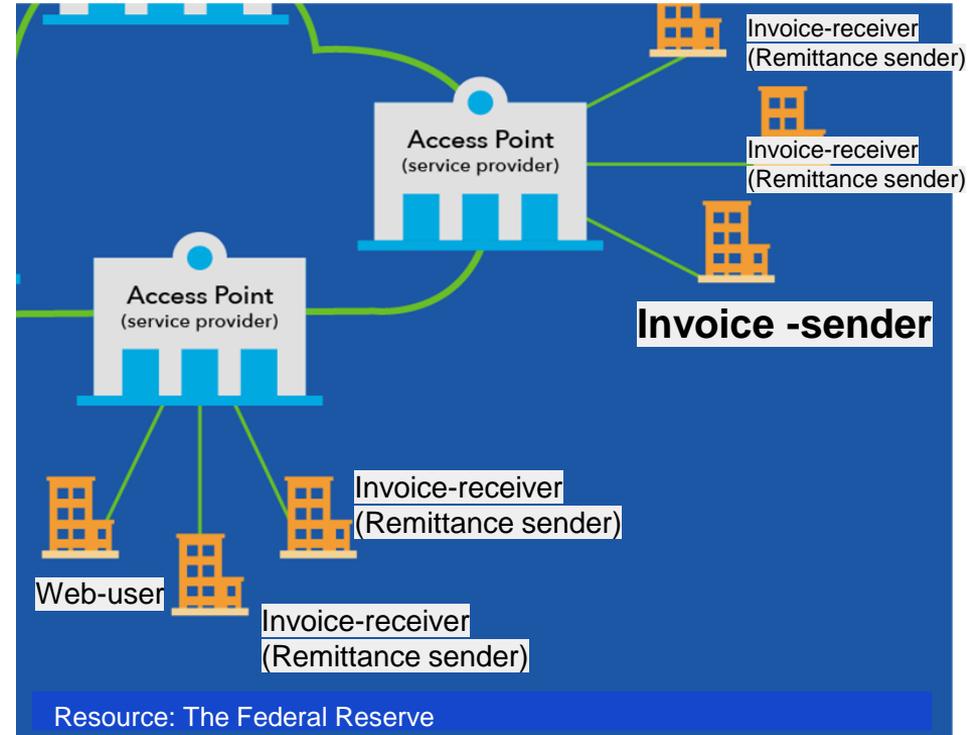
For E-invoicing to work, both parties need to be signed up to an Access Point (service provider).

Exchange Framework helps businesses connect once to exchange with many others, send and receive documents back and forth.



## E-invoicing - how it works today

1. Automatic invoice posting to the e-invoice providers (AP - Access- Point).
1. This information is converting to the common format of BPC and distributing partly to the user if the same access point and partly to other AP (Access Point).
1. If defined by the business process, the remittance advice may be collected in relation to invoices sent.
2. Any user may interact via Web-interface, through integration with accounting system or both.



# How it works in a real life. UBL Invoice



CO

Sender

2BAF...301B



Envelope view

Close








← 🔍

 ENVELOPE DETAILS

 INVOICE











### Message

Thank you for being with us!

### Processing flow

2/2

● 1 - Sender

CO

Sender

2BAF2149-1E2A-4C47-97D3-33D240BF301B

 Assignee

● 2 - Recipient

CO

Sender

2BAF2149-1E2A-4C47-97D3-33D240BF301B

 CC

+

New Tag

### Invoice

DocStudio

## Invoice

Supplier:

Manuf Head

9864218568568

Florida(FL)

32701

305 E Altamonte Dr Ste 1000, Altamonte Springs, (FL)

Buyer:

W&J Inc. Head

9864292327791

Illinois(L)

62249

110 Coventry Way Highland, Illinois(L)

DATE: 28-04-2022

INVOICE: 19198168

TERMS: Net 10.

DUE: 28-04-2022

Item Description	Quantity	Price	Amount
Zebra TC72/TC77 TC77HL	24	215	\$160.00
Ingenico IPP320 Pin Pad	43	234	10062.00
Credit Card Terminal			

Subtotal: 15222.00

Tax Rate: 30.00

Total: 15222.00

BALANCE DUE: 16744.20

Notes:

Thank you for being with us!

### TAXINVOICE

In ( My incoming envelopes )

Conversion rule it's entity by which document will be converted. You may create conversion rule for incoming envelopes or envelopes you sent. Also you're able to run you conversion rule and watch if it match with the template.

Out ( Envelopes I sent )

Name \*  
INVOICE.\*

Name  
e0dd3786-e3b7-4e1b-a30b-767e738bf445  
Tax Invoice (J1201010)

Template UUID  
92d27640-7305-42a2-abac-a18e5ad438b3  
Template version

Example file

```
1 <?xml version="1.0"?>
2 <TAXINVOICE xmlns:xsi="http://www.w3.org/2001/XMLSchema-instal
3 <DECLARHEAD>
4 <TIN>37636185</TIN>
5 <C_DOC>J12</C_DOC>
6 <C_DOC_SUB>010</C_DOC_SUB>
7 <C_DOC_VER>12</C_DOC_VER>
8 <C_DOC_TYPE>0</C_DOC_TYPE>
9 <C_DOC_CNT>6603395</C_DOC_CNT>
10 <C_REG>26</C_REG>
11 <C_RA>58</C_RA>
12 <PERIOD_MONTH>11</PERIOD_MONTH>
13 <PERIOD_TYPE>1</PERIOD_TYPE>
14 <PERIOD_YEAR>2021</PERIOD_YEAR>
15 <C_STI_ORIG>2658</C_STI_ORIG>
16 <C_DOC_STAN>1</C_DOC_STAN>
17 <D_FILL>07122021</D_FILL>
18 <SOFTWARE>BY:9864232385394;SU:4829900025441</SOFTWARE>
19 </DECLARHEAD>
20 <DECLARBODY>
21 <R03G10S>without VAT</R03G10S>
22 <HFILL>30112021</HFILL>
23 <HNUM>3468</HNUM>
24 <HNAMESEL>Limited Liability Company &quot;Centredo&quot;;<
25 <HNAMEBUY>Limited Liability Company &quot;Henkel&quot;;</H
26 <HKSEL>376361826583</HKSEL>
27 <HTINSEL>37636185</HTINSEL>
28 <HKS>1</HKS>
29 <HKBUY>435887726576</HKBUY>
30
```

Conversion rule

```
1 <?xml version="1.0" encoding="UTF-8"?>
2 <xsl:stylesheet version="1.0" xmlns:xsl="http://www.w3.org/19
3 xmlns:a="urn:oasis:names:specification:ubl:scl
4 <xsl:output indent="yes"/>
5
6 <xsl:template match="/">
7 <xsl:apply-templates select="TAXINVOICE"/>
8 </xsl:template>
9
10 <xsl:template match="TAXINVOICE">
11 <envelope>
12 <!--Template UUID, take it from template on site-->
13 <xsl:attribute name="templateUuid" select="'E0DD3786-E3B
14 <!--Template version UUID-->
15 <xsl:attribute name="templateVersion" select="'92d27640
16 <info>
17 <subject>Tax invoice</subject>
18 <message>Tax invoice message</message>
19 <expire after="30" notifyIn="1"/></expire>
20 </info>
21 <documents>
22 <document id="b52c98b3-d146-4eb0-917c-6e580cad7ba6">
23
24 <field>
25 <xsl:attribute name="name" select="'Supplier'"/>
26 <!--<xsl:attribute name="recordUuid" select="'wdEx
-->
27 <!--<xsl:attribute name="recordUuid" select="'4b7
28 <xsl:value-of select="cac:AccountingSupplierParty.
29
30
```

Result

```
1 <?xml version="1.0" encoding="UTF-8"?>
2 <envelope xmlns:a="urn:oasis:names:specification:ubl:schema:x
3 xmlns:cbc="urn:oasis:names:specification:ubl:schema
4 xmlns:cac="urn:oasis:names:specification:ubl:schema
5 templateUuid="E0DD3786-E3B7-4E1B-A308-767E738BF445"
6 templateVersion="92d27640-7305-42a2-abac-a18e5ad438b3
7 <info>
8 <subject>Tax invoice</subject>
9 <message>Tax invoice message</message>
10 <expire after="30" notifyIn="1"/>
11 </info>
12 <documents>
13 <document id="b52c98b3-d146-4eb0-917c-6e580cad7ba6">
14 <field name="Supplier"/>
15 <field name="Customer"/>
16 <field name="R01G1">123.47</field>
17 <field name="R03G10S">without VAT</field>
18 <field name="HORI1"/>
19 <field name="HTYPR"/>
20 <field name="HFILL">30112021</field>
21 <field name="HNUM">3468</field>
22 <field name="HNUM1">3468</field>
23 <field name="HNAMESEL">Limited Liability Company "Ce
24 <field name="HKSEL">376361826583</field>
25 <field name="HNUM2"/>
26 <field name="HTINSEL">37636185</field>
27 <field name="HNAMEBUY">Limited Liability Company "Hei
28 <field name="HKBUY">435887726576</field>
29 <field name="HFBUY"/>
30
```



# NONCONFIDENTIAL // EXTERNAL

## Completed UBL Invoice in PDF and XML format



### Invoice

Supplier:  
Manuf Head  
9864218568568  
Florida(FL)  
32701  
305 E Altamonte Dr Ste 1000, Altamonte Springs, (FL)

Buyer:  
W&J Inc. Head  
9864292327791  
Illinois(IL)  
62249  
110 Coventry Way Highland, Illinois(IL)

DATE: 28-04-2022  
INVOICE: 19198168

TERMS: Net 10  
DUE: 28-04-2022

Item Description	Quantity	Price	Amount
Zebra TC72/TC77 TC77HL	24	215	5160.00
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Credit Card Terminal			

Subtotal: 15222.00  
Tax Rate: 10.00  
Total: 15222.00  
BALANCE DUE: 16744.20

Notes:  
Thank you for being with us!

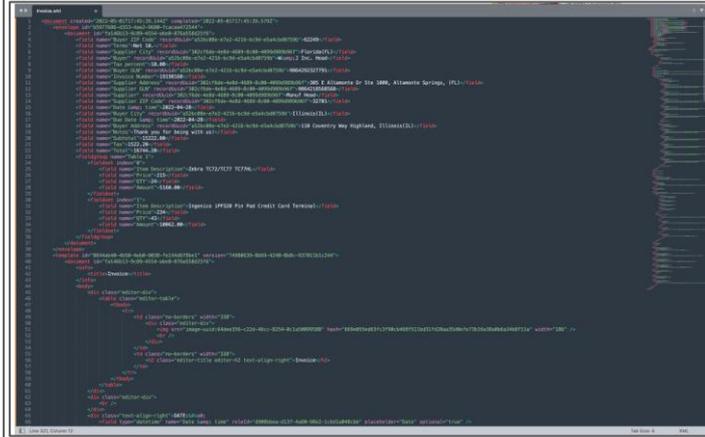


## Document processing certificate

Detailed information about the electronic document

### Document information

Envelope UUID	b5977686-d353-4ae2-9680-fcaca472544
Envelope subject	Invoice № 19198168
Document ID	fa146b13-9c89-4554-abe8-876a558d25f6
Title of the document	Invoice
Date of the document	5/1/22, 8:45 PM
Template UUID	8644ab40-4b50-4eb0-9038-fe144d6f9be1
Template version	74980639-8b69-4240-8b8c-937011b1c244
File name	Invoice.pdf
Electronic version of the document	<a href="https://app.docstudio.com/envelope/view/b5977686-d353-4ae2-9680-fcaca472544">https://app.docstudio.com/envelope/view/b5977686-d353-4ae2-9680-fcaca472544</a>



← 🔍  
**ENVELOPE DETAILS**  
 ISO 20022 REMITTANCE AD...

- 1 - Sender **ISO20022**  
 120879F8-8886-4C7B-911C-EBCA1A87E1A5 Assignee
- 2 - Recipient **DocStudio Integrations**  
 589ESDF1-D553-4743-89B9-FCDD21C62CD34 CC
- New Tag

ISO 20022 Remittance Advice



Date: 25-07-2014 09:59  
 Number: 987654321  
 PO Number: PO-000123

**Initiating Party**

XYZ Corporation  
 111222222PD  
 120879F8-8886-4C7B-911C-EBCA1A87E1A5  
 Washington Avenue, 27, 12206, Albany, NY, US  
 John Smith  
 +1-212-555-5678  
 john.smith@xyzcorp.org

**Original Payment Information**

XYZ Corp. Payment Trn Number  
 20140624000000025998  
 Account #123456789

**Creditor Agent Financial Institution Identification**

HSBCUS33  
 USABA  
 021001088  
 HSBC Bank USA, N.A.

**Message Recipient**

ABC Corporation  
 33388888  
 589ESDF1-D553-4743-89B9-FCDD21C62CD34  
 Lexington Street, 123, 19801, Wilmington, DE, US  
 Mary Putnam  
 +1-302-111-1234  
 Mary.Putnam@abc.com

Invoice Number	Invoice Date	Sub N°	Due Payable Amount	Tax Amount	Remitted Amount	Description	Discount Amount	Ac
INVOICE 123456	30-05-2014	123456-1	110500.00	6875.00	116875.00	Quarterly SW Lic. Fee July 1 - Sept. 30, 2014	300.00	20
INVOICE 123456	30-05-2014	123456-2	48585.56	3036.60	51622.10	Vol (2,429,278 @ \$0.02) 4/1-6/30/ 2014		
INVOICE 123456	30-05-2014	123456-3	34500.00	2156.20	36656.20	Delivery of Prod Change Req. #20795		

Due payable amount: 193585.56  
 Total Tax Amount: 12067.85  
 Total Remitted Amount: 205153.41  
 Discount Applied Amount: 300.00  
 Adjustment Amount: 200.00

## Rem\_p2c\_ver\_1.2

ON OFF

 In ( My incoming envelopes )

Conversion rule it's entity by which document will be converted. You may create conversion rule for incoming envelopes or envelopes you sent. Also you're able to run you conversion rule and watch if it match with the template.

 Out ( Envelopes I sent )

Name	Template UUID	Template version
*Remi.*.xml	44fdbd0f-9689-4f04-80a3-695261273b44	66c8a7c9-91db-4728-8172-21ab79a3d2a4
	ISO 20022 Remittance Advice	

## Example file

```
1 <?xml version="1.0" encoding="utf-8"?>
2 <document xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schema
3 <RmtAdv>
4 <GrpHdr>
5 <MsgId>987654321</MsgId>
6 <CreDtTm>2014-07-25T09:59:59</CreDtTm>
7 <InitgPty>
8 <Nm>XYZ Corporation</Nm>
9 <PstlAdr>
10 <AdrTp>
11 <Cd>DLVY</Cd>
12 </AdrTp>
13 <Dept>Purchasing Department</Dept>
14 <StrtNm>Washington Avenue</StrtNm>
15 <BldgNb>27</BldgNb>
16 <PstCd>12206</PstCd>
17 <TwnNm>Albany</TwnNm>
18 <CtrySubDvsn>NY</CtrySubDvsn>
19 <Ctry>US</Ctry>
20 </PstlAdr>
21 <Id>
22 <OrgId>
23 <Othr>
24 <Id>111222222PD</Id>
25 <SchmNm>
26 <Prtry>Identifier 333444555</Prtry>
27 </SchmNm>
28 <Issr>XYZ Corporation</Issr>
29 </Othr>
30 </OrgId>
31 </Id>
32 <CtryOfRes>US</CtryOfRes>
33 <CtctDtls>
34 <NmPrfx>MIST</NmPrfx>
35 <Nm>John Smith</Nm>
36 <PhneNb>+1-212-333-1234</PhneNb>
37 <MobNb>+1-212-555-5678</MobNb>
38 <FaxNb>+1-212-333-3355</FaxNb>
39
40
```

## Conversion rule

```
1 <?xml version="1.0"?>
2 <xsl:stylesheet version="1.0" xmlns:xsl="http://www.w3.org/1999/XSL/Transfo
3 xmlns:a="urn:iso:std:iso:20022:tech:xsd:remt.001.001.05">
4 <xsl:output indent="yes"/>
5
6 <xsl:template match="/">
7 <xsl:apply-templates select="Document/RmtAdv"/>
8 </xsl:template>
9
10 <xsl:template match="RmtAdv">
11 <envelope templateUid="44fdbd0f-9689-4f04-80a3-695261273b44" templateV
12 <state/>
13 <xsl:value-of select="GrpHdr/MsgId"/>
14 <info>
15 <subject>
16 <xsl:variable name="num" select="translate(GrpHdr/MsgId, '\V:?!&
17 <xsl:value-of select="concat('Remittance Advice & ', $num)"/>
18 </subject>
19 <message>
20 <xsl:variable name="Seller" select="GrpHdr/InitgPty/Nm"/>
21 <xsl:variable name="DelDate" select="GrpHdr/CreDtTm"/>
22 <xsl:value-of select="concat('Remittance Advice ', $Seller, ' on ',
23 </message>
24 </info>
25 <documents>
26 <document id="7fc52a0b-b556-4df2-a6e9-c531453505d2">
27 <field name="CreDtTm">
28 <xsl:value-of select="GrpHdr/CreDtTm"/>
29 </field>
30 <field name="MsgId">
31 <xsl:value-of select="GrpHdr/MsgId"/>
32 </fieldset>
33 <field name="CdtRfInf">
34 <xsl:value-of select="RmtInf/Strd/CdtRfInf/Ref"/>
35 </field>
36 <field name="InitgPty_Nm">
37 <xsl:attribute name="recordId" select="wdExtensions:getRecord
38 <xsl:value-of select="GrpHdr/InitgPty/Nm"/>
39
40
```

## Result

```
1 <?xml version="1.0" encoding="UTF-8"?>
2 <envelope xmlns:a="urn:iso:std:iso:20022:tech:xsd:remt.001.001.05"
3 templateUid="44fdbd0f-9689-4f04-80a3-695261273b44"
4 templateVersion="66c8a7c9-91db-4728-8172-21ab79a3d2a4">
5 <state/>987654321</info>
6 <subject>Remittance Advice & 987654321</subject>
7 <message>Remittance Advice XYZ Corporation on 2014-07-25T09:59:59</mes
8 </info>
9 <documents>
10 <document id="7fc52a0b-b556-4df2-a6e9-c531453505d2">
11 <field name="CreDtTm">2014-07-25T09:59:59</field>
12 <field name="MsgId">987654321</field>
13 <field name="CdtRfInf">P0-000123</field>
14 <field name="InitgPty_Nm" recordId="f768658a-b775-4ca3-993b-754a
15 <field name="InitgPty_CtctDtls_Nm">John Smith</field>
16 <field name="InitgPty_CtctDtls_MobNb">+1-212-555-5678</field>
17 <field name="InitgPty_CtctDtls_EmailAdr">john.smith@xyzcorp.org</f
18 <field name="PmtInf">XYZ Corp. Payment Txn Number</field>
19 <field name="EndToEndId">20140624000000025998</field>
20 <field name="DctrAcct_ID">Account #123456789</field>
21 <field name="BICFI">HSBCUS33</field>
22 <field name="ClrSysId">USABA</field>
23 <field name="MmbId">021001088</field>
24 <field name="FinInstId_Nm">HSC Bank USA, N.A.</field>
25 <field name="MsgRcpt_Nm" recordId="7ee2ee9-26c3-4729-9b34-ee7bd
26 <field name="MsgRcpt_CtctDtls_Nm">Mary Putnam</field>
27 <field name="MsgRcpt_CtctDtls_MobNb">+1-302-111-1234</field>
28 <field name="MsgRcpt_CtctDtls_EmailAdr">Mary.Putnam@abc.com</field>
29 <fieldgroup name="RfrDocInf_AdtrRmtInf">
30 <fieldset index="0">
31 <field name="AdtrRmtInf">For more info about this payment,
32 </fieldset>
33 <fieldset index="1">
34 <field name="AdtrRmtInf">Call before 5PM ET</field>
35 </fieldset>
36 <fieldset index="2">
37 <field name="AdtrRmtInf">Monday to Friday</field>
38 </fieldset>
39
40
```

Delete

Clone

Save

# NONCONFIDENTIAL // EXTERNAL Completed ISO 2022 Remittance Advice PDF and XML format



## ISO 2022 Remittance Advice

Date: 7/25/14, 9:59 AM  
Number: 987654321  
PO Number: PO-000123

### Initiating Party

XYZ Corporation  
111222222PPO  
1200799-8-8886-4C7B-911C-EBCA1A87E1A5  
Washington Avenue 27 12206 Albany NY US  
John Smith  
+1-212-555-5678  
john.smith@xyzcorp.org

### Original Payment Information

XYZ Corp. Payment Txn Number  
20140624000000025998  
Account #123456789

### Creditor Agent Financial Institution Identification

HSBCUS33  
USABA  
021001088  
HSBC Bank USA, N.A.

### Message Recipient

ABC Corporation  
33388888  
53965D07-1D553-4743-89B9-FC0D21CA2C3D4  
Lexington Street 123 19801 Wilmington  
DE US  
Mary Putnam  
+1-302-111-1234  
Mary.Putnam@abc.com

Invoice Number	Invoice Date	Sub N°	Due Payable Amount	Tax Amount	Remitted Amount	Description	Discount Amount	Adjustment Amount	Adjustment Reason
INVOI CE123 456	5/30/14	12345 6-1	110500.00	6875.00	11687.500	Quarterly SW Lic. Fee July 1- Sept 30, 2014	300.00	200.00	Deducted \$200.00 from payment due to pricing change
INVOI CE123 456	5/30/14	12345 6-2	48565.50	3096.60	51622.10	Vol (2,429,278 @ \$0.02) 4/1-6/30/2014			
INVOI CE123 456	5/30/14	12345 6-3	34500.00	2156.25	36656.25	Delivery of Prod Change Req #20795			

Due payable amount: 193565.56  
Total Tax Amount: 12067.65  
Total Remitted Amount: 205153.41  
Discount Applied Amount: 300.00  
Adjustment Amount: 200.00

### Additional Remittance Information

For more info about this payment, call John Smith at 212-333-1234

Call before 5PM ET

Monday to Friday

DocStudio



## Document processing certificate

Detailed information about the electronic document

### Document information

Envelope UUID	6d358904-13a1-4d46-96f0-b7b118b206ab
Envelope subject	Remittance Advice № 987654321
Document ID	7fc52a0b-b556-4df2-a6e9-c531453505d2
Title of the document	ISO 2022 Remittance Advice
Date of the document	7/26/22, 9:21 PM
Template UUID	44fdb0f-9689-4f04-80a3-695261273b44
Template version	66c8a7c9-91db-4728-8172-21ab79a3d2a4
File name	ISO 2022 Remittance Advice.pdf
Electronic version of the document	<a href="https://app.docstudio.com/envelope/view/6d358904-13a1-4d46-96f0-b7b118b206ab">https://app.docstudio.com/envelope/view/6d358904-13a1-4d46-96f0-b7b118b206ab</a>

```

1 # ISO 2022 Remittance Advice XML
2
3 <?xml version="1.0" encoding="UTF-8" standalone="yes" ?>
4 <RemittanceAdvice xmlns="urn:iso:std:iso:2022:01:01:remittanceAdvice" >
5   <EnvelopeUUID>6d358904-13a1-4d46-96f0-b7b118b206ab</EnvelopeUUID>
6   <EnvelopeSubject>Remittance Advice № 987654321</EnvelopeSubject>
7   <DocumentID>7fc52a0b-b556-4df2-a6e9-c531453505d2</DocumentID>
8   <Title>ISO 2022 Remittance Advice</Title>
9   <Date>2022-07-26T21:00:00.0000000-04:00</Date>
10  <TemplateUUID>44fdb0f-9689-4f04-80a3-695261273b44</TemplateUUID>
11  <TemplateVersion>66c8a7c9-91db-4728-8172-21ab79a3d2a4</TemplateVersion>
12  <FileName>ISO 2022 Remittance Advice.pdf</FileName>
13  <ElectronicVersion>https://app.docstudio.com/envelope/view/6d358904-13a1-4d46-96f0-b7b118b206ab</ElectronicVersion>
14  <InitiatingParty>
15    <Name>XYZ Corporation</Name>
16    <Address>111222222PPO</Address>
17    <City>Albany</City>
18    <State>NY</State>
19    <Country>US</Country>
20  </InitiatingParty>
21  <OriginalPaymentInformation>
22    <PaymentTxnNumber>20140624000000025998</PaymentTxnNumber>
23    <AccountNumber>123456789</AccountNumber>
24  </OriginalPaymentInformation>
25  <CreditorAgentFinancialInstitution>
26    <InstitutionCode>HSBCUS33</InstitutionCode>
27    <BranchCode>USABA</BranchCode>
28    <AccountCode>021001088</AccountCode>
29    <InstitutionName>HSBC Bank USA, N.A.</InstitutionName>
30  </CreditorAgentFinancialInstitution>
31  <MessageRecipient>
32    <Name>ABC Corporation</Name>
33    <Address>33388888</Address>
34    <City>Wilmington</City>
35    <State>DE</State>
36    <Country>US</Country>
37  </MessageRecipient>
38  <InvoiceTable>
39    <Invoice>
40      <InvoiceNumber>INVOI CE123 456</InvoiceNumber>
41      <InvoiceDate>2014-05-30</InvoiceDate>
42      <SubNumber>12345 6-1</SubNumber>
43      <DuePayableAmount>110500.00</DuePayableAmount>
44      <TaxAmount>6875.00</TaxAmount>
45      <RemittedAmount>11687.500</RemittedAmount>
46      <Description>Quarterly SW Lic. Fee July 1- Sept 30, 2014</Description>
47      <DiscountAmount>300.00</DiscountAmount>
48      <AdjustmentAmount>200.00</AdjustmentAmount>
49      <AdjustmentReason>Deducted $200.00 from payment due to pricing change</AdjustmentReason>
50    </Invoice>
51    <Invoice>
52      <InvoiceNumber>INVOI CE123 456</InvoiceNumber>
53      <InvoiceDate>2014-05-30</InvoiceDate>
54      <SubNumber>12345 6-2</SubNumber>
55      <DuePayableAmount>48565.50</DuePayableAmount>
56      <TaxAmount>3096.60</TaxAmount>
57      <RemittedAmount>51622.10</RemittedAmount>
58      <Description>Vol (2,429,278 @ $0.02) 4/1-6/30/2014</Description>
59      <DiscountAmount></DiscountAmount>
60      <AdjustmentAmount></AdjustmentAmount>
61      <AdjustmentReason></AdjustmentReason>
62    </Invoice>
63    <Invoice>
64      <InvoiceNumber>INVOI CE123 456</InvoiceNumber>
65      <InvoiceDate>2014-05-30</InvoiceDate>
66      <SubNumber>12345 6-3</SubNumber>
67      <DuePayableAmount>34500.00</DuePayableAmount>
68      <TaxAmount>2156.25</TaxAmount>
69      <RemittedAmount>36656.25</RemittedAmount>
70      <Description>Delivery of Prod Change Req #20795</Description>
71      <DiscountAmount></DiscountAmount>
72      <AdjustmentAmount></AdjustmentAmount>
73      <AdjustmentReason></AdjustmentReason>
74    </Invoice>
75  </InvoiceTable>
76  <Summary>
77    <DuePayableAmount>193565.56</DuePayableAmount>
78    <TotalTaxAmount>12067.65</TotalTaxAmount>
79    <TotalRemittedAmount>205153.41</TotalRemittedAmount>
80    <DiscountAppliedAmount>300.00</DiscountAppliedAmount>
81    <AdjustmentAmount>200.00</AdjustmentAmount>
82  </Summary>
83  <AdditionalInformation>
84    <Text>For more info about this payment, call John Smith at 212-333-1234</Text>
85    <Text>Call before 5PM ET</Text>
86    <Text>Monday to Friday</Text>
87  </AdditionalInformation>
88 </RemittanceAdvice>

```

## **Benefits of the E-invoicing**

### **Increased efficiency**

E-invoicing significantly reduces the errors and issues, ensuring no more accuracy issues, leading the risk of lost, incorrectly delivered or fraudulent invoices.

### **More security**

Invoices are exchanged through a secure e-invoicing network.

### **Save time & money**

Save time and money through faster processing.

### **Better cash flow**

Immediate delivery of invoices shortens the time to payment and thus improves cash flow.

# Thank you!

Zack Dikhtyar, CEO

+1(669)241-8064

[dz@docstudio.com](mailto:dz@docstudio.com)

# Open Discussion

Get involved with the E-invoice Exchange Market Pilot

Join the Business Payments Coalition and FedPayments Improvement Community



Business Payments Coalition

[BusinessPaymentsCoalition.org](https://BusinessPaymentsCoalition.org)



[FedPaymentsImprovement.org](https://FedPaymentsImprovement.org)



Business Payments Coalition