

# International Standards Organization (ISO) 20022 Message Training

## Executive Summary – Background on ISO



Purpose

In an effort to expand ISO knowledge, we will be providing training on what ISO messaging is, how it works, and how it will impact the treasury space.

Who?

Corporate clients have an expectation that their financial institution should be in a position to support their ISO Messaging requirements as it relates to the Treasury workstation and ERP platforms.

What?

- Founded in 1947, International Standards Organization (ISO) is an organization that promotes worldwide proprietary, industrial, and commercial standards. It is headquartered in Geneva, Switzerland, and works in 164 countries. Composed of representatives of various national standards organizations.
- Standardization can help maximize compatibility, interoperability, safety, repeatability, or quality.
- Comparable to the American National Standards Institute (ANSI)

Why?

As requests for ISO files continues to increase, understanding ISO messaging helps us improve the overall client experience and provides a smoother transition to implementation.

## Agenda



What is ISO?
Who is Asking for ISO now
ISO 20022 Standards and Connectivity
Scope of Truist ISO Capabilities
What Makes ISO So Great
Advantage of ISO 20022
Client are Asking their Banking Partners
What we can tell our clients about ISO 20022
Appendix

#### What is ISO?



- Governance structure
- A data dictionary (repository)
- Provides rules for how to develop messages and documentation adapting, allows for growth
- Describes messages, elements and characteristics
- Contains descriptions of business processes
- Provides vehicle to use data elements and message definitions in the same way...same meaning, less translation and mapping....
- The common standards platform for the financial industry

## **ERP & Treasury Work Stations**



#### **ERP Systems**









#### **Treasury Workstations**







#### ISO 20022 Standards



**ISO Today** 

23,499

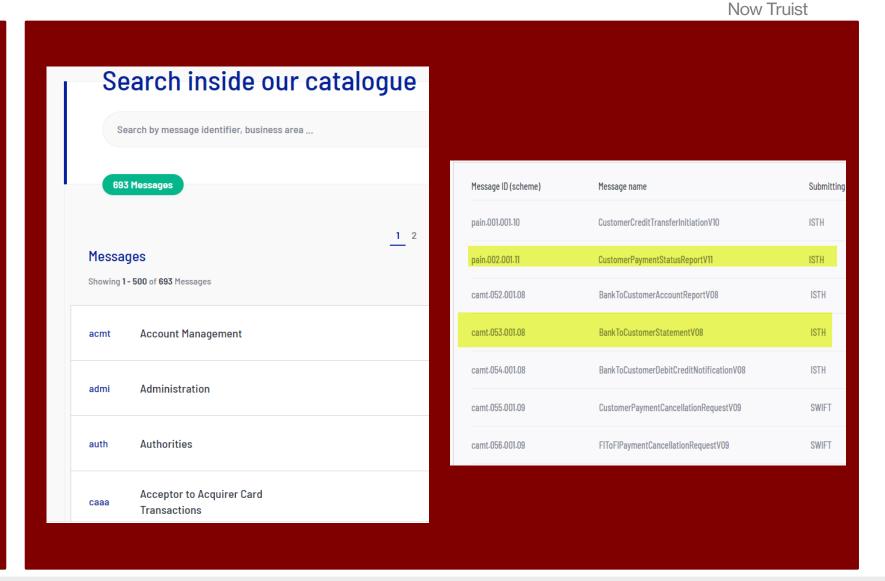
International Standards covering almost all aspects of technology and manufacturing.

165

Members representing ISO in their country. There is only one member per country.

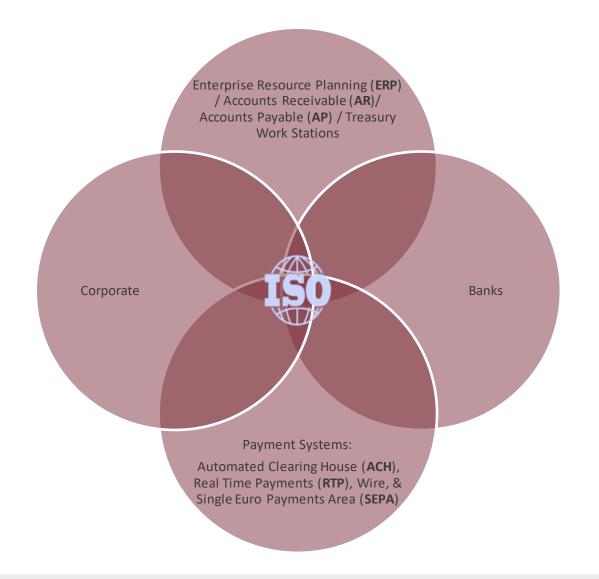
792

Technical committees and subcommittees to take care of standards development.



## ISO 20022 Connectivity





## Scope of Truist ISO Capabilities



Now Truict

#### Reporting









- Prior Day Reporting (camt.053)
- Payment Acknowledgement (pain.002)
- Bank Services Billing (camt.086)
  - In progress

- pain.001.01
  - ACH (CTX, CCD, CCD+)
  - Fedwire
  - Checks
  - Account Transfers
  - FX Currency

## pain & camt Messages



Standards for electronic data interchange for financial institutions and treasury clients

#### pain

#### camt

Message Purpose

- Payment initiation
- Make an ACH, wire, check, FasterPayments, etc.
- Information Reporting
  - Previous day reporting (camt.053)
  - Current day reporting (camt.052)
  - Credit (lockbox, ach, wire) receipts (camt.054)

Message Type Replaces...

- Sending comingled ISO 20022 files, instead of one RLO/file containing multi payment types:
  - EDI 820 in U.S. (middle ware required, not native within ERPs
  - SWIFT (MT) in Europe, world-wide
  - Other formats (e.g. CSV, IDoc, bank proprietary)

- Consolidating information reporting into a uniform standard
  - Replacing CSV, BAI2, MT940, MT942, & other proprietary formats

## Payment Types using ISO Format



U.S. Wire Payment Systems

U.S. ACH Network

Real-Time Payments (RTP) System

- Support PAIN today.
- Required for all FI Target date is 2023–25

- ISO 20022 in CTX (remt.001 and remt.002), opt-in \*
- NACHA mapping guides

- Utilizes ISO 20022 formats and messaging
- Request for Payment (ISO 20022 messages), confirmations...
- Truist was an early adopter; therefore, the market will be catching up to us. The percentage of Domestic accounts are at an RTP enabled bank is approximately 59%

**Note**: new file formats, all Rails will use/support ISO file formats. ISO formats will replace Swift MT as standard message types (limited to 2000 characters; therefore one BAI file = multiple MT message); all "rails" continue: Fed, TCH, EPN, SWIFT

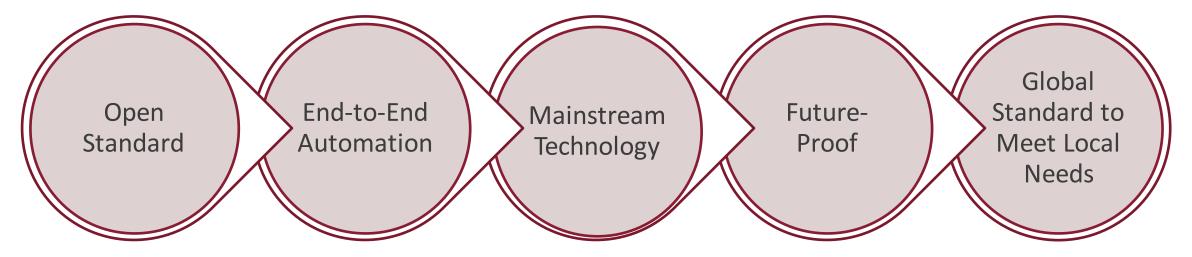
#### What Makes ISO So Great



- A formal business model for the financial services industry, which can be used as a reference for many different purposes.
- A method to develop well-structured financial messages, as described in the previous section.
- A way to unify the many existing standards
- Use of ISO 20022 is really catching on. Large financial infrastructures and user groups have committed to using ISO 20022 in payments and securities settlement domains, and it has already established itself as the natural language of real-time payments.
- ISO 20022 messages are designed to **support current and future business needs** around the world. To this end, specifications include international characters in narrative fields, long identifiers and references, large monetary amounts and precise interest and exchange rates.
- Adopting ISO 20022 in **correspondent banking**. By 2025, the high value payment systems of all major reserve currencies will have moved to ISO 20022. ISO 20022 is a rich, structured and extensible messaging standard that is increasingly **becoming the de facto standard** for exchange of payments and reporting in high value, instant and other domestic payment schemes.
- ISO 20022 is used already in over **70** countries, and forecast to be used in **80%** of clearing and settlement of high value payments **by 2025**.

## Advantages of ISO 20022





Open to everyone not controlled by single interest

A single standard that covers all business domains and end-to-end business processes

User
mainstream
well-supported
technology (e.g.
XML) that
facilitates
efficient
integration

Can adapt to new technologies as they emerge

ISO 20022 data
is very
structured and
allows for
enriched data to
be passed

## Client are Asking their Banking Partners



- Multiple banking relationships: ISO 20022 may be right for their organization if you use several banks, and process a variety of payment types in a number of different currencies and countries. ISO will bring standardization so you will not have to follow a myriad of proprietary formats.
- Most current: If the client is planning on implementing or upgrading software (ERP, AR/AP, Treasury, etc.) it may be the time to look at these applications to see if they support ISO 20022 messages.
- **Education**: Client are reaching out to their banks and software partners upfront to assess their ISO 20022 literacy.

#### What we can tell out clients about ISO 20022



ISO 20022 is a **methodology** for defining financial data content – a standard for standards, so to speak.

Currently, over 800 messages have been defined, and there are many more on the way.

It's not just about messages – ISO 20022 provides a **common language for machines and people** to exchange information about financial business. This common language is set out in a formal dictionary.

ISO 20022 is a **business standard**; its principal focus is on the content of the **dictionary**, rather than the technicalities of how data is exchanged.

ISO 20022 is an open standard that anyone can use, and to which anyone can contribute.



## Appendix

### 820 Remittance vs. REMIT.001



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	EDI 820 Structure	ISO 20022 with XML Structure			
Syntax	Data elements are positional within Data Segments	Data elements have prior and ending tags presented in a hierarchy			
Customer Account Number	N104 N1*PR*XYZ Company*91*C9876543\	<invoice></invoice>			
Customer Name	N102 N1*PR*XYZ Company*91*C9876543\	<nm>XYZ Company</nm>			
Invoice Number	RMR 01 IV=Invoice Number RMR*IV*121212**950.00*1000.00*450.00\	<rfrddocinf> <tp></tp></rfrddocinf>			
Invoice Data	DTM02 DTM*003*20201005\	<rltddt>2020-10-05</rltddt>			
Invoice Gross Account/Amount Before Discounts	RMR05 RMR*IV*9876543**950.00*1000.00*450.00\	<rfrddocamt></rfrddocamt>			
Discount Amount	RMR06 RMR*IV*121212**950.00*1000.00*450.00\	<rfrddocamt></rfrddocamt>			



## Information Reporting

Previous Day Reporting BAI2 vs CAMT.053

## Information Reporting



	BAI2 Structure	ISO 20022 with XML Structure
Syntax	Data elements are positional within Data Segments	Data elements have prior and ending tags presented in a hierarchy
Customer Account Number	03,000024106XXXX,,010,+00000000000,,/	<acct> <id> <othr> <id>&gt;0000024106XXXX</id></othr></id></acct>
Account Balance Information	88,015,+00000000000,,,040,+00000000000,,,045,+0000000000	<cd>OPBD</cd> <amt ccy="USD">0</amt> <cdtdbtind>CRDT</cdtdbtind> <dt>2020-07-22</dt> <bal> <tp> <cdorprtry> <cdorprtry> <cd>CCd&gt;CLBD</cd> </cdorprtry></cdorprtry></tp></bal>
Total Debits and Credits	88,100,+000005556411,000002,/	<ttlcdtntries> <nbofntries>000002</nbofntries> <sum>55564.11</sum></ttlcdtntries>
Transaction details	16,475,000000023184,,,47406/ 88,IMAGE EXCHANGE CHECK	<ntryref>47406</ntryref> <amt ccy="USD">231.84</amt> <cdtdbtind>DBIT</cdtdbtind>
Overflow data	16,142,000000011665,,,0/ 88,ACH CREDIT 88,REPAYMENT TASC 88,SCOTT PROFESSIONAL E 88,CUSTOMER ID AMSTAF59234XXXX	<rmtinf> <ustrd>ACH CREDIT</ustrd> <ustrd>REPAYMENT TASC</ustrd> <ustrd>SCOTT PROFESSIONAL E</ustrd> <ustrd>CUSTRD&gt;CUSTRD</ustrd></rmtinf>



### Payments

EDI 820 vs PAIN.001.01.03

## Payments



	EDI 820 Structure	ISO 20022 with XML Structure Pain.001.01.03			
Syntax	Data elements are positional within Data Segments	Data elements have prior and ending tags presented in a hierarchy			
ClientID	GS*RA*SCOTT0227ORG*521111119T*20200924*1548*1*X*004010~	<initgpty></initgpty>			
N1*PR* SCOTT Insurance Agency, Inc.~  Customer's Address  N3*One Scott Plaza~  N4*Washington*DC*20111*US~		<pstladr> <adrtp>ADDR</adrtp> <strtnm>One Scott Plaza</strtnm> <pstcd>20111</pstcd> <twnnm>Washington</twnnm>     &lt; CtrySubDvsn&gt;DC</pstladr>			
Paymennt (WIRE)	BPR*X*60*C*FWT**01*121000248*DA*00052355XXXXX*	<lclinstrm></lclinstrm>			
Invoice Data	DTM02 DTM*003*20201005\	<rltddt>2020-10-05</rltddt>			
Invoice Gross Account/Amount Before Discounts	RMR05 RMR*IV*9876543**950.00*1000.00*450.00\	<rfrddocamt></rfrddocamt>			
Discount Amount	RMR06 RMR*IV*121212**950.00*1000.00*450.00\	<rfrddocamt></rfrddocamt>			



## Payment Acknowledgement Data File & Readable Report EDI 824 VS PAIN.002.01.03

## Payments ACK EDI 824 vs ISO Pain.002 or HTML Report



	EDI (824) Structure	ISO 20022 with XML Structure Pain.002.01.03		
Syntax	Data elements are positional within Data Segments	Data elements have prior and ending tags presented in a hierarchy		
ClientID	GS*AG*521111119T*SCOTT0227ORG*20200925*1455*6*X*004010	<stsid>SCOTT02270RG/00000001/00000001/3&lt;</stsid>		
Message type	ST*824*00000006	Document xmlns="urn:iso:std:iso:20022:tech:xsd:pain.002.001.03">		
Transaction amount	DTM*007*20200920\AMT*1*60			
Acknowledgement Status	OTI*TA*TN*5181318*****3*0003	<stsid>SCOTT0227ORG/00000001/00000003/3 </stsid> <orgnlinstrid>5181318</orgnlinstrid> <orgnlendtoendid>5181318</orgnlendtoendid> <txsts>ACSP</txsts>		
FED Refernce number	REF*8I*0925E3QP016C000002\	<cirsysref>0925E3QP016C000002</cirsysref>		

## HTML Readable Report



BBT/190102/000000001 pain.002.001.03 Generated On 02-Jan-2019 15:24:00 ET

91387 111 <b>122244</b> 4		Brand	ch Banking and Trust Corp				
		Customo	er Payment Status Report				
		Original Gr	roup Information And Statu	s			
Original Messag Original Messag Original Creation	e Name Identification						6/181116/CCT00 pain.001.001.03 3-11-16T10:12:03
•	r Of Transactions						291,603.2
		Original Pay	ment Information And Stat	us			
-	nt Information Identification r Of Transactions Sum	Transacti	on Information And Status			ADS	5/181116/CCT00 3/ 291,603.2
Transaction Status	Status Identification / Reason Information	Original Instruction Identification	Original End To End Identification	Requested Execution Date	Local Clearing	System Reference	Instructed Amount
ACTC	SCOTT1234ORG/000000001/000000001/1 Accepted Technical Validation	ADS/181116/CCT001/001	84026	11/16/2018	стх		2,581.0
ACTC	SCOTT1234ORG/000000001/000000002/1 A Accepted Technical Validation	ADS/181116/CCT001/002	84027	11/16/2018	СТХ		6,390.0
ACTC	SCOTT1234ORG/000000001/000000003/1 A Accepted Technical Validation	ADS/181116/CCT001/003	84037	11/16/2018	СТХ		42,545.2
ACTC	SCOTT1234ORG/00000001/000000004/1 Accepted Technical Validation	ADS/181116/CCT001/004	84039	11/16/2018	СТХ		6,773.0
ACTC	SCOTT1234ORG/00000001/000000005/1 Accepted Technical Validation	ADS/181116/CCT001/005	84041	11/16/2018	СТХ		1,134.0
ACTC	SCOTT1234ORG/00000001/000000006/1 Accepted Technical Validation	ADS/181116/CCT001/006	84042	11/16/2018	СТХ		1,701.0
ACTC	SCOTT1234ORG/000000001/000000007/1 A Accepted Technical Validation	ADS/181116/CCT001/007	84043	11/16/2018	СТХ		4,190.2
ACTC	SCOTT1234ORG/00000001/000000008/1 A Accepted Technical Validation	ADS/181116/CCT001/008	84044	11/16/2018	СТХ		50,907.2
ACTC	SCOTT1234ORG/000000001/000000009/1 Accepted Technical Validation	ADS/181116/CCT001/009	84045	11/16/2018	СТХ		3,185.0
ACTC	SCOTT1234ORG/00000001/000000010/1 A	ADS/181116/CCT001/010	84048	11/16/2018	СТХ		5,715.00

#### Resources



Feel like you have learned a lot about ISO 20022, but you still want to know more? Here is a list of useful URLs for ISO and other standards bodies.

- ISO 20022: <u>www.iso20022.org</u>
- SWIFT: www.swift.com
- ISO 15022: www.iso15022.org
- Extensible Markup Language (XML): www.w3.org/XML
- Payments Market Practice Group: www.swift.com/pmpg
- MyStandards: <u>www.swift.com/mystandards</u>

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