



# Distinguishing Advantages in the Format & Structure of ISO 2022 for Instant Payment Adoption

What can be done with ISO 2022 that cannot be done with today's message standards as implemented? Why is a change to ISO 2022 valuable?

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In this report, the FPC Cross-Border Payments Work Group identifies some of the fundamental capabilities that distinguish ISO® 2022 from older message standards. In some respects, these capabilities are applicable to all message standards, not solely to ISO 2022 or instant payments. However, there are demonstrable benefits specific to instant payments transactions. Here are eight specific examples:

## Flexible Structure

Real-time payment platforms support transaction routing for wire transfers, SWIFT, and Real-Time Gross Settlement (RTGS). High Value Payments (HVP) systems are at the heart of the financial ecosystem. They need to offer efficient clearing and settlement services for large value and high priority payments and must ensure they are resilient enough to withstand a variety of threats to their security and integrity.<sup>1</sup> ISO 2022 is crafted to empower real-time payment platforms and HVP systems to flexibly adjust to shifting market conditions, regulatory demands, and technological progressions. In step with the evolution of the financial sector, ISO 2022 can seamlessly integrate novel message formats, data components, and operational workflows. This ensures that real-time payment platforms and HVP systems maintain their agility and responsiveness to emerging trends and evolving customer requirements.

One of the distinguishing factors regarding HVPs is that they support extended timeframes for payments and funding. In between there can be numerous and increasingly complicated steps entailed in finalizing the transaction, much more than other payment types. Moreover, HVP status requires constant monitoring. The ISO 2022 supports these tracking and monitoring functions, providing details of the transaction movement through multiple hops.

## Richer Data Content

Richer data content is a key differentiator for instant payments and cross-border transactions. ISO 2022 can support more data elements (multiple banks, multiple account numbers, etc.) and repeat them multiple times.

The ISO 2022 format enables the transaction message to include richer data (e.g., the name of the ultimate beneficiary of the payment) in the remittance. Such rich data also allows users to be more prescriptive, e.g., identifying the name of the business and/or merchant bank. ISO 2022 also enables users to add account numbers, reference information, currency, limitations further downstream, and to define data restrictions.

[1] Swift. (n.d.). *Swift for High Value Payment Systems*. Retrieved August 19, 2024, from [https://www.swift.com/our-solutions/market-infrastructures/swift-for-hvps-rtgs#:~:text=High%20Value%20Payments%20Systems%20\(HVPS,to%20their%20security%20and%20integrity](https://www.swift.com/our-solutions/market-infrastructures/swift-for-hvps-rtgs#:~:text=High%20Value%20Payments%20Systems%20(HVPS,to%20their%20security%20and%20integrity).

The conversion from MT to MX format creates an inherent protection within a SWIFT message which is part of ISO 20022. Field enhancements support additional data elements such as the application header which allows the inclusion of signatures.

### **Enhanced straight-through processing (STP)**

The structured data content enabled by ISO 20022 can support straight-through processing, which is payment processing that is completely free of human intervention. For example, additional data elements may enable a person with a “traditional” given and/or surname name to get cleared more quickly through the Office of Foreign Assets Control (OFAC). ISO 20022 brings enhancements to identify everyone involved in a payment to be included in a bespoke data field. The data fields are labelled. For example, the ‘address’ field is not just “address” but is broken down into “street,” “number,” “city,” “postal code,” “country,” etc. This helps with STP rates by preventing/reducing false positives for OFAC and screening issues.

ISO 20022 supports lots of information and eliminates the need for intermediaries to populate the information, and instead go directly to the payer.

### **Cost reduction through streamlined processes and reduced errors**

Standardized data formats and automated processing workflows reduce the likelihood of errors occurring during transaction processing. By eliminating manual data entry and reducing the complexity of data validation, ISO 20022 helps minimize errors such as data entry mistakes, formatting errors, and reconciliation discrepancies. This not only reduces the costs associated with error resolution but also enhances the overall reliability and accuracy of transaction processing.

### **Enhanced operational efficiency and process optimization**

Manual processes have been replaced such that every line item can be specified based on new formatting. Instant processing eliminates the need for human intervention.

Historically, wires lacked sufficient information either because there were not enough fields or tags to insert to data points or there were character restrictions, e.g., in field 72 which has a limitation of 6 lines of 35 characters each. With ISO 20022 the invoice and corresponding funds will be matched using the data in the message format. Faster settlement can be achieved based on credit analyses and information from a reserve account enabling payers to move money faster. These additional fields may also help to speed up reconciliation.

ISO 20022 drives a significant reduction in operational risks and errors by automating reconciliation and transaction analysis processes. Through automated matching of payables and receivables, invoices and incoming wires seamlessly align, minimizing discrepancies and errors. ISO 20022 fields facilitate the inclusion of crucial data elements like invoice numbers, product specifications, and additional payment or reference information, which expedites and enhances the reconciliation process.

This automation marks a transformative shift, empowering every department within a firm with access to the necessary data elements for efficient operations. By eliminating manual intervention and streamlining data exchange, ISO 20022 not only mitigates operational risks but also enhances accuracy and efficiency across the organization. This reduction in errors and operational risks translates to significant cost savings and improved overall performance.

### **Opportunities for international expansion and market access**

ISO 20022 supports multilingual capabilities. Currently, the global agreement is to restrict support to basic-Latin with a limited set of special characters; but, in the future, ISO 20022 will be able to accommodate non-Latin alphabets such as Arabic, Greek, Cyrillic and Chinese. These features expand internationalization of the standard, making it more suitable for global communication and inclusiveness.

### **ROI benefits**

ISO 20022 offers substantial return on investment (ROI) benefits by fostering revenue growth through enhanced customer trust and unlocking new market opportunities. By leveraging ISO 20022 messages, financial institutions can capture richer data sets, enabling deeper insights into customer behaviors and preferences. This wealth of data can be utilized to develop innovative products and services, particularly in areas such as derivatives and foreign exchange, expanding the institution's product portfolio and attracting new clients.

Additionally, the standardized nature of ISO 20022 messages facilitates faster access to and even more analysis of data, enabling real-time decision-making and responsiveness to market trends. This increased speed and agility not only enhances operational efficiency but also contributes to revenue growth by capitalizing on timely opportunities and mitigating risks more effectively.

## Compliance improvements

Compliance improvements in other ISO standards (e.g., ISO 9001 and ISO 14001) within the context of ISO 20022 adoption is multifold:

- **Enhanced Quality Management:** ISO 9001 sets the framework for quality management systems, ensuring consistent delivery of products and services that meet customer requirements. By aligning with ISO 9001 standards alongside ISO 20022 adoption, organizations can establish robust quality control measures throughout their processes, enhancing the reliability and trustworthiness of their financial services.
- **Improved Environmental Performance:** ISO 14001 focuses on environmental management systems, helping organizations identify and mitigate environmental impacts associated with their operations. By integrating ISO 14001 compliance with ISO 20022 adoption, financial institutions can enhance their environmental performance by optimizing resource utilization, reducing waste generation, and minimizing their carbon footprint.
- **Regulatory Compliance:** Compliance with ISO standards such as ISO 9001 and ISO 14001 demonstrates a commitment to best practices and regulatory compliance. By adhering to these standards in conjunction with ISO 20022 adoption, organizations can enhance their regulatory compliance posture, ensuring adherence to industry regulations and standards governing quality management and environmental stewardship.
- **Risk Mitigation:** ISO standards provide a systematic approach to risk management, helping organizations identify, assess, and mitigate risks across their operations. By integrating ISO 9001 and ISO 14001 compliance with ISO 20022 adoption, financial institutions can strengthen their risk management practices, reducing the likelihood of operational disruptions, compliance failures, and reputational damage.

When it comes to compliance, the structured data and semantic data model allows for better focused screening, compliance processes, and help to detect and mitigate fraud.

## Benefits

The benefits of ISO 20022 in support of instant payments are far reaching and should help to accelerate the adoption curve. The rich, structured data enables significant improvement in global payment automation.

## Looking Forward

The FPC Cross-Border Payments Work Group's will continue to explore the benefits of ISO 20022 and its impact on the global and domestic faster payments ecosystem.

## Cross-Border Payments Work Group

Thank you to the members of the FPC Cross-Border Payments Work Group (CBPWG), sponsored by [Mastercard](#), who contributed to this report.

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## About the Cross-Border Payments Work Group

The FPC Cross-Border Payments Work Group covers global industry initiatives, gathering information on various models and use cases for real-time payments across borders with the long-term goal of cross-border interoperability.

## About the U.S. Faster Payments Council

The U.S. Faster Payments Council (FPC) is an industry-led membership organization whose vision is a world-class payment system where Americans can safely and securely pay anyone, anywhere, at any time and with near-immediate funds availability. By design, the FPC encourages a diverse range of perspectives and is open to all stakeholders in the U.S. payment system.