ISO 20022 MIGRATION FOR THE AUSTRALIAN PAYMENTS SYSTEM – ISSUES PAPER – RESPONSE TEMPLATE

Name/Organisation: SWIFT

Organisation Category: Vendor/Payment Service Provider

About these consultation questions:

Primarily the focus of these questions relate to direct participants in Australian payment systems and will not be applicable to all that wish to respond to this public consultation. Notwithstanding this focus, the RBA is open to receiving comments from all respondents and invites general comment in the last question.

2.4 Objectives of an ISO 20022 migration for payments in Australia

Q1. Does your organisation currently support ISO 20022 for payments and reporting messaging?

☒ Yes
☐ No

If yes, what payment systems and/or associated activities are currently supported? If no, what plans does your organisation have to support ISO 20022 by 2024?

SWIFT was founded with the vision of creating shared worldwide financial messaging services, and a common language to support financial transactions. As such, SWIFT has long played an important role in standardisation, notably by creating and maintaining global financial messaging and reference data standards that are still used for Correspondent Banking today. These messaging standards are often referred to as the SWIFT 'FIN MT' standards.

In the 1990's, SWIFT started moving away from the proprietary FIN MT standards by adopting the International Organization for Standardization (ISO) standards for Securities transactions starting with ISO 7775 and later mandating the migration to the richer ISO 15022 standard. Today ISO 15022 standards are still used widely by the Securities industry and represent around 50% of the transactions on the SWIFT network.

In 2004, ISO 20022 was introduced as a new methodology for defining standards that cover the full spectrum of financial services, including payments. These newer standards have been adopted by major payments and securities market infrastructures around the globe as well as in the corporate to bank space. In alignment with the major high-value payment systems (HVPSs) in the world (e.g. TARGET2 and EURO1 in the EU, Fedwire and TCH in the US, CHAPS in the UK and CHATS in Hong Kong), SWIFT has now mandated the adoption of these standards in the cross-border/correspondent payments space – with a four-year migration window, starting in November 2021. In order to facilitate this migration, SWIFT has worked with the community on the CBPR+ message usage guidelines which build on the work done for HVPS+. The first phase of this work will be finalised by November of 2019. The CBPR+ and HVPS+ specifications will be available on www.MyStandards.com.

SWIFT has been appointed by ISO as the Registration Authority (RA) for the ISO 15022 and ISO 20022 standards. The RA is the guardian of the ISO 20022 repository, which includes all existing ISO 20022 messages and the data dictionary of ISO 20022 components. While ISO 20022 is an open standard, at the time of this paper, SWIFT Standards is the largest contributor of messages to ISO. SWIFT acts as the RA under a contractual agreement with ISO. SWIFT Standards also contributes to

the formalisation and implementation of other data standards, notably the ISO 17442 Legal Entity Identifier (LEI), which is increasingly required for regulatory reporting purposes.

In SWIFT's ongoing role as a financial messaging standardiser, a global team of more than 50 standards experts are supporting Standards working groups' activities with the financial community.

Q2. Does your organisation provide or use inbound and/or outbound correspondent banking services?

☐ Yes – cross-border inbound
☐ Yes – cross-border outbound
☐ Yes – both inbound and outbound cross-border
☒ No

Q3. Are there any other objectives that your organisation believes the Australian financial industry should look to achieve as part of an ISO 20022 payments migration?

☒ Yes
☐ No

If yes, please explain your views.

SWIFT has observed consistent themes from the payment systems that have adopted ISO 20022. These developments commonly have similar drivers behind them, including:

Straight Through Processing (STP)
Banks in Australia have reported that many payments end up in repair queues due to unstructured data being used in payment instruction messages. This results in manual interventions to repair the data for onward processing, or sometimes these payments also require investigation teams to seek further information from the sending bank or the customer. This leads to delays in processing and a dependency on staff for processing the exceptions and investigations. ISO 20022 will help ensure that data is presented in a machine-readable format and validated on the SWIFT network, which will result in higher rates of STP and negating the need for manual interventions.

Interoperability
With market infrastructures across the globe (including NPP and ASX CHESS) migrating to ISO 20022, many financial institutions, corporates and software vendors are basing their systems on a common data dictionary and standard. A migration of more domestic payment systems to ISO 20022 will ensure simpler interoperability within the industry, particularly for those larger institutions which connect to multiple market infrastructures both in Australia and globally.

The majority of MT 103 payments sent into Australia over the SWIFT network are routed to the end beneficiary's bank via the RITS system (when the beneficiary is not serviced by the clearing bank). Although NPP has developed ISO mapping and operational rules for IFTI (International Fund Transfer Initiation) transactions, some accounts will remain exclusively reachable via RITS for the foreseeable future.

By aligning RITS and the cross-border standards onto the same version of ISO 20022, institutions will reduce the amount of conversions, mapping or truncation required, particularly where they act as an intermediary bank in the payments chain. If RITS remains on the legacy MT standard, whilst the cross-border transactions move to ISO 20022, clearing banks will need to convert the ISO 20022 payment message into the MT equivalent and may need to truncate some data elements. They will then need to convey this extra data to the end beneficiary (who will need to screen the transactions) via other means which will result in processing delays and possibly higher exception rates, generating more investigations between institutions.

Compliance

ISO 20022 provides rich, structured and consistent data that is suited to the needs of regulators, market overseers and reporting firms that rely on unambiguous data for meaningful analysis. Richer data being consistently transported through the chain of correspondents and domestic payment systems will enable a better feed to regulators. In Australia, AUSTRAC could benefit from more structured data and alignment across geographies, schemes and systems.

By adopting ISO 20022, identification management for regulatory reporting and financial crime compliance will significantly improve. Unlike MT standards, ISO 20022 is capable of supporting the Legal Entity Identifier (LEI), which is increasingly required for regulatory reporting purposes. Including these codes, wherever possible, will reduce the ambiguity of data. Moreover, the richer content supported by ISO 20022 including but not limited to:

- full payer and payee information
- ultimate debtor and creditor
- more banks / agents
- extended remittance information
- postal and country codes
- payment purpose

These elements will help to improve the accuracy of KYC, AML and sanction screening.

Open Banking

One of the key benefits of ISO 20022 is that there is a separation of the business and logical layers from the underlying syntax used for the messaging. This separation means that ISO 20022 is not dependent on any particular syntax or technology. So whilst new formats or technologies may be adopted over time, the ISO 20022 data dictionary and business models remain valid.

As Open Banking regulations require banks to open their systems to third parties, Application Programming Interfaces (APIs) are often chosen as the technology for this new type of interaction with financial institutions. SWIFT is working to apply its standardisation expertise to data exchanged via APIs and to promote ISO 20022 as a common source of data definitions for message and API specifications. SWIFT has developed a methodology and toolset to enable API specifications to be created that use ISO 20022 as a source of business definitions. This approach targets tools and standards commonly used by API developers in order to facilitate consumption and implementation of the specifications.

As a practical example, an ISO 20022 Payment Initiation API looks significantly different from an ISO 20022 Payment Initiation message. Although it is flatter and smaller, an ISO 20022 API shares the same business semantics and data dictionary as the equivalent ISO 20022 message. This greatly simplifies the task of integrating the API into existing financial systems and processes. A good example is demonstrated by NPP Australia who have developed an API framework with SWIFT to provide alignment by Third Party Providers and NPP participants to the design of open APIs based on the ISO 20022 data dictionary.

Innovation

Alignment to a common business and technical standard, as explained in the Open Banking paragraph above, will allow for an easier and faster development of digital products and services for the payments industry. This alignment across international and domestic payments will also help to facilitate the

adoption of new technologies such as AI and machine learning. Equally, the adoption of common standards across the industry will help to speed up the deployment or adoption of new solutions, making the payments industry more agile and able to adapt and respond to customer and regulatory requirements.

2.5   Risks and challenges

Q4 a) Do you have any comments on the high-level risks and challenges of payments messaging migration to ISO 20022 outlined in Section 2.5?

☐ Yes
☒ No

If yes, please provide your comments under the relevant risk/challenge: prioritisation against other initiatives, business case approval, project horizon and cross-border migration.

SWIFT agrees with the list of risks that the RBA has identified.

Q4 b) Are there any other major risks and challenges that you believe need to be considered?

☒ Yes
☐ No

If yes, please explain your views.

The migration of the central infrastructure to ISO 20022 has risks that need to be carefully monitored to ensure the success of the migration program. These are:

Participants' back office system readiness
The FIN MT standards have been used by the finance industry for decades – and for larger institutions, the standards are often used to interconnect internal systems as well as transact with the external world. Users of the MT standards will need to analyse their internal systems to determine which will be affected by the changes that the ISO standard will introduce.

Some banks are still heavily reliant on legacy systems which are often built on older technology (e.g. mainframes), batch-based, inflexible and costly to change. As a result, some institutions have shielded back office systems via middleware or third party products that are more flexible and compatible with newer technologies (such as XML and APIs), can operate in real-time and require zero downtime. Some banks have also spent many years investing in their customer-facing channels to capture and keep market share but often the investment in back office, core systems has not kept pace. These larger institutions will have a complex set of changes to manage across multiple internal systems, so this risk will need to be carefully monitored by each institution and at an industry level.

Many Australian institutions also rely heavily on third party application providers/vendors for components of their payment's ecosystem. While most of the application providers/vendors will claim expertise and readiness with ISO 20022, the complexity lies in the exceptions/unhappy path scenarios where tailored usage guidelines are set for a community. For the NPP program, some participants were reliant on third party vendors for parts of the solution (e.g. customer-facing channels, internal payments hub) and their public launch of NPP was delayed due to dependencies on these vendors. Any industry program should therefore include the vendors in the planning activities so that they are well informed and can plan their development efforts accordingly.

Industry coordination
There are 47 institutions using FIN MT standards over the SWIFT network to transact with RITS. Migrating this large group of institutions will require industry coordination to ensure that message

usage guidelines are agreed, tracked and ratified by a governing body, timelines are agreed and adhered to, milestones are met, testing is extensive and final migration is fully planned. The NPP program, with KPMG appointed as the central PMO, provides a great example of how to properly manage a complex industry program.

Downstream users

Although the migration of RITS to ISO 20022 will mainly affect the direct participants of the system, there are many downstream institutions that will also need to be aware of the migration and, in some cases, they will need to initiate their own projects to migrate to the new standard. Some examples of this are smaller ADIs in Australia which may rely on the agency services of larger banks/payments providers for access into the payments system. Although these ADIs may agree to a different standard for communication with their payments provider, they may still need to be able to receive, screen or send extra data that may be mandatory for the new ISO 20022 equivalent messages.

Another downstream user is AUSTRAC. Under the AML/CTF Act, if a reporting entity sends or receives an electronic instruction to or from a foreign country to transfer money, the reporting entity must report the 'IFTI' to AUSTRAC. The transactions are reported in a file in a format set out by AUSTRAC. The format of the transactions are currently based on the FIN MT 103/202 standards. As cross-border transactions over SWIFT will migrate to ISO 20022 and if RITS also migrates to ISO 20022, SWIFT would recommend that the reporting standard be modified to accommodate the ISO 20022 data elements. This change would affect all 'reporting entities' and AUSTRAC, so SWIFT recommends that this should also be factored into the industry migration program.

Q5. For your organisation, please consider each risk and challenge outlined in Section 2.5, and list any others you have identified in Q4 b). Please rate each risk/challenge for your organisation according to the scales for likelihood (rare, possible, likely, almost certain, certain) and consequence (insignificant, minor, moderate, major, catastrophic). Please rank each risk/challenge by the difficulty they pose to your organisation, with 1 being the most difficult.

Risk/Challenge Item	Likelihood	Consequence	Difficulty
Prioritisation against other initiatives	Choose an item.	Choose an item.	Enter ranking.
Business case approval	Choose an item.	Choose an item.	Enter ranking.
Project horizon	Choose an item.	Choose an item.	Enter ranking.
Cross-border migration	Choose an item.	Choose an item.	Enter ranking.
Click here to enter text.	Choose an item.	Choose an item.	Enter ranking.
Click here to enter text.	Choose an item.	Choose an item.	Enter ranking.
Click here to enter text.	Choose an item.	Choose an item.	Enter ranking.
Click here to enter text.	Choose an item.	Choose an item.	Enter ranking.

Not applicable for SWIFT

3.1   Australian payments, clearing and settlement systems

Q6. Which, if any, of the messages categorised as "Other messaging that could be migrated", should be included as part of an ISO 20022 payments migration? Are there any that you think could potentially form part of a later stage of migration?

	Yes	No	No View	Later Phase
Direct credits and debits (direct entry (DE)) clearing messaging	☐	☐	☐	☒
RITS Low Value Settlement Service (LVSS) settlement messaging	☐	☐	☒	☐
Customer to financial institution/financial institution to customer messaging	☐	☒	☐	☐

Please explain your views.

Direct credits and debits (direct entry (DE)) clearing messaging
If the industry decides to proactively transition and fully migrate DE payments to the NPP over time, then the investment required to migrate the BECS standard to ISO 20022 for DE payments is not likely to be supported or required. If however, the industry sees a long term future for batch-based payments, then the industry should consider a migration to align standards across the three main account-to-account clearing streams: RITS, NPP and DE.

Customer to financial institution / financial institution to customer messaging
In the corporate to bank space, the adoption of ISO 20022 is a global trend addressing the need for harmonised standards for Payables and Receivables. This adoption is often driven by larger corporates with multiple banking relationships looking to centralise payments operations (the trend is often referred to as establishment of a 'payments factory').

Corporates have been driving banks to provide them with ISO 20022-based messaging for many years and the larger banks have obliged these requests in order to stay competitive. Today, more than 2,000 corporates have connected to SWIFT and about 50% of those are live on ISO 20022. SWIFT expects that this adoption of ISO 20022 in the corporate to bank space will continue without the need for any proactive industry-wide program.

Q7. Do you have any other specific feedback you wish to provide on the overall ISO 20022 payments migration scope?

☒ Yes
☐ No

If yes, please explain your views.

SWIFT believe that the scope should include a review of the impact of the migration on the data standards for transactions reported to AUSTRAC (see "Downstream users" under question 4b).

Q8. For organisations that use the RBA's AIF reporting and enquiry service, what are your initial views on a replacement solution to modernise this service? For example:

☒ Develop ISO 20022 messaging
☒ Develop an RBA Application Programming Interface (API) service
☐ Other

Please explain your views.

Although SWIFT is not a user of the AIF reporting and enquiry service, it has been built upon the SWIFT FIN messaging service. Since the RBA developed the AIF service, ISO 20022 messages have been created which could support some or all of the functionalities that the current proprietary 'MT 198' messages were built for. SWIFT recommendation would be to migrate these proprietary messages onto ISO 20022 equivalents where applicable. This type of interaction with a central system would also be a good candidate for API-based query/response communication. SWIFT always recommends the re-use of the ISO 20022 data dictionary for APIs developed for the finance industry. SWIFT is currently deploying an 'API Gateway' on the SWIFT network that can be used for API communication between SWIFT users.

3.2   Possible message enhancements

Q9 a) Please provide your views on whether to include each of the enhanced content items proposed in this paper in Section 3.2.

Enhancement	Include	Views
Payment Purpose Codes	☒	For the cross-border migration, it was decided by the CBPR+ group that PPC will remain optional and subject to each jurisdiction's regulatory requirements. Also, whilst the use of coded information is recommended, proprietary codes will remain an option. Domestically, for the NPP, some use cases/overlays are likely to flag this supplementary field as mandatory. The use of these codes will provide the opportunity for banks to gain market insights into the way consumers are using the payment system and potentially allow them to tailor offerings to consumers, public institutions and corporates. In summary, SWIFT believe that PPC's should be used where possible.
Identity Information	☒	Structural customer data is critical for compliance and operational efficiencies. Globally, other payments market infrastructures (PMIs) are looking to remove unstructured customer data by November 2025. The CBPR+ group has mandated the use of structured customer information. It will be mandatory to identify all 'agents' by the SWIFT BIC code, optionally complemented with LEI. If BIC or LEI cannot be used, name and postal address in structured data fields may be used. When considering the domestic ISO migration for RITS, the same rules are highly recommended. This will also ensure alignment with the HVPS+ guidelines.
Legal Entity Identifiers (LEIs)	☐	ISO 20022 supports the use of LEIs to identify legal entities. As mentioned above, the CBPR+ group has recommended the use of LEIs as one of the options for entity identification. SWIFT remains agnostic on this adoption but highly recommends the use of structured data for the identification of all 'agents' in a payment.

Remittance Information	☒	Whilst ISO 20022 caters for vast amounts of remittance data, most market infrastructures would define an upper limit for the number of characters that can be populated in those data fields. For the NPP, it was decided that two fields of 140 characters each, would be available for remittance information. SWIFT suggests alignment of any new RITS standards with those agreed for the NPP.
		SWIFT also recommends that information conveyed through the payment system via remittance fields be structured as much as possible to allow for greater levels of STP, especially for underlying corporates that need to reconcile the payments within their systems. This structuring would require agreement across the industry to ensure a consistent approach.
International Bank Account Number (IBAN)	☐	Whilst there are STP benefits to the use of IBANs, SWIFT believe that migrating the industry from BSB and Account number structures would complicate the migration even further. However, any new standards defined for RITS should accommodate the possibility of a future migration to IBANs in Australia.

Q9 b) What other enhanced content considerations would like to see included as part of the migration project? Please explain your views.

SWIFT gpi

Since the launch in 2017, SWIFT's 'global payments innovation' (gpi) has been adopted rapidly by the banking industry. Today more than 460 banking groups are live globally on gpi (including the major Australian banks) and 91 payments market infrastructures are already exchanging gpi payments, enabling the exchange of the tracking information (via the Unique End-to-End Transaction Reference or UETR) through the payment system. With 55% of SWIFT customer payments on gpi in 150 currencies, SWIFT recommends the support of the UETR in the RITS system enabling International Fund Transfer Instruction (IFTI) to be tracked if settled in RITS. For reference, NPP Message Usage Guidelines mandate the UETR to be sent for IFTI payments where the participants are registered in the IFTI service defined for the NPP. In Standards Release 2021, with details available November 2019, the UETR and the Service Type Identifier will be added to the business payload of the message which will facilitate this alignment. Note: if SWIFT remains the network for connectivity to the new RITS system, then the UETR will be mandatory for all participants (validated on the SWIFT network).

4.1   Long-run payment system design considerations

Q10. Do you agree with the view that it is appropriate to maintain a dedicated HVPS alongside other payment systems, including the NPP?

☒ Yes
☐ No

If no, please explain your views.

SWIFT supports the view that it is important to maintain the HVPS as a separate, distinct system to the NPP for the reasons outlined by the RBA in this paper. This is in line with the approach taken by others that have adopted, or are implementing an instant payments system (e.g. UK, Singapore, Hong Kong and the EU). To date, SWIFT is not aware of any market that has retired their HVPS after implementing an instant payments system.

To add to the RBA's comments on resilience, the technology components developed for the NPP Basic infrastructure in Australia, including the domestic network backbone access, software (Payment Gateway and Domestic Messaging Channel) and security components - are deployed locally with full segregation to the InterAct Store and Forward messaging services used for ISO 20022. Such segregation reduces systemic risk in case one of the payment systems experiences a major disruption.

Q11 a) Does your organisation have any other views or preferences on how the long-term design of the Australian payments system should evolve?

☒ Yes
☐ No

Q11 b) If yes, how does choice of settlement method and system resiliency factor into this view?

Direct Entry (DE) is an old system with known limitations: limited remittance information, batch-based, 1+ days for clearing, settlement windows and restricted operating hours. DE was not built to cater for the type of digital payments experience that customers now expect. Despite it being identified as a 'low cost' payment solution, there will still be longer term cost savings through the consolidation of payments systems. Having said this, a full migration of DE to NPP would need to be carefully managed so that the capacity of the NPP (central components and participants' infrastructure) could cater for the massive increase of clearing and settlement instructions (especially given the NPP's line-by-line settlement model).

If the industry decided that there would always be a need for batch-like payments but still wanted to phase out the DE system, then SWIFT would be ready to work with the industry to design a solution on the NPP (an 'overlay'?) to cater for the migration of these batches to the NPP. Another option for the industry to consider would be the 'Settlement Before Interchange' (SBI) model adopted in New Zealand. This solution allows for batches of payments to be sent between clearing banks with an automatic settlement at the RBNZ handled by SWIFT FileAct Y-Copy mechanism. Both options would allow the dismantling of DE and could cater for the ongoing support of 'batch' payments, whilst also introducing a more efficient settlement and authentication (PKI-signing) mechanism.

Q11 c) From your organisation's perspective, what other long-term design considerations should be factored into this migration project? Please frame your response from a strategic standpoint rather than focus on any short-term challenges or required investment.

System consolidation
SWIFT, as an industry-owned cooperative, is always supportive of measures that reduce payment systems cost and complexity. Therefore, we support the view that there is an opportunity to reduce and consolidate payment systems in the coming years. However, we also support the RBA's view that resilience is a very important consideration and for that reason, SWIFT believes the maintenance of two distinct account to account payment streams is preferable to channelling everything through one stream, such as the NPP. Instead of looking to merge the NPP and RTGS systems together, SWIFT feel the most logical first step towards consolidation should be to migrate Direct Entry (DE) payments onto the NPP and once complete, dismantle the Direct Entry system. The work NPPA are doing to build new capabilities, such as a central debit mandate service (Consent Management Service) to improve the direct debit process in Australia will help to accelerate this migration.

Batch payments
The NPP was designed for payments that require immediate clearing and settlement. Many argue that there will always be a role for batch-based payments to support processes that are not time critical, such as payroll payments. If these payments were to migrate to the NPP, the line by line nature of the system

will mean that the RBA and NPP participants will need to increase their system capacity significantly. Though technically this shouldn't be a major problem, the cost of such an approach should be weighed against the benefits gained. If batch-type payments are foreseen in the long term, another approach could be to provide a batch capability via the NPP or introduce another clearing and settlement mechanism, such as the Settlement Before Interchange model adopted in the New Zealand market.

Cross border payments
The majority of MT 103 payments sent into Australia over the SWIFT network are routed to the end beneficiary's bank via the RITS system (when the beneficiary is not serviced by the clearing bank). NPPA has developed ISO 20022 mapping and operational rules for IFTI (International Fund Transfer Initiation) transactions, and once the service is launched (expected Q4 2019 and 2020), we can expect to see a gradual migration of the cross-border payment flows from RITS to the NPP as NPP participants take advantage of lower transaction costs, 24/7 operations and the instant clearing and settlement features of the NPP. However, there are 47 institutions using SWIFT to access RITS today compared to 11 direct NPP participants, so if all customer payments were to migrate to the NPP, it would imply that smaller institutions would need to enter into agency arrangements with the direct NPP participants. For this reason, SWIFT believe customer payments will continue to be processed through RITS for many years to come.

4.2   RTGS message exchange models

Q12. If a separate high value clearing system is maintained for the ISO 20022 payments migration, what is your organisation's preference on the RTGS messaging model (i.e. Y-Copy or V-Shape) that should be adopted?

Please explain your views.

The SWIFT FIN Y-Copy solution was launched in the 1990s as RTGS systems were being adopted by multiple central banks around the world. The service allows for banks to exchange payment instructions (either FI to FI or customer payments) directly with each other, with SWIFT partially copying only those details needed for settlement to the central bank. Once the authorisation is received from the central bank, SWIFT releases the instruction to the beneficiary bank. The benefit of the partial copy is that the central bank only receives information related to settlement and is shielded from the underlying customer details. This protects the confidentiality of the transaction and also means that the central bank does not need to screen the transaction and process potentially large quantities of (for the central bank) irrelevant information.

As described by the RBA, the V topology would mean that the full message is sent directly to the central bank which would send a matching instruction to the beneficiary once settlement has occurred. A shift of topology from Y to V would have major technology and operational impacts for both the RITS participants and the central system and would add complexity to the migration program.
For the avoidance of doubt, the Y-Copy mechanism is available on SWIFT's InterAct Store and Forward service which is used to transfer ISO 200022 formatted messages. By maintaining the Y-Copy model, the 47 PDS participants would be able to maintain the same back office logic and be able to focus on the changes at the standards level, simplifying the migration.

Other points to note regarding V and Y-Copy topologies:

End-to-end message authentication/integrity
Y-Copy provides end-to-end authentication within an RTGS ecosystem. Messages are signed by the sender using the recipient/beneficiary's public key. When the recipient/beneficiary bank receives the message, they know that it could not have been altered by the central bank.

V-Shape requires the creation and signing of two separate payment instructions – one from the sender

to the central bank and one from the central bank to the beneficiary/recipient. The receiver of the payment instruction would have to trust that the central bank has not altered the message content. The central bank will have to provide a dispute resolution framework which is today provided by SWIFT out of the box with Y-Copy.

Service continuity
In the unlikely event of unavailability of the central system, the Y-Copy service allows the central institution to switch to bypass mode which allows for continuation of messaging between banks whilst the central institution is offline, similar to the bilateral clearing topology adopted by NPP. In V topology, the payments are sent directly to the central bank so end-to-end message exchange would not be possible until the central bank recovers.

Central message validation
SWIFT's Store and Forward services enable central validation of message syntax and cross-element rules at the network level. This capability is available in both Y and V topology, however if V topology is selected, the RBA would need to upgrade the central system to comply with the annual standards release on the SWIFT network – whereas settlement request/response messages (partial copy) are less likely to have changes implemented. It would also mean that the RBA would need to be able to process multiple payment instruction types.

Multi-network
While Y-Copy requires all connected participants to access the central system via SWIFT, the V topology – if a new network option was introduced – would add complexity, especially at the RBA which would need to switch transactions between the multiple networks (mapping, routing, different network and security protocols).

SWIFT Y-Copy solutions are also based on the Store and Forward protocol, meaning that SWIFT will queue messages centrally if a participant (including in RBA) is offline. Once the participant is back online, SWIFT will resume the message flow without any impact on the sender.

Having SWIFT as the main network provider also has the benefit of the non-repudiation service that it provides to its members. This service can be invoked in the case of a dispute between participants as to whether instructions were sent/received and related timestamps.

Other benefits of keeping SWIFT as the primary network provider include delivery notifications, message retrieval capability and re-use of existing infrastructure. Furthermore, the RITS participants are familiar with SWIFT's security protocols, support and service capabilities and can rely on the broad SWIFT community (e.g. to exchange cyber security and fraud-related information).

5.1   ISO migration path

Q13. Does your organisation agree with the proposed high-level stages of the ISO 20022 payments migration project?

☒ Yes
☐ No

Please explain your views.

The high-level phased approach suggested by the RBA makes sense, however SWIFT believes a central coordination of the program is essential for a smooth and successful migration.

Q14. Taking into account the advantages and disadvantages of each migration option, which approach do you support?

☐ Option 1 – Like-for-like followed by adoption of enhanced content
☒ Option 2 – Direct migration to enhanced content
☐ Other

Please explain your views.

In SWIFT's experience, 'like-for-like' approaches prolong migration programs and add to the overall cost, as affected parties need to engage development, testing and operational teams over a longer timeframe. It also means that the business benefits (e.g. increased STP, richer data, better customer services) of ISO 20022 are not realised until the full migration is complete, making it harder to justify the initial business case.

In SWIFT's view, adoption of the 'enhanced content' should take precedence over 'like-for-like', as it achieves the ultimate goal of data richness and allows for the immediate development of improved customer propositions, thus helping to justify the industry's investment. Hence, major FMIs (such as TARGET2, CHAPS, EURO1 and CHATS) are all planning to adopt the 'enhanced content' for their ISO 20022 templates based on HVPS+. It should also be noted that the CBPR+ working group, which is defining the network validation rules for the cross-border migration, is also adopting 'enhanced content' where it makes sense. Fedwire and TCH will go to 'enhanced content' after a limited and fixed period of 'like-for-like'.

5.2   Managing the transition to new messages

Q15. What is your organisation's preferred approach for transitioning between existing message formats and ISO 20022?

☒ Big-bang
☒ Coexistence

Please explain your views.

There are pros and cons to both approaches. For large migration programs involving the full SWIFT community, SWIFT tends to migrate its community from one technology to another through a period of co-existence. However, SWIFT also has examples where a 'big bang' migration is adopted (e.g. the annual standards migration in November of each year).

Although a period of co-existence will allow participants to migrate against their own timelines within a given industry window, it will also increase the complexity that participants will need to manage. The extra complexity includes: the need to support multiple formats, technical protocols, new message flows with business acknowledgements (e.g. pacs.002); message translation; truncation of data; handling structured and unstructured data elements; and, knowing the status of counterparts. These are examples of considerations that are often underestimated by communities opting for co-existence. Co-existence also implies that the RBA would need to support different formats and protocols for the settlement instructions and confirmations that RITS will need to process. If the decision is taken to have a co-existence period, the Australian community will need to plan for and proactively manage for this complexity.

A 'big bang' approach reduces the complexity as institutions will cut-over on a given date to the new system, however it has the risk that some participants will not be ready and the program timelines could slip as a result. It also means that the industry may need to plan some fallback measures in case the migration is not successful and the industry needs to quickly revert to the old system.

5.3   Project timing

Q16. Does your organisation face any impediments or constraints that are evident at this stage that would limit your ability to migrate to ISO 20022 within the 2024 target timeframe set out in this paper?

☐ Yes
☐ No

If yes, please explain.

Not relevant for SWIFT to respond to this.

Q17. Are there other international ISO 20022 initiatives that you consider the Australian ISO 20022 payments migration timeframe should be aligned to? E.g. large domestic implementations in other jurisdictions.

Please explain your views.

RITS is often used for clearing and settlement of inbound cross-border customer payments. It is also sometimes used to send the first leg of outbound customer payments. Therefore it would make sense to align the RITS migration to the migration of major payment currencies and to the migration of the cross-border transactions on the SWIFT network. SWIFT's latest information is that TARGET2, EURO1, CHAPS, Fedwire, TCH and CHATS all plan to start their migration windows in late 2021/early 2022. The SWIFT correspondent banking migration will start with a 'big bang' in the eurozone in November 2021, and end in November 2025 when the MT payments standard becomes obsolete for international transactions.

It should also be noted that Australian banks with operations in other markets may be faced with an ISO 20022 migration for those domestic systems (e.g. Australian banks are often direct participants of CHAPS and CHATS, so they will be impacted by the migration in other countries regardless of the plans for RITS domestically. Alignment may therefore be desirable).

Q18 a) Is your organisation affected by the timing of SWIFT's ISO 20022 migration for cross-border payments?

☐ Yes
☐ No

Q18 b) If yes, are there benefits to aligning the migration of domestic AUD payments messaging to cross-border payments migration for your organisation?

The ideal scenario would be for the RITS migration to align with the go-live of the cross-border migration in November 2021. If it were achievable, it could reduce the complexity for AUD clearing banks (intermediaries) which would not need to manage the issues of translation and truncation that they would need to deal with if RITS were still MT-based.

5.4   Message harmonisation

Q19. Do you support the HVPS+ developed message guidelines being used as the starting point for the development and implementation of new ISO 20022 standards for Australia's HVPS?

☒ Yes
☐ No

Please explain your views.

From the outset, HVPS+ has embraced openness and transparency as its guiding principles. For the first time, financial market infrastructures (FMIs) and banks have come together to share implementation plans in detail (whether new or existing implementation). Major FMIs (such as TARGET2, EURO1, CHAPS, Fedwire and TCH) have planned the fully fledged migration to ISO 20022 from 2021, which will cover eight of the top ten global currencies. While the new CBPR+ working group for cross-border payments will also be developed based on the HVPS+ guideline, SWIFT fully supports domestic migration based on this guideline to ensure interoperability among domestic market infrastructures and regulatory requirements across the board.

Q20. To what extent should other ISO 20022 standards for payments messaging (e.g. those used for the NPP) be considered?

Please explain your views.

ISO 20022 exceptions and investigations messages were adopted by NPP participants to support case initiation and resolution to help implement operational efficiency and consistent rules. There is an opportunity for RITS participants to integrate these messages into their exceptions and investigations systems for RTGS.

Also refer to Q8 regarding the Liquidity Management ISO messages which are another suggested suite of messages that could be introduced.

Q21. Are there any other areas of work that you believe are relevant in looking to achieve message harmonisation (to the extent possible)?

Please explain your views.

Click here to enter text.

6.1   Governance

Q22. Does your organisation have a preferred governance structure?

Please explain your views and include your preference for the roles of different parties in that governance structure.

SWIFT would encourage the industry to include experts from SWIFT on any working groups and/or steering committees to help manage the program. SWIFT also has standards experts located in the Sydney office who are ready to assist the industry through the cross-border and potential RITS migration to ISO 20022.

General feedback

Does your organisation have any general comments on an Australian ISO 20022 payments migration?

Click here to enter text.

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