

## ISO 2022 MIGRATION FOR THE AUSTRALIAN PAYMENTS SYSTEM – ISSUES PAPER – RESPONSE TEMPLATE

Name/Organisation: National Australia Bank Limited

Organisation Category: RITS Member & FSS Participant

*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 2022 migration for payments in Australia

Q1. Does your organisation currently support ISO 2022 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 2022 by 2024?

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We currently support ISO2022 for payments messaging on the New Payments Platform (NPP). By 2024 we anticipate supporting ISO2022 for NPP, SWIFT Cross Border, and for high value domestic payments. We also use, and will continue to use, ISO20022 as the basis for managing and processing internal payments within NAB.

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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 2022 payments migration?

- Yes  
 No

If yes, please explain your views.

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In order to implement effective monitoring, reporting and screening of payments to detect and prevent financial crime, it is essential for payments to include sufficient and high-quality information. That objective can be met either by uplifting payment clearing systems to ISO20022, or by migrating all residual payments volume away from clearing systems that do not carry sufficient data.

Standardisation of payment systems has potential to deliver very significant efficiency benefits for the Australian community.

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To achieve that goal of standardization, the following components would be beneficial:

- Standardisation of disputes, investigations and reconciliation processes using ISO20022 schemas across all Australian payments clearing systems, based on the capability already developed for the NPP;
- Standardisation of ISO20022 payment formats across all payment systems to a 'Common Credit Message', such that as far as possible, payments may be routed alternately across the various payments clearing systems, for example between NPP and the High Value Payment System;
- an Australian JSON API standard for payments that has lineage back to ISO20022. This would be particularly useful to support payments investigations and reporting; and
- structured data fields requiring ultimate creditor and debtor allows meaningful screening of Payments.

Interoperability between different payment clearing systems is essential to achieve resilience.

While planning for the development of new payments clearing system such as an ISO-20022 High Value Payments System, the industry should take the opportunity to ensure that system is optimally designed to address contemporary and foreseeable issues such as cyber-security risk.

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## 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.

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Building new functionality in the Payments industry requires significant investment and coordination effort between a large number of institutions. In order to facilitate that investment it is essential that the broad scope and costs are understood as soon as possible, and that sufficient time is allowed for internal design, cost estimation, and the budgeting / approval cycle that typically occurs over multiple financial years.

With SWIFT commencing the use of ISO20022 from late 2021, the time-frame for change is already relatively short, and there is risk that there will be a shortage of appropriately skilled resources with expertise in ISO 20022 for payments business and technologies in organisations and their supplier partners.

Given the practice of forwarding cross-border payments through the High Value Clearing System, it is desirable for the High Value Clearing System to be capable of handling new data structures and elements before they begin to be used in the cross-border environment. We understand that SWIFT has an expectation that institutions who forward payments in this manner be ready to do so by November 2021 (to be confirmed).

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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.

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If there is poor harmonization of ISO20022 payment formats across the various frameworks which use ISO20022, efficiency and resilience benefit from the migration will be significantly reduced, which could lead to a low appetite to migrate payments to ISO20022.

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Investment in the Payments domain competes for funding against both other regulatory change, and other customer-focused and business-driven change. There is a risk that large amounts of regulatory- driven change crowds-out investment in the Payments domain.

Financial Crimes systems of all financial services organisations, not just Participants in NPP, also need to be able to cater for ISO20022-based instructions.

The potential to carry some additional information, e.g. biometric based customer identification information, needs to be very carefully considered as it is personally identifiable information and subject to information privacy management considerations, such that it may not be desirable to carry the actual information (e.g. digital representation of a fingerprint) within the payment. To that end, digital identity in the Australian context needs to be considered, noting work recently completed by the Australian Payments Council.

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.

Add as required.

### 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	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
RITS Low Value Settlement Service (LVSS) settlement messaging	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Customer to financial institution/financial institution to customer messaging	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please explain your views.

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The migration program should consider not only those clearing systems that need to be uplifted, but also how to achieve orderly migration away from, and ultimately decommissioning of, payment clearing systems that do not carry sufficient information to readily support monitoring, reporting and screening, and that will not be uplifted to ISO20022.

We propose that the Australian Paper Clearing System should not be uplifted due to the rapidly declining volume of cheques, and the Bulk Electronic Clearing System should not be uplifted as alternative systems such as the New Payments Platform are, or could be, capable of carrying those payments. Accordingly, both of those systems should be considered for an orderly and planned migration and decommissioning within foreseeable timeframes.

Similarly, achieving ubiquitous high-quality payments data requires not only enhancement of the bank-to-bank payments clearing environment, but also enhancement of customer-to-bank and bank-to-customer data flows. For this purpose, an Australian JSON API standard for payments that has lineage back to ISO20022 would be very beneficial, and could be similar to that proposed in the United Kingdom.

The RITS LVSS itself could be considered as not required if message traffic is moved to other ISO20022 or equivalent settlement capabilities.

Other Financial System capabilities such as ASX CHES interface, Austraclear and PEXA could all be harmonized with either NPP or a new High Value ISO20022 based settlement capability. Cards schemes could consider migration to an equivalent message standard such as NEXO, though we propose that such migration should be planned by Card Schemes to fit with international developments within those schemes, and need not be coupled with this migration program.

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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.

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Migration of payment systems to ISO20022 should endeavour to standardize message formatting across frameworks including dispute, investigation and reconciliation processes using ISO20022 schemas.

Standardising to ISO20022 without addressing obsolescence of legacy frameworks which don't use ISO20022 would make the Australian Payments System more complex and reduce the benefits of migration.

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Given the proposal for a common message format and a desire for interoperability and resilience, the establishment of a testing utility for both industry testing and unilateral testing requirements is recommended, rather than 'buddy testing' that requires ongoing coordination between institutions.

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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.

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We encourage the RBA to replace legacy message types and move to ISO standard messaging, particularly expanding the use of CAMT messages. This would allow organisations to use consistent messaging at a global standard.

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## 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	<input checked="" type="checkbox"/>	For those types of payments that are likely to require the purpose of payment to be understood, the purpose of payment should be captured at the outset and included in the payment message.
Identity Information	<input checked="" type="checkbox"/>	<p>The identity of the ordering customer / ultimate payer should be accurately included in each payment message.</p> <p>Special consideration should be given to risks associated with personally identifiable information (especially relating to biometric identification) in the context of payment messages.</p> <p>Self-Sovereign Identity schemes for personal identity assertions and related schemes and how that interacts with payment messages should also be evaluated.</p>
Legal Entity Identifiers (LEIs)	<input checked="" type="checkbox"/>	The potential utility of LEIs should be considered in light of emerging international experience.
Remittance Information	<input checked="" type="checkbox"/>	Consideration should be given to harmonising Remittance Information standards across NPP and a new High Value payment system, for similar payment types. Having different standards for remittance information between the two clearing and settlement capabilities would introduce unnecessary friction.
International Bank Account Number (IBAN)	<input type="checkbox"/>	<p>The business case for IBANs is not clear, however we would be willing to consider IBANs if the business case can be demonstrated.</p> <p>These concepts (Section 3.2) should all be considered as part of an Australian superset for ISO20022 implementation.</p>

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

There should be a focus on ensuring the ISO based payment systems, and their associated messages, are always capable to carry a full end-to-end transaction identifier (an identifier to map into the end to end business process) to ensure customers can also leverage benefits of standardized messaging.

Increased presence and adoption of digital wallets and other digital services such as loyalty and digital identity should be factored in. For example, consideration for a wallet address as part of the payment instruction (separate to Identity and LEI). Consent and Mandate reference information relating to usage of those types of processes are also important in the payment workflow. Care does need to be taken to not unnecessarily overburden the payload of payment messages to ensure speed, convenience and assurance can be maintained.

## 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.

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It is reasonable to separate wholesale settlement systems that focus on intraday bank liquidity management from retail payment systems with a focus on commercial opportunity and innovation. This would also provide some redundancy in the Australian payment system, provided the underpinning payment formats are interoperable. A high degree of difference between the ISO formatted schemas would not provide contingency across frameworks for either clearing or settlement.

As such, in designing a future High Value Payment System, we should look for opportunities to re-use as many components as possible from the NPP, even if some adjustments such as speed to settle are required to accommodate liquidity management. Elements such as the NPP Addressing Service, and the proposed Consent Management Service, would be of benefit to the High Value Payments System, and should not be duplicated. Other potential central utility capabilities assessed in future should also consider usability across frameworks to improve efficiency and benefit applicability.

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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?

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Resilience of the Australian Payments System should be a core principle for design, alongside efficiency. Interoperability for both payment instructions and the investigations, disputes and reconciliation processes of payment frameworks would support both principles. Expectations relating to improving customer awareness of potential financial and personal risk from cyber fraud, considering vulnerable customers and even assisting customers to moderate their behavior as it relates to their financial wellbeing are aspirations that can be enhanced by migrating to data rich payment formats.

Removing or reducing settlement risk in the system should also be considered consistent with the Payments System Board's other initiatives over the past decade.

Adjacent opportunities exist such as the ability to implement pre-acceptance models of payment processing where a sending bank can pre-check that a receiving bank will accept a payment prior to sending it with associated data. Mechanisms for adjacent opportunities could be either message or API based.

Customers should not have to make choices regarding either clearing or settlement method before they instruct their bank to make a payment, they should be able to provide their payment to their bank in a single format and allow the bank to route the payment depending on factors such as the value and the date/time.

This would allow diversity of clearing options based on customer needs. It would then enable a reduced number of settlement processes with interoperable Settlement processes providing systemic resilience.

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To achieve true systemic resilience for settlement services, retail payment systems such as the NPP should

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be able to leverage the RITS Settlement (HVCS) to facilitate interbank settlement of funds, using mutually harmonised settlement instructions, in the event that the Fast Settlement Service is unavailable to fulfil that need. An important design principle for resilience is that there must be no component or process which, if failed, could prevent payments from being cleared and settled beyond the brief period required to trigger fallback to alternative processing arrangements.

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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.

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In general, investigations, disputes and reconciliation processes are not differentiators between banks or even across payment frameworks and should be standardised to allow greater transparency and confidence of outcome for customers.

The migration will require a coordinated effort across the financial industry, and potentially across migration of multiple payment types. An industry body should be appointed to lead the necessary coordination effort for this significant transformation, and rationalisation of the Australian payments landscape.

In order to achieve both the migration of customer-to-bank and bank-to-customer flows, and the migration and decommissioning of non-ISO20022 clearing systems that will not be upgraded, the migration program will need to include a change management component to communicate to the business community clear time-frames for migration.

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## 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.

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Our preference is for a model aligned to the NPP Clearing and Settlement interaction paradigm albeit with a slower processing of the settlement to allow treasury management of liquidity. This would achieve a near consistent payment processing solution for NPP and HVPS. However, for the purposes of the stated question, a Y-Copy type model would be preferable.

As previously expressed, if Clearing and Settlement are kept as separate processes that are consequent but not conjoined, it is then possible for either Clearing then Settlement (NPP real-time flow) or Settlement then Clearing (RTGS/High Value type process flow) to be equally achieved using a Y-Copy model.

Furthermore, by keeping these processes separate, it is also much easier to implement emerging technology solutions such as a distributed ledger solution for Clearing or Settlement without having to dismantle an otherwise tightly coupled system.

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## 5.1 ISO 20022 migration approach

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

- Yes  
 No

Please explain your views.

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There is a risk of unnecessary friction if domestic payments capability lags behind that of cross-border payments capability, so we should work towards implementing domestic capability in advance of the cross-border time-frame.

The high level stages outlined in the discussion paper propose that the industry plan will not be finalized until some time in 2020. It would be preferable to have clarity on a broad sense of the scope by the end of 2019 and indicative timing for the later phases shortly thereafter. Timing should consider the interaction of this program with other migration programs such as SWIFTs international migration.

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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.

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We should build capability for enhanced content from the outset on the basis that utilising that content is optional at first, with the use of enhanced content to become mandatory at a later date. That would allow for like-for-like migration while not restricting the adoption of enhanced content by those organisations and businesses who are quick to develop new capability. Both Options as worded carry a risk that slowest to achieve readiness will cause a lag across the whole market.

We suggest that the scope of the proposed migration should be determined before deciding on the migration approach. Institutions will also need to consider the design of their internal environments to comply with the proposed scope. Which option to pursue will depend on the scope of the capability to be developed, and the constraints such as time-frames by which the capability needs to be built. In particular, should it remain necessary to achieve a level of compliance by the date of the intended SWIFT cross-border migration in late 2021, there may be insufficient time to do more than a like-for-like migration by that date.

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## 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.

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Recent experience with NPP has demonstrated that a big-bang migration is unlikely to be successful. Coexistence for a relatively short time should be permitted if not preferable.

There could be a case to migrate message formats in PDS first using the same process flows, but with a plan to also migrate the payment system then or soon after. This way a staged migration is achieved but

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organisations also know what the end configuration will be in order to migrate their internal payment systems.

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### 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.

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It is possible that four migrations of payment messages to the new version of ISO20022 would occur concurrently with SWIFT Cross-border, NPP enhancements, ASX CHES replacement and the proposed High Value Payment System all occurring in the period 2021-2024. To avoid competing demands it is essential for there to be a sequenced and coordinated approach across the industry.

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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.

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Yes. Refer to previous answers relating to SWIFT ISO 20022 migration.

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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?

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Yes. Domestic AUD payments messaging must be capable of handling the final leg of cross-border payments received through SWIFT, in a time-frame consistent with SWIFT's requirements.

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### 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.

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Yes, subject to harmonisation with the New Payments Platform (NPP), to ensure customers have one common message format for Australia.

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

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Please explain your views.

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It is very important for payment system efficiency that customer-initiated payments should use one ISO 20022 message format, regardless of whether those payments are eventually cleared through the HVPS or NPP or settled through the FSS or a new ISO20022 liquidity focused settlement system. As such, we strongly support the idea of a common credit message for use between multiple payment systems.

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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.

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In addition to considering other ISO20022 financial message planned migrations, it is also important to consider the Open Data for Banking initiative in Australia. This is especially relevant for the bank-customer data flows, such as reporting of payments received.

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## 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.

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We recommend that the Australian Payments Network (AusPayNet) should be ultimately responsible for governance of the migration program, recognising that AusPayNet will require augmented resources. The program structure of the NPP program provides a useful template for determining the potential governance structure of this program, and associated roles and responsibilities.

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## General feedback

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

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NAB supports the introduction of a Common credit message and usage standards (such as permitted characters, account formatting) in Australia for use between ISO 20022 enabled payment systems.

To that end we support the development of an ISO compliant High Value Payment System with messaging formats aligned to those of NPP. The enablement of interoperability between such a new High Value system and NPP is essential to provide resilience and reduce friction.

Additionally, NPP components such as the Addressing Service, Consent Management Service, as well as any future proposed account validation service may be relevant for the High Value Payments System.

To achieve the benefits of ISO migration, the program should include orderly and prompt migration and decommission of old payment systems such as APCS and BECS, including a public awareness campaign within the business community for that migration.

Similarly, to assist businesses to leverage the benefits of ISO, there is a need to standardise customer-Bank and Bank-customer data flows, not just Bank-Bank.

Across all ISO enabled payment systems, the exceptions, disputes, investigations, reconciliation and reporting processes should also be migrated to a harmonised suite of ISO2022 instructions (with matching JSON where appropriate). This will allow for significant rationalisation of the back-office processing in banks as well as providing greater consistency of customer experience when there is a need to investigate or take further action.

Migration of card schemes to ISO should be decoupled, at least for purchases/debit transactions, though if the card schemes were to add/expand their use of credit transfer payments, conformity to ISO or a corresponding standard would be appropriate in order to achieve the benefits of enhanced data for comprehensive financial crime compliance.

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