

# Data Standards Body

Technical and Consumer Experience Working Groups

## Noting Paper – Approach to developing Data Standards for the non-bank lending sector

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*Publish date: 21st February 2023*

### Context

In preparation for the non-bank lending (NBL) sector entering the Consumer Data Right (CDR) ecosystem, consideration needs to be given as to how the Data Standards (the Standards) will be impacted. Foremost in this consideration is how to provide as much lead time as possible to the participants that will be required to implement the Rules and Standards.

This paper outlines the current position of the Standards and the steps that are expected to be taken in their continuing development. The intent is to identify areas of the Standards that can be considered by the sector to be a baseline for implementation planning and execution, but also to bring awareness to any areas that are subject to change beyond routine maintenance.

In addition to those objectives, this paper is designed to obtain initial feedback to support the development of draft Standards for the NBL sector. The draft Standards will then be the subject of formal consultation at a later stage, with the opportunity to make formal submissions.

You are invited to provide initial feedback on the Standards to the Data Standards Body (DSB), by:

- Lodging comments on the public [GitHub repository](#) maintained by the DSB; or
- Emailing [contact@consumerdatastandards.gov.au](mailto:contact@consumerdatastandards.gov.au). Respondents who would like to provide feedback on a confidential basis should ensure that this is clearly indicated.

Feedback posted on GitHub is public by nature at the time of submission. Content posted on GitHub should be made according to the [community engagement rules](#) published by the DSB.

The DSB also provides a range of engagement channels and artefacts to assist the community with interpretation and implementation, including:

- The [Data Standards Body Newsletter](#), to help participants stay up to date with news and announcements.
- The [CX Guidelines](#), which contain optional implementation examples for key Rules, Standards, and recommendations, as well as open-source CX assets and a CX Checklist to aid requirement discovery.

- The [CDR Support Portal](#), which provides guidance across a range of topics. The Support Portal allows for queries to be raised to the ACCC and DSB for clarification. Many existing articles, guides and FAQs answer the most common questions.
- The [CDR Implementation call](#), held weekly on Thursdays. This meeting series provides the CDR community an opportunity to interact with the DSB and ACCC Technology and Rules teams on implementation-oriented topics.
- The [Standards maintenance iteration call](#), held fortnightly on Wednesdays. This meeting series provides the CDR community with the ability to collaborate on proposed changes to the Standards. Change requests submitted to the [GitHub repository](#) are assessed and scrutinised by participants, allowing a considered decision to be developed and submitted to the Data Standards Chair. This is a direct method to improve and develop the Standards.
- A [YouTube channel](#) providing informative videos to support participants in the implementation of CDR. The channel includes a range of introductory and in-depth videos, covering areas such as Rules, CX, obligation dates, APIs, sector-specific Standards and information security.

## Current status and approach to developing Data Standards for the non-bank lending sector

### Standards development principles

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The DSB established a set of principles for the development of the Standards through open consultation beginning in 2018. The original consultation and decision can be found at:

**Decision Proposal 001 - API Principles**

<https://github.com/ConsumerDataStandardsAustralia/standards/issues/1>

Subsequent consultation to improve the principles for cross-sector application can be found at:

**Decision Proposal 097 - Principles Review**

<https://github.com/ConsumerDataStandardsAustralia/standards/issues/97>

The current principles are included in [Appendix A](#) and can also be found in the Standards, available at:

<https://consumerdatastandardsaustralia.github.io/standards/#principles>

One of the key principles relevant to the addition of a new sector is:

**Outcome Principle 5: APIs are consistent across sectors.**

Adhering to this principle will mean that the NBL-specific Standards will be developed with a bias towards existing patterns, types, and structures.

## Information security

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There is a view that a common [information security profile](#) can be applied to all sectors that become subject to the CDR.

The advantages to this view are significant and include the following:

- A common information security profile will enable Accredited Data Recipients (ADRs) to easily implement cross-sector data sharing where it supports the services they offer.
- Vendor solutions developed for existing sectors will be transferable to new sectors, reducing implementation cost and complexity.
- Threat and risk assessment for the sector will be simplified by the use of a single information security profile rather than multiple, separate profiles.
- The complexity and cost of ongoing maintenance of the information security profile will be reduced for all participants, including the DSB.
- The information security profile will be established as a cross-sectoral foundation allowing for simpler inclusion of future sectors.
- Changes to the CDR Register will be minimal due to the commonality of approach across sectors.

The authentication flow section of the information security profile is complemented by the Consumer Experience Standards, which are discussed further in the next section.

## Consumer Experience (CX) Standards

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The Consumer Experience (CX) [Data Standards](#) are expected to be sector agnostic, with the exception of sector-specific [data language Standards](#).

CX research, community consultation, and public workshops will inform the development of data language and other CX Standards for the NBL sector before a draft position is developed.

It is expected that the data language for the NBL sector will reflect the language used in the [Banking sector](#) for equivalent data and will have strong alignment in any other cases.

All other relevant CX Standards are expected to apply to the NBL sector unless divergence is considered necessary.

## Data sharing requirements

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As the Standards are being continually enhanced through an iterative process, changes to cater to new product innovations, unique product feature treatments, and sector differences are expected to continue.

Analysis of the NBL designation and explanatory material has created a hypothesis that the existing Standards, including both the Common and Banking APIs, are likely to be able to support the types of data that are required to be shared without significant change, and this may be preferable to creating a new sector grouping in the Standards.

A key difference between the introduction of NBL to the Standards, and that of Energy and Telecommunications (Telco), is that products such as credit cards and loans are already supported in the Standards as designed for the Banking sector. Conversely, where NBL Rules may require new product conventions to suit products such as 'Buy Now, Pay Later', these products may also be offered by participants in the Banking sector, though they are not yet required to share them.

The commonality of products and the likely expectation of comparison between them suggests that a consolidated model may be preferable to having two very similar, but distinct sector models being defined.

Reasons to extend the Banking or Common Standards may include new requirements for data, to enable:

- The appropriate specification of 'Buy Now, Pay Later' products,
- Support for additional variations of lease products,
- Support for the diversity of products and providers in the NBL sector,
- Support for the sharing of financial hardship information, if required by the rules.

As changes to accommodate the introduction of NBL may also impact the Banking sector Standards, careful consideration will need to be given to the timing of certain NBL-driven obligations. Where applicable, [future-dated obligations](#) could specify when certain changes are required, while the opportunity for early delivery of versioned obligations would typically remain an option.

Further review of the proposed Standards will also occur once the final Rules are made.

## API endpoints and URI structure

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It is expected that the NBL sector-specific Standards will align closely to the existing Banking sector Standards, as they cater to similar data sharing requirements.

Benefits of this alignment will include the ability to leverage existing CDR platforms, CDR vendor support, industry implementation experience and the possibility of simpler like-for-like product comparison. If the endpoints are largely expected to be common to Banking and NBL, the API URI structure could remain the same and the respective API endpoints will therefore become common to these sectors.

Where differences may ultimately arise in the requirements of each sector, additional data fields or endpoints may be created or marked as conditional according to their applicability to the sector or other relevant determining factors.

Where a new endpoint is required, it may be discovered by either a new value in an existing field, such as *productCategory=BNPL*, a new field such as *isLoanDetailAvailable=true*, or another discovery mechanism to be determined.

Where an endpoint is not applicable to the sector or a specific Data Holder, the [error defined](#) for a *'Resource Not Implemented'* may be applicable.

The current Banking sector-specific endpoints are:

### Account data

- Get Accounts
- Get Account Detail

### Account balances

- Get Bulk Balances
- Get Balances For Specific Accounts
- Get Account Balance

### Transactions

- Get Transactions For Account
- Get Transaction Detail

### Direct Debits

- Get Bulk Direct Debits
- Get Direct Debits For Specific Accounts
- Get Direct Debits For Account

### Scheduled Payments

- Get Scheduled Payments Bulk
- Get Scheduled Payments For Specific Accounts
- Get Scheduled Payments for Account

### Payee data

- Get Payees
- Get Payee Detail

### **Product data**

- Get Products
- Get Product Detail

In addition, the following Common and Admin endpoints would be applicable to the NBL sector:

### **Customer data**

- Get Customer
- Get Customer Detail

### **Service data**

- Get Status
- Get Outages

### **Admin**

- Metadata Update
- Get Metrics

Other endpoints required by the CDR Security Profile can be found in [the Standards](#).

## Authorisation scopes

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It is expected that there will be minimal, or no change to the [authorisation scopes](#) that are applicable to the Banking sector endpoints.

The relevant scopes are:

### Account data

- Basic Bank Account Data (bank:accounts.basic:read)
- Detailed Bank Account Data (bank:accounts.detail:read)

### Transactions

- Bank Transaction Data (bank:transactions:read)

### Scheduled Payments

- Bank Regular Payments (bank:regular\_payments:read)

### Payee data

- Bank Payee Data (bank:payees:read)

In addition, the following Common and Admin scopes will also be applicable to the NBL sector:

### Customer data

- Basic Customer Data (common:customer.basic:read)
- Detailed Customer Data (common:customer.detail:read)

### Admin data

- Basic Admin Metrics Data (admin:metrics.basic:read)
- Admin Metadata Update (admin:metadata:update)

Other scopes required by the CDR Security Profile can be found in [the Standards](#).

## Non-functional requirements

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Although the non-functional requirements are subject to continued review as the CDR ecosystem develops, it is expected that there will be minimal, or no practical change to the existing [Standards](#).

## Decision making operating model

The operating model that the DSB will use for decision consultation and recommendation will align with the model used for previous sectors. This approach has been successful in breaking down a large volume of decisions that may need to be made and provides the ability for the community to adapt where the Rules iterate in parallel with the Standards.

### Expected approach

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#### Phase 1: Draft Standards

One or more consultations will be conducted to evolve the proposed Standards until they are ready to be made binding. This status is referred to as 'Draft' to indicate that the Standards have achieved a level of certainty equivalent to binding Standards but are not yet formally binding.

During this phase it is anticipated that decisions will be submitted to the Chair for review and approval or rejection, but the decisions will not seek to make the Standards binding.

#### Phase 2: Binding Standards

Once the NBL sector Rules are published, the Draft Standards will be reviewed for alignment, and any areas of misalignment will undergo further consultation for a minimum of 28 days. At the end of this process, the Standards will be submitted to the Chair, proposing they be made binding.

#### Phase 3: Maintenance

Once binding Standards are in place, it is anticipated that the process of implementation can reveal challenges or opportunities for further refinement. Changes at this stage will follow the existing Standards maintenance process.

### Consultation channel

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For technical and consumer experience issues, a key tool for consultation is the issue tracking capability provided by the CDR Standards repository on GitHub. This can be found at:

<https://github.com/ConsumerDataStandardsAustralia/standards/issues>

### Decision Proposal process

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The DSB develops the Standards through a Decision Proposal process, by which the DSB recommends decisions to the Data Standards Chair for approval. This process is a hybrid of common open-source collaboration processes and more formal consultation processes normally used by government departments.

This process is aligned to Rule 8.9 in Part 8 of the CDR rules, which provides requirements for the consultation process for Standards development.



The process is as follows:

1. Initial research into a problem space is conducted. For the technical aspects of the Standards this is an internal process. For consumer experience aspects of the Standards this involves a wide variety of formal research processes including CX research and preliminary workshops to invite community feedback to help shape proposals.
2. The decision to be made is defined by the relevant stream lead (API and InfoSec Lead or Consumer Experience Lead) and a decision proposal document, with context and options, is published. Technical and CX decision proposals are published on GitHub.
3. Feedback on the decision proposal is obtained from the community for a defined period of time.
4. If the feedback received allows for a reasonable consensus or compromise solution to be recommended, then a final decision document is authored defining the change to be made to the Standards. If a solution cannot be recommended a new, refined, decision proposal may be initiated.
5. The final decision document is provided to the Chair for review along with the feedback obtained and rationale for the decision.
6. If the Chair is comfortable with the decision, then the decision document is sent to the Data Standards Advisory Committee (DSAC) for a final review for a period of two business days.
7. If no significant issues arise from this review the Chair will make a final determination regarding the decision document. The outcome of this determination will then be published on GitHub.

## Evolution of the CDR ecosystem

In addition to the routine maintenance and enhancements made to the Standards through participant collaboration, other factors may necessitate ongoing change to varying degrees.

Recent significant factors include the [Inquiry into Future Directions for the Consumer Data Right](#) and the subsequent [Government Response to the Inquiry](#), and an [Independent Information Security Review](#) and subsequent review of the [CX of Authentication](#).

The above is not an exhaustive list. Stakeholders would be strongly encouraged to subscribe to the [Data Standards newsletter](#), [Data Standards GitHub repository](#), [Data Standards Maintenance GitHub repository](#) and the [Consumer Data Right Newsletter](#) for regular updates.

As the CDR ecosystem will continue to evolve, consideration to some of the changes is provided below for reference.

### Information security Standards

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In anticipation of the [Exposure draft legislation to enable action initiation](#), work has already begun to explore the impact to the Standards from the introduction of Action Initiation. Part of this work has included phasing in FAPI 1.0 across the ecosystem through the second half of 2022.

Further consultation and development in this area is expected to continue through 2023, starting with a [Workshop for simple Payments Initiation](#).

This significant consultation may result in further changes to the information security (infosec) Standards that may be required to be implemented by the NBL sector at the commencement of consumer data sharing.

### Open Finance

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Beyond the introduction of the NBL sector, consultation on further sectors to be introduced to the CDR may occur through 2023 as outlined in the [Consumer Data Right Sectoral Assessment for Non-Bank Lending – Open Finance](#).

# Appendices

## Appendix A: Standards Development Principles

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The principles below are not sector specific and have been used to guide the development of the CDR Standards across multiple milestones and sectors.

### Outcome Principles

#### Outcome Principle 1: APIs are secure

The API definitions will consider and incorporate the need for a high degree of security to protect customer data. This includes the risk of technical breach but also additional concerns of inadvertent data leakage through overly broad data payloads and scopes. The security of customer data is a first order outcome that the API standards must seek to deliver.

#### Outcome Principle 2: APIs use open standards

In order to promote widespread adoption, open standards that are robust and widely used in the industry will be used wherever possible.

#### Outcome Principle 3: Data sharing provides a positive consumer experience

The standards will ensure that CDR consumers have simple, informed, and trustworthy data sharing experiences that provide them with positive outcomes over the short and long term.

#### Outcome Principle 4: APIs provide a good developer experience

To ensure that the entry hurdle for new developers is low the experience of the developers that are building clients using the APIs will be considered. The ability for a developer to easily understand and write code using the APIs in modern development environments should be facilitated by the API standards.

#### Outcome Principle 5: Standards are consistent across sectors

The standards will strive for consistency in patterns, structure, security mechanisms and user experience across sectors to facilitate the development of customer experiences and services that are able to integrate data from multiple sectors seamlessly and to reduce the cost of customer education for new sectors.

## Technical Principles

These principles articulate specific technical outcomes that the API definitions should seek to deliver.

### Technical Principle 1: APIs are RESTful

The API standards will adhere to RESTful API concepts where possible and sensible to do so. In particular the concepts of statelessness and resource orientation will be followed.

### Technical Principle 2: APIs are implementation agnostic

The underlying implementation of the APIs should not be constrained or driven by the API definitions and standards. Conversely, the underlying implementation choices should not be visible or derivable to the client applications using the APIs.

### Technical Principle 3: APIs are simple

As complexity will increase implementation costs for both holders and clients as well as reduce the utility of the APIs, API definitions should seek to be as simple as possible but no simpler.

### Technical Principle 4: APIs are rich in capability

As the APIs are defined care should be taken to ensure that the data payloads defined represent rich data sets that can be used in many scenarios, including scenarios not necessarily front of mind during the design process.

### Technical Principle 5: APIs are performant

The API definitions should consider and incorporate performance implications during design ensuring that repeated calls are not necessary for simple use cases and that payload sizes do not introduce performance issues.

### Technical Principle 6: APIs are consistent

The API definitions across the full suite of APIs should be consistent with each other as much as possible. Where possible common data structures and patterns should be defined and reused.

### Technical Principle 7: APIs are version controlled and backwards compatible

As the API definitions evolve care will be taken to ensure the operation of existing clients are protected when breaking changes occur. Breaking changes will be protected by a well-defined version control model and by a policy of maintaining previous versions for a period of time to allow for backwards compatibility.

### Technical Principle 8: APIs are extensible

The API definitions and standards should be built for extensibility. This extensibility should accommodate future API categories and industry sectors but it should also allow for extension by data holders to create unique, value add offerings to the ecosystem.

## Consumer Experience Principles

These principles articulate qualitative outcomes for consumer experience that the standards should seek to deliver.

### CX Principle 1: The CDR is Consumer-centric

The CDR consumer experience is intuitive and is centred on consumer attitudes, needs, behaviours, and expectations – noting that these may change over time.

### CX Principle 2: The CDR is Accessible and Inclusive

A diverse range of people are able to access, use, and comprehend the CDR ecosystem regardless of their background, situation, experience, or personal characteristics.

### CX Principle 3: The CDR is Comprehensible

When interacting with the CDR, consumers are able to understand the following:

- **who** their data is shared with;
- **what** information is shared;
- **when** sharing begins and ceases;
- **where** data is shared to and from;
- **why** their data is being requested; and
- **how** they can manage and control the sharing and use of their data.

### CX Principle 4: The CDR is Simple and Empowering

Consumer interactions with the CDR are as simple as possible, but not at the expense of informed consent, consumer control, transparency, privacy, or comprehension. Consumers should be encouraged to be privacy conscious without experiencing cognitive loads that lead to disengagement. Consumers should also be empowered by the CDR without interactive burdens being placed on them.

### CX Principle 5: Consent is Current

Consent is granted at a point in time and is only as current as the consumer's original intent. Consumer attitudes and behaviours may change over time and be impacted by external events such as the expansion of the CDR or consumer awareness. Consent terms should always align to current consumer preferences.