

**CONSUMER  
DATA  
STANDARDS**

# **Consumer Experience Standards**

**Version 1.0.1**

12 November 2019

# Document management

## Endorsement

Version	Date	Endorsed by
1.0.0	30.09.2019	Chair of the Data Standards Body

## Change log

Version	Date	Author(s)	Description of changes
1.0.0	30.09.2019	MP, EC, BC, NG	CX Standards v1.0.0
1.0.1	12.11.2019	MP, EC	'Account balance' permission added to basic scope

## Requirement levels

The following conventions are used in this document as described in [RFC2119](#).

**MUST** – means an absolute requirement of this document.

**MUST NOT** – means an absolute prohibition of this document.

**SHOULD** – means there may exist valid reasons to ignore a particular item in this document, but the full implications need to be understood before choosing a different course.

**SHOULD NOT**- means there may exist valid reasons when the particular item is acceptable or even useful, but the full implications need to be understood before implementing any item described with this label.

**MAY** - means that this is an informed suggestion but that the item is optional.

# Key decisions

The below table contains a list of key decisions reflected in these guidelines and articulated in the [technical standards](#)

#	Area	Decision
1	CX Standards	The CDR Rules require a number of data standards to be made. These include CX Standards outlined in the <a href="#">CX Standards section</a> . To indicate the direction of the CDR Rules, certain guidelines were listed as mandatory in <a href="#">v0.9.5 of the CX Guidelines</a> . A number of these items have now been incorporated into the <a href="#">CDR Rules</a> .
2	Consent	These guidelines allow for the provision of consent at the level of data clusters and meet the requirements of the CDR rules. Consultation and research have indicated that fine-grained control will be needed within the regime. Further consultation on how fine-grained control will be accommodated into the CDR regime will be undertaken. This will include further rounds of customer experience research.
3	Authentication	The DSB has determined that a single, consistent, authentication flow will be adopted by the CDR regime. The redirect with one-time password model is incorporated into the standards as the proposed authentication flow. Guidelines and standards for this authentication flow are contained in this document.
4	Right to Delete	The CX Standards and Guidelines reflect Subdivision 4.3.4 in the CDR Rules on a consumer's right to deletion. These rules state that a CDR consumer may elect that their collected data, and any data derived from it, be deleted when it becomes redundant. A consumer is able to make this election when giving consent, or, if they do not make the election at that point, at any other time before the expiry of their consent.
5	Re-authorisation	The CX Standards and Guidelines do not cover re-authorisation. This position reflects the current <a href="#">CDR Rules</a> . Further CX work is encouraged to provide further guidance on re-authorisation and to identify ways in which re-authorisation flows can be simplified without compromising the quality of consumer consent.

# Overview

# Overview

In August 2019, the Australian government introduced a [Consumer Data Right](#) to provide individuals and businesses with a right to access specified data in relation to them held by businesses.

The Consumer Data Right will be designated sector by sector, beginning in the banking sector, followed by energy and telecommunications, with a view to have it apply economy-wide.

The Australian Competition and Consumer Commission (ACCC), supported by the Office of the Australian Information Commissioner (OAIC), is the lead regulator of the Consumer Data Right. The rules developed by the ACCC set out details of how the Consumer Data right works.

Breaches of the CDR Rules and certain privacy safeguards can attract civil penalties up to an amount specified in the Rules, capped at, for individuals, \$500,000, or for corporations, the greater of \$10,000,000; three times the total value of benefits that have been obtained; or 10% of the annual turnover of the entity committing the breach. Refer to the [Treasury Laws Amendment \(Consumer Data Right\) Act 2019](#) and the [CDR Rules](#) for more details, including which privacy safeguards breaches may attract civil penalties.

This right requires common data standards to be made to help consumers easily and safely share data held about them by businesses via application programming interfaces (APIs) with trusted, accredited third parties.

CSIRO's Data61 has been appointed as the Data Standards Body, designing the first iteration of open standards to support consumer-driven data sharing. The work is progressing through four open work streams: API, Information Security, Engineering, and Consumer Experience (CX).

The CX Workstream exists to help organisations provide CDR consumers with simple, informed, and trusted data sharing experiences. [CX Standards](#) have been created to help achieve this along with the CX Guidelines, which are an example of how to put key [CDR Rules \(2nd September 2019\)](#) into effect. CDR participants should refer to the CDR Rules for a complete list of requirements.

Following advice in the the [Farrell report](#), the CX Workstream has looked to the UK implementation of Open Banking and their [accompanying CX Guidelines](#) for reference.

The CX Guidelines cover:

- the process that a consumer may step through when consenting to share, manage, and withdraw access to their data;
- what (and also how) information should be presented to consumers to support informed consent; and
- particular language that should be used to ensure a consistent experience for consumers across the CDR ecosystem.

The CX guidelines and design patterns in this document are provided as examples of how to put a range of key CDR rules into effect.

The outputs of CX research and consultation that led to the creation of these guidelines and standards can be found [in these reports](#), and in public updates [on this website](#). Formal consultation drafts and public submissions can be found [in consultation draft 1](#) and [consultation draft 2](#), and in [Decision number 87](#).

You can access major updates from the Data Standards Body in the [standards section of our website](#), and by signing up to our [mailing lists](#).

# Developing the CX Standards and Guidelines

The [CX Guidelines and CX Standards](#) have been developed for the Australian context through extensive consumer research, industry consultation, and in collaboration with various government agencies.

In total, over 200 people across Australia and with diverse needs have been engaged in the CX research and their input has influenced the content and form of the guidelines.

In addition to this engagement with the community, the guidelines have been shaped by extensive collaboration across the CDS Working Groups (aligning with the [API Standards and Information Security Profile](#)) and across government with [ACCC](#), [OAIC](#), and [Treasury](#).

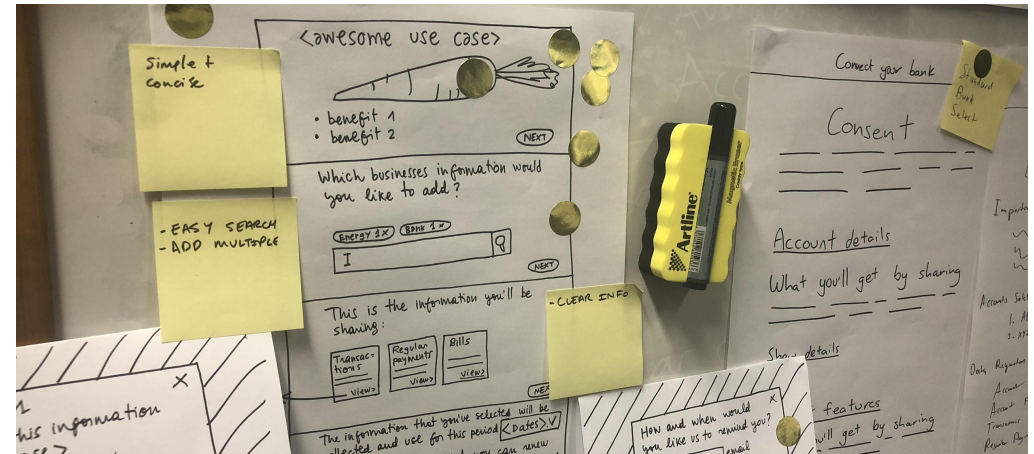
Feedback and guidance has also been provided by an Advisory Committee, spanning representatives from the financial sector, FinTechs, consumer groups, and software vendors.

This document focuses on banking as the first designated sector and will be built on with further CX research and design activities.

The outputs of CX research and consultation that led to the creation of the DSB guidelines and CX Standards can be found [in these reports](#), and in public updates [on this website](#).

They include:

- Phase 1 CX Research on the consent flow;
- Phase 2 CX Research:
  - Stream 1: consent flow, accessibility, joint accounts, cross sector data sharing
  - Stream 2: dashboards and withdrawal
  - Stream 3: consent flow, authentication models, reauthorisation, and notifications
- 4x industry workshops involving data holders, data recipients, and consumer advocacy groups.
- Formal consultation drafts and public submissions can be found in [consultation draft 1](#) and [consultation draft 2](#) and in [Decision number 87](#).



# Consumer Experience Standards

# Consumer Experience Standards

The Data Standards Body (DSB) recognises that consumer adoption is critical to success for the CDR regime. This is particularly true in the early stages of implementation when consumers will not be familiar with the mechanisms and protocols required to engage with CDR participants and consent to share their CDR data.

To facilitate CDR adoption the DSB has developed [Consumer Experience \(CX\) Standards and Guidelines](#) that identify a number of key elements to be aligned to across the regime.

[CDR Rules](#) (8.11) also require data standards to be made for:

- obtaining authorisations and consents, and withdrawal of authorisations and consents;
- the collection and use of CDR data, including requirements to be met by CDR participants in relation to seeking consent from CDR consumers;
- authentication of CDR consumers
- the types of CDR data and descriptions of those types to be used by CDR participants in making and responding to requests

As stated in the [CDR Rules Explanatory Statement](#), 'at a minimum, accredited persons will be guided by the language and processes of guidelines produced by the DSB.' The CX Workstream emphasises that aligning to the non-mandatory items in the CX Guidelines will help achieve consistency, familiarity and, in turn, facilitate consumer trust and adoption.

The CX Guidelines avoid being prescriptive to balance ecosystem consistency with the potential to innovate. The complete list of binding Consumer Experience Standards outlined in this document were created to balance these objectives. The CX Standards are available as a [standalone document](#).

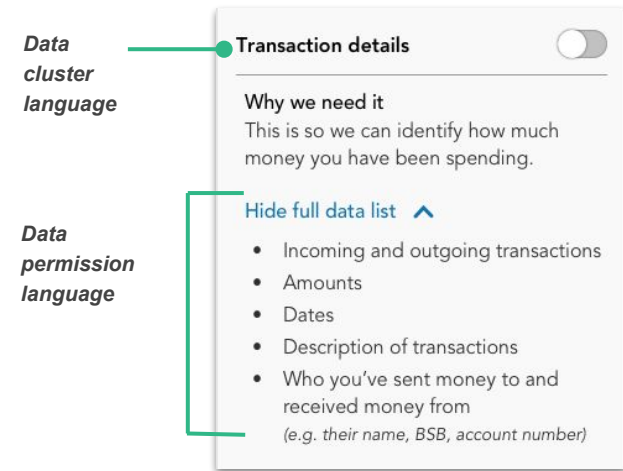
**CX standards will be binding data standards for the purposes of s56FA and in accordance with the Consumer Data Right rules made by the ACCC. The making and commencement of the data standards and the CDR rules is subject to the Consumer Data Right legislation.**



# Consumer Experience Standards

## Data Language Standards

In accordance with *CDR Rule 8.11(1)(d)*, a data standard must be made to provide descriptions of the types of data to be used by CDR participants in making and responding to requests. Adherence to this language will help ensure there is a consistent interpretation and description of the consumer data that will be shared across different CDR implementations.



Example of data language standards presented in a consumer-facing interaction

#	Area	CX Standard
1	<b>Data Language Standards:</b> Language to be used	<p>Data Recipients and Data Holders <b>MUST</b> use data language standards to describe data clusters and permissions in consumer-facing interactions as outlined in <a href="#">Table 1</a></p> <ul style="list-style-type: none"> <li>• Data language standards <b>MUST</b> be used when CDR data is being requested, reviewed, or access to such data is withdrawn.</li> <li>• Data Recipients and Data Holders <b>MUST</b> use the appropriate data standards language for business consumers as denoted with an ‘*’ in <a href="#">Table 1</a></li> <li>• Data Recipients and Data Holders <b>SHOULD</b> expand on the proposed language where appropriate to communicate further details of what is being shared. <ul style="list-style-type: none"> <li>○ Additional details <b>MAY</b> include additional information in context, such as in-line help or tool tips, and/or additional permissions where they may exist.</li> <li>○ Examples of permission details that <b>MAY</b> be used and provided as in-line help are denoted with an ‘†’ in <a href="#">Table 1</a></li> </ul> </li> </ul>
2	<b>Data Language Standards:</b> Detailed scope requests	<p>If a scenario requires it, Data Holders and Data Recipients <b>MUST</b> merge and amend <i>Basic</i> and <i>Detailed</i> data cluster and permission language to show that <i>Detailed</i> scopes include <i>Basic</i> data.</p> <ul style="list-style-type: none"> <li>• Data Holders and Data Recipients <b>MUST</b> use the alternative language denoted with an ‘†’ in <a href="#">Table 1</a> (rows greyed out for clarity).</li> </ul> <p><b>Example:</b> A Data Recipient presents the <i>Detailed</i> data cluster in a data request to a consumer, but does not present the <i>Basic</i> data cluster. The <i>Detailed</i> scope includes <i>Basic</i> data, but this is not apparent to the consumer based on the data cluster language and permissions used for the <i>Detailed</i> scope.</p>

# Consumer Experience Standards

## Data Language Standards

Table 1.  
*Individual consumer*

Data Cluster Language	Permission language	Authorisation scopes
<b>Name and occupation</b>	Name; Occupation;	common:customer.basic:read
<b>Contact details</b>	Phone; Email address; Mail address; Residential address;	common:customer.detail:read
<b>Name, occupation, contact details ‡</b>	Name; Occupation; Phone; Email address; Mail address; Residential address;	common:customer.detail:read

# Consumer Experience Standards

## Data Language Standards

Table 1.  
*Business consumer*

Data Cluster Language	Permission language	Authorisation scopes
<b>Organisation profile*</b>	Agent name and role; Organisation name; Organisation numbers ( <i>ABN or ACN</i> );† Charity status; Establishment date; Industry; Organisation type; Country of registration;	common:customer.basic:read
<b>Organisation contact details*</b>	Organisation address; Mail address; Phone number;	common:customer.detail:read
<b>Organisation profile and contact details*‡</b>	Agent name and role; Organisation name; Organisation numbers ( <i>ABN or ACN</i> );† Charity status; Establishment date; Industry; Organisation type; Country of registration; Organisation address; Mail address; Phone number;	common:customer.detail:read

# Consumer Experience Standards

## Data Language Standards

Table 1.

Data Cluster Language	Permission language	Authorisation scopes
<b>Account name and type</b>	Name of account; Type of account; Account balance;	bank:accounts.basic:read
<b>Account numbers, balances, and features</b>	Account number; Interest rates; Fees; Discounts; Account terms; Account mail address;	bank:accounts.detail:read
<b>Account balance and details‡</b>	Name of account; Type of account; Account balance; Account number; Interest rates; Fees; Discounts; Account terms; Account mail address;	bank:accounts.detail:read

# Consumer Experience Standards

## Data Language Standards

Table 1.

Data Cluster Language	Permission language	Authorisation scopes
<b>Transaction details</b>	Incoming and outgoing transactions; Amounts; Dates; Descriptions of transactions; Who you have sent money to and received money from; <i>(e.g. their name, BSB, account number)</i> †	bank:transactions:read
<b>Direct debits and scheduled payments</b>	Direct debits; Scheduled payments;	bank:regular_payments:read
<b>Saved payees</b>	Names and details of accounts you have saved; <i>(e.g. their BSB and Account Number, BPay CRN and Biller code, or NPP PayID)</i> †	bank:payees:read

# Consumer Experience Standards

## Accessibility Standards

In 2015, almost one in five Australians reported living with disability (roughly 18.3% or 4.3 million people). Making the Consent Model accessible will make consent simpler and easier for everyone.

This section refers to the [Web Content Accessibility Guidelines \(WCAG\)](#), which cover a range of recommendations to make content more accessible. Following these guidelines will help make content more accessible to a wide range of people with disabilities, but will also help make content more accessible to everyone. WCAG address accessibility of web content on desktops, laptops, tablets, and mobile devices.

*CX Research 15, 16, 37*

#	Area	CX Standard
3	<b>Accessibility</b>	At a minimum, all CDR participants <b>MUST</b> seek to comply with the following accessibility guidelines throughout the Consent Model. <ul style="list-style-type: none"><li>• These standards <b>SHOULD</b> be assessed, tested, and refined further by accessibility consultants directly involved in implementation.</li></ul>
4	<b>Accessibility:</b> Content distinction	Data recipients and data holders <b>MUST</b> seek to have all aspects of the Consent Model comply with <a href="#">WCAG 1.4</a> . This will make it easier to see and hear content, including separate foreground information from the background.
5	<b>Accessibility:</b> Keyboard functionality	Data recipients and data holders <b>MUST</b> seek to have all aspects of the Consent Model comply with <a href="#">WCAG 2.1</a> . This will make all functionality available from a keyboard.
6	<b>Accessibility:</b> Pointer interactions	Data recipients and data holders <b>MUST</b> seek to have all aspects of the Consent Model comply with <a href="#">WCAG 2.5</a> . This will make it easier to operate functionality using various input devices.
7	<b>Accessibility:</b> Reading experiences	Data recipients and data holders <b>MUST</b> seek to have all aspects of the Consent Model comply with <a href="#">WCAG 3.1</a> . This will make text content readable and understandable
8	<b>Accessibility:</b> Input assistance	Data recipients and data holders <b>MUST</b> seek to have all aspects of the Consent Model comply with <a href="#">WCAG 3.3</a> . This will help users avoid and correct mistakes.

# Consumer Experience Standards

## Consent, Authenticate, and Authorise Standards

#	Area	CX Standard
9	Seeking consent	Data recipients <b>MUST</b> notify consumers of redirection prior to authentication.
10	<b>Authentication:</b> 'One Time Password'	Data holders and data recipients <b>MUST</b> clearly refer to a "One Time Password" in consumer-facing interactions and communications. The use of 'verification code' and 'password' caused confusion and apprehension among consumers.
11	<b>Authentication:</b> Passwords	Data holders and data recipients <b>MUST</b> state in consumer-facing interactions and communications that services utilising the CDR do not need access to consumer passwords for the purposes of sharing data. The exact phrasing of this is at the discretion of the data holder and data recipient.
12	<b>Authentication:</b> Password link	Data holders <b>MUST NOT</b> include forgotten details links in redirect screens. The inclusion of such links is considered to increase the likelihood of phishing attacks.
13	<b>Authentication:</b> OTP expiry	Data holders <b>MUST</b> communicate the expiry period of the OTP to the consumer in the authentication flow.
14	<b>Authorisation</b> Account selection	<p>Data holders <b>MUST</b> allow the consumer to select which of their accounts to share data from if the data request includes account-specific data and if there are multiple accounts available. The Data holder <b>MAY</b> omit this step if none of the data being requested is specific to an account (e.g. Saved Payees).</p> <ul style="list-style-type: none"><li>• If certain accounts are unavailable to share, data holders <b>SHOULD</b> show these unavailable accounts in the account-selection step.<ul style="list-style-type: none"><li>○ Data holders <b>SHOULD</b> communicate why these accounts cannot be selected, and this <b>SHOULD</b> be communicated as in-line help or as a modal to reduce on-screen content.</li><li>○ Data holders <b>MAY</b> provide instructions on how to make these accounts available to share, and this <b>SHOULD</b> be communicated as in-line help or as a modal to reduce on-screen content.</li></ul></li></ul>
15	<b>Authorisation</b> Account confirm	Data holders <b>MUST</b> show which accounts the data is being shared from prior to confirming authorisation if the data request includes account-specific data. The data holder <b>MAY</b> omit this information if none of the data being requested is specific to an account (e.g. Saved Payees).

# Consumer Experience Standards

## Withdrawal Standards

#	Area	CX Standard
16	Withdrawing consent	<p>If a data recipient does not have a general policy to delete redundant data, and the consumer has not already requested that their redundant data be deleted:</p> <ul style="list-style-type: none"><li>• Data recipients <b>MUST</b> allow consumers to elect to have their redundant data deleted as part of the withdrawal process prior to the final withdrawal step.</li><li>• Data recipients <b>SHOULD</b> consider prompting consumers to exercise this right at appropriate times (e.g. when inaction on the part of the consumer may cause them to lose the opportunity to exercise the right to delete their redundant data).</li></ul>
17	Withdrawing authorisation: Consequences	<p>As part of the withdrawal process, the data holder <b>MUST</b> advise the consumer to review the consequences of withdrawal with the data recipient before they stop sharing their data.</p> <ul style="list-style-type: none"><li>• The data holder <b>MAY</b> consider using or paraphrasing the following message(s):<ul style="list-style-type: none"><li>○ <i>'You should check with [Data Recipient] before you stop sharing to understand the consequences.'</i></li><li>○ <i>'You should check with [Data Recipient] to see if your service will be impacted before you stop sharing.'</i></li></ul></li></ul>
18	Withdrawing authorisation: Redundant data	<p>As part of the withdrawal process, the data holder <b>MUST</b> inform the consumer about the handling of redundant data and the right to delete.</p> <ul style="list-style-type: none"><li>• The Data Holder <b>MAY</b> consider using or paraphrasing the following message(s):<ul style="list-style-type: none"><li>○ <i>'CDR data is either deleted or de-identified when it is no longer required.'</i></li><li>○ <i>'[Data recipient] will have specific policies on how to handle your data once it's no longer required.'</i></li><li>○ <i>'If you haven't already, you can ask [data recipient] to delete your data when they no longer need it, but you must do this before you stop sharing.'</i></li></ul></li></ul>



# CONSUMER DATA STANDARDS

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