

Data Standards Body

Technical Working Group

Decision Proposal 262 – Product Data Payloads

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Context

This proposal describes the payloads for telecommunications product arrangements as described in sections of the [telecommunications sector designation instrument](#).

This proposal has incorporated feedback obtained in response to the following consultation activities:

- **Decision Proposal 256 – Telco Endpoints**
This consultation proposed a series of URIs for the whole telecommunications sector. Feedback provided in response to this consultation can be found at: <https://github.com/ConsumerDataStandardsAustralia/standards/issues/256>
- **First telecommunications API Workshop**
This workshop was conducted online, and the outcomes of the workshop can be found at: <https://github.com/ConsumerDataStandardsAustralia/standards/wiki/Consumer-Data-Right-%7C-telecommunications-API-Workshop-%7C-Online---Outcomes>

It should be noted that, until the rules being developed by the Treasury are finalised, any decision made in response to this consultation is only indicative. The Data Standards Chair is required to make standards only in accordance with the Rules and the designation instrument.

Decision To Be Made

Define the preliminary end point URIs and payloads for Product offering data.

Identified Options

When consulting on payloads each field potentially has multiple options. For this reason, this proposal only presents a single option for consultation with the expectation that all parts of the proposal are subject to change in response to community feedback.

This section therefore includes a series of descriptions of the underlying assumptions and rationale that have led to the specific proposal included in the recommendation section.

Alignment To CDR Standards

The field naming conventions and structures proposed are based on existing standards for the Telco sector but the field names, end point naming conventions and data structures have been modified to align with existing CDR standards. These standards are referenced below:

- **CDR Payload Structure:**

<https://consumerdatastandardsaustralia.github.io/standards/#payload-conventions>

These standards describe the overall payload structure for all CDR APIs.

This includes:

- a description of the use of the generic “data” object and standard error payload;
- a section on field naming conventions that outline how individual fields are named in the CDR standards; and
- a definition for the use of mandatory vs optional statements in CDR payloads.

- **CDR Common Field Types:**

<https://consumerdatastandardsaustralia.github.io/standards/#common-field-types>

These standards describe common field types referred to in payload definitions.

Cross Sector Alignment

The proposed payloads have also been aligned with the model for presenting product data established in the banking and energy sectors. Specifically, it has been previously assumed that product data would not be presented from a single API set aligned to the designated organisation but that each entity that the customer has a relationship with (i.e. master brand) would present APIs independently.

This approach ensures the defined end points are adaptable in the event of a change to the data holder designation in the future. It also means the data presented can be more easily aligned with the tailored arrangement data that is designated to be provided by telecommunications retailers as the data holder.

It is also worth noting that some data holders span the energy and telecommunications sectors. For these data holders this level of alignment will likely have a material, positive, impact on their implementations.

Designation Scope

This section outlines the scope of the end points documented in this proposal. This scope has been determined by a review of the designation for the telecommunications sector.

Public Mobile Telecommunication Services

These include mobile services - both pre and post-paid. As defined as in [section 32 of the Telecommunication Act](#)

Fixed line Internet Services

These include fixed line services including NBN, ADSL, VDSL and fixed wireless.

Data Sets

- Product Name & Description
- Product Type (mobile pre or post paid, internet service such as NBN or ADSL)
- Retailer Details
- Pricing information including usage rate, features and benefits including discounts, incentives and bundling.

The product data payloads are a public interface and do not require authentication.

Current Recommendation

The recommended URIs and Payloads for product/service reference data is presented in the following sections.

Product Offering End Points Summary

A summary of the publicly available product end points:

- GET /telco/products
- GET /telco/products/{productId}

Product List Data

High Level Information

Title	Obtain information on a list of telecommunications products offered openly to the market
HTTP Method	GET
URI	/telco/products
Security Scope	Public (no authentication required)
Pagination	Supported
Path Parameters	None

Query Parameters

type

Used to filter results on the type field. Any one of the valid values for this field can be supplied. If absent, defaults to include all products

billing-type

Used to filter results on the billing-type field. Any one of the valid values for this field can be supplied. If absent, defaults to include all products

brand

Used to filter results on the brand field. If absent, defaults to include all products. For service providers that operate a number of mobile and internet brands

effective

If true then only include products that are effective right now and exclude products that may be available at a future time. If false only include products effective in the future. If absent, defaults to include all products

updated-since

Only include products that have been update after the specified date and time. Format for this field follows the format for the DateTimeString common type. If absent, defaults to include all products

page

Page of results to request (standard pagination)

page-size

Page size to request. Default is 25 (standard pagination)

Request Payload

Not applicable

Response Payloads

HTTP Response Code: 200 OK

Field	Type	Mandatory	Description
data	Object	Mandatory	
{			
products	Array of Objects	Mandatory	
[
productId	ASCIIString	Mandatory	The ID of the specific product
effectiveFrom	DateTimeString	Optional	The date and time from which this product is effective (i.e. is available for origination). Used to enable the articulation of products to the regime before they are available for customers to originate
effectiveTo	DateTimeString	Optional	The date and time at which this product will be retired and will no longer be offered. Used to enable the managed deprecation of products

Field	Type	Mandatory	Description
lastUpdated	DateTimeString	Mandatory	The last date and time that the information for this product was changed (or the creation date for the product if it has never been altered)
name	String	Mandatory	The display name of the product
description	String	Optional	A description of the product
type	Enum	Mandatory	The type of the product. Must be one of: <ul style="list-style-type: none"> MOBILE BROADBAND
billingType	Enum	Optional	The billing type of the product. Must be one of: <ul style="list-style-type: none"> PRE_PAID POST_PAID UPFRONT_PAID
usage	Enum	Mandatory	The usage type of the product. If absent, then the value PERSONAL is assumed. Must be one of: <ul style="list-style-type: none"> PERSONAL BUSINESS ANY
isContract	Boolean	Mandatory	TRUE if a contract is required
isBundle	Boolean	Optional	TRUE if part of a product bundle. Default is FALSE
brand	ASCIIString	Mandatory	The ID of the brand under which this product is offered
brandName	String	Mandatory	The display name of the brand under which this product is offered
pricing	Array Of Objects	Mandatory	List of pricing details for the product plan
{			
name	String	Mandatory	The display name of the pricing
description	String	Mandatory	The description of the pricing
period	ExternalRef	Optional	The duration that occurs on a pricing schedule indicates the frequency. Formatted according to ISO 8601 Durations (excludes recurrence syntax)
chargeAmount	AmountString	Mandatory	The amount charged for the duration period
}			
thirdPartyAgentId	String	Optional	The ID of the Third Party through which this product may be originated

Field	Type	Mandatory	Description
thirdPartyAgentName	String	Optional	The display name of the Third Party through which this product may be originated
applicationUri	URIStrng	Optional	A link to an application web page where this product can be applied for
additionalInformation	Object	Optional	Object that contains links to additional information on specific topics
{			
overviewUri	URIStrng	Optional	A link to a general overview of the product
termsUri	URIStrng	Optional	A link to terms and conditions for the product
eligibilityUri	URIStrng	Optional	A link to detail on eligibility criteria for the product
pricingUri	URIStrng	Optional	A link to detail on pricing for the product
bundleUri	URIStrng	Optional	A link to detail on bundles that this product can be a part of
}			
}}			
}			
links	Object	Mandatory	
{			
self	URIStrng	Mandatory	Fully qualified link to this API call
first	URI	Conditional	URI to the first page of this set. Mandatory if this response is not the first page
prev	URI	Conditional	URI to the previous page of this set. Mandatory if this response is not the first page
next	URI	Conditional	URI to the next page of this set. Mandatory if this response is not the last page
last	URI	Conditional	URI to the last page of this set. Mandatory if this response is not the last page
}			
meta	Object	Mandatory	
{			
totalRecords	PositiveInteger	Mandatory	The total number of records in the full set
totalPages	PositiveInteger	Mandatory	The total number of pages in the full set

Field	Type	Mandatory	Description
}			

Product Detailed Data

High Level Information

Title	Obtain detailed information on a single telecommunications product offered openly to the market
HTTP Method	GET
URI	/telco/products/{productId}
Security Scope	Public (no authentication required)
Pagination	Not supported
Specific Errors	Not supported – 400 and 422 not expected to be returned
Path Parameters	productId ID of the specific product requested
Query Parameters	None

Request Payload

Not applicable

Response Payloads

HTTP Response Code: 200 OK

Field	Type	Mandatory	Description
data	Object	Mandatory	
{			
productId	ASCIIString	Mandatory	The ID of the specific product
effectiveFrom	DateTimeString	Optional	The date and time from which this product is effective (i.e. is available for origination). Used to enable the articulation of products to the regime before they are available for customers to originate
effectiveTo	DateTimeString	Optional	The date and time at which this product will be retired and will no longer be offered. Used to enable the managed deprecation of products
lastUpdated	DateTimeString	Mandatory	The last date and time that the information for this product was changed (or the creation date for the product if it has never been altered)

Field	Type	Mandatory	Description
name	String	Mandatory	The display name of the product
description	String	Optional	A description of the product
type	Enum	Mandatory	The type of the product. Must be one of: <ul style="list-style-type: none"> MOBILE BROADBAND
billingType	Enum	Optional	The billing type of the product. Must be one of: <ul style="list-style-type: none"> PRE_PAID POST_PAID UPFRONT_PAID
usage	Enum	Mandatory	The usage type of the product. If absent, then the value PERSONAL is assumed. Must be one of: <ul style="list-style-type: none"> PERSONAL BUSINESS ANY
isContract	Boolean	Mandatory	TRUE if a contract is required
isBundle	Boolean	Optional	TRUE if part of a product bundle. Default is FALSE
bundles	Array of Objects	Optional	Required if bundle is TRUE
{			
bundle	Array of Objects	Optional	
{			
name	String	Mandatory	The display name of the product bundle
description	String	Optional	The description of the product bundle
bundleUri	URIString	Optional	The URI of the product bundle
features	Array Of Objects	Optional	Optional list of features available for the product plan
{			
feature	Array Of Objects	Optional	Optional list of discounts available for the contract
{			

Field	Type	Mandatory	Description
name	String	Mandatory	The display name of the feature
description	String	Optional	The description of the feature
category	Enum	Optional	The type of the feature. Must be one of: <ul style="list-style-type: none"> • DATA • VOICE • MESSAGING • HANDSET • DEVICE • NETWORK • ENTERTAINMENT • SUBSCRIPTION • SOFTWARE • OTHER
}			
}}			
}			
}}			
isPlan	Boolean	Mandatory	TRUE if part of a product plan
plans	Array Of Objects	Optional	Required if isPlan is TRUE
{{			
plan			
{			
name	String	Mandatory	The display name of the product plan
description	String	Optional	The description of the product plan
features	Array Of Objects	Optional	Optional list of features available for the product plan
{{			
feature	Array Of Objects	Optional	Optional list of discounts available for the contract
{			
name	String	Mandatory	The display name of the feature
description	String	Optional	The description of the feature

Field	Type	Mandatory	Description
category	Enum	Optional	The type of the feature. Must be one of: <ul style="list-style-type: none"> • DATA • VOICE • MESSAGING • HANDSET • DEVICE • NETWORK • ENTERTAINMENT • SUBSCRIPTION • SOFTWARE • OTHER
}			
}}			
}			
}}			
pricing	Array Of Objects	Mandatory	List of pricing details for the product plan
{{			
name	String	Mandatory	The display name of the pricing
description	String	Mandatory	The description of the pricing
period	ExternalRef	Optional	The duration that occurs on a pricing schedule indicates the frequency. Formatted according to ISO 8601 Durations (excludes recurrence syntax)
chargeAmount	AmountString	Mandatory	The amount charged for the duration period
}}			
brand	ASCIIString	Mandatory	The ID of the brand under which this product is offered
brandName	String	Mandatory	The display name of the brand under which this product is offered
thirdPartyAgentId	String	Optional	The ID of the Third Party through which this product may be originated
thirdPartyAgentName	String	Optional	The display name of the Third Party through which this product may be originated

Field	Type	Mandatory	Description
applicationUri	URIStrIng	Optional	A link to an application web page where this product can be applied for
additionalInformation	Object	Optional	Object that contains links to additional information on specific topics
{			
overviewUri	URIStrIng	Optional	A link to a general overview of the product
termsUri	URIStrIng	Optional	A link to terms and conditions for the product
eligibilityUri	URIStrIng	Optional	A link to detail on eligibility criteria for the product
pricingUri	URIStrIng	Optional	A link to detail on pricing for the product
bundleUri	URIStrIng	Optional	A link to detail on bundles that this product can be a part of
}			
]			
}			
links	Object	Mandatory	
{			
self	URIStrIng	Mandatory	Fully qualified link to this API call
}			
meta {}	Object	Mandatory	