

# Data Standards Body

## Technical Working Group

### Decision Proposal 265 – Billing Transactions Data Payloads

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## Context

This proposal describes the payloads for telecommunications billing transaction data 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 Billing Transaction 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

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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

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The proposed payloads have also been aligned with the model for presenting transaction data established in the banking and energy sectors. Specifically, it has been previously assumed that transaction 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

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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 Internet Services

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

### Data Sets

These include information about billing transaction data issued in relation to an account (transaction).

- Nature of the transaction
- Date and time of transaction
- Amount paid
- Payment method
- Account balance

The account transaction interface requires customer consent including authentication and authorisation based and the CDR [information security profile](#).

## Current Recommendation

The recommended URIs and Payloads for transaction data is presented in the following sections.

### Transactions End Points Summary

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A summary of the available account transaction end points:

- GET /telco/accounts/transactions
- POST /telco/accounts/transactions
- GET /telco/accounts/{accountId}/transactions

### Transaction List Data

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#### High Level Information

<b>Title</b>	<b>Obtain information on a list of transactions for a customer account</b>
<b>HTTP Method</b>	GET
<b>URI</b>	/telco/accounts/transactions
<b>Security Scope</b>	telco:billing:read
<b>Pagination</b>	Supported
<b>Path Parameters</b>	None
<b>Query Parameters</b>	<b>newest-date</b> Constrain the request to records with issue date at or before this date. If absent defaults to current date. Format is aligned to DateString common type <b>oldest-date</b> Constrain the request to records with issue date at or after this date. If absent defaults to newest-date minus- 24 months. Format is aligned to DateString common type <b>page</b> Page of results to request (standard pagination) <b>page-size</b> 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	

Field	Type	Mandatory	Description
{			
accounts	Array of Objects		
{{			
account	Object		
{			
accountId	ASCIIString	Mandatory	The ID of the account for which the transaction occurred. accountId must comply in accordance with <a href="#">CDR ID permanence</a>
accountName	String	Mandatory	Name of the account
balance	AmountString	Mandatory	The balance of the account
transactions	Array of Objects	Mandatory	
[[			
transaction	Object	Optional	
{			
accountId	String	Mandatory	The ID of the account for which the transaction occurred. accountId must comply in accordance with <a href="#">CDR ID permanence</a>
invoiceNumber	String	Optional	The invoice number on which this transaction is included if it has been issued
description	String	Optional	Optional description of the transaction used for display purposes
transactionDate	DateTimeString	Mandatory	Date and time of the transaction
type	Enum	Mandatory	Type of transaction <ul style="list-style-type: none"> <li>• DEBIT</li> <li>• CREDIT</li> <li>• OTHER</li> </ul>
paymentMethod	Object	Mandatory	The payment details
{			
amount	AmountString	Mandatory	The payment amount

Field	Type	Mandatory	Description
method	Enum	Mandatory	The method of payment. Values include: <ul style="list-style-type: none"> <li>• DIRECT_DEBIT</li> <li>• CARD</li> <li>• TRANSFER</li> <li>• BPAY</li> <li>• CASH</li> <li>• CHEQUE</li> <li>• OTHER</li> </ul>
}			
services	Array of Objects	Mandatory	Array of services to which this transaction applies.
{{			
service			
{			
serviceld	String	Mandatory	The serviceld representing a unique service identifier such as a mobile (MSISDN) or internet service (e.g NBN or ADSL)
invoiceNumber	String	Mandatory	The number assigned to this invoice in which this transaction is included
description	String	Optional	Optional description of the transaction used for display purposes
startDate	DateTimeString	Mandatory	Date when the usage period starts
endDate	DateTimeString	Mandatory	Date when the usage period ends
amount	AmountString	Mandatory	The amount charged or credited for this transaction prior to any adjustments being applied. A negative value indicates a credit
adjustments	Array of Objects	Optional	Optional array of adjustments arising from this transaction
{{			
amount	AmountString	Mandatory	The amount of the adjustment
description	String	Mandatory	A free text description of the adjustment
}}			
}			
}}			

Field	Type	Mandatory	Description
}			
}}			
}			
}			
}			
links	Object	Mandatory	
{			
self	URIString	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
}			

## Transaction data for specific accounts

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### High Level Information

<b>Title</b>	<b>Obtain information on a list of transactions for specific accounts</b>
<b>HTTP Method</b>	POST
<b>URI</b>	/telco/accounts/transactions
<b>Security Scope</b>	telco:billing:read
<b>Pagination</b>	Supported
<b>Path Parameters</b>	None
<b>Query Parameters</b>	<p><b>accountIds</b> Array of specific accountId's to obtain account data for</p> <p><b>newest-date</b> Constrain the request to records with issue date at or before this date. If absent defaults to current date. Format is aligned to DateString common type</p> <p><b>oldest-date</b> Constrain the request to records with issue date at or after this date. If absent defaults to newest-date minus- 24 months. Format is aligned to DateString common type</p> <p><b>page</b> Page of results to request (standard pagination)</p> <p><b>page-size</b> Page size to request. Default is 25 (standard pagination)</p>

### Request Payload

Not applicable

### Response Payloads

*HTTP Response Code: 200 OK*

Field	Type	Mandatory	Description
data	Object	Mandatory	
{			
accounts	Array of Objects		
{			
account	Object		
{			



Field	Type	Mandatory	Description
accountId	ASCIIString	Mandatory	The ID of the account for which the transaction occurred. accountId must comply in accordance with <a href="#">CDR ID permanence</a>
accountName	String	Mandatory	Name of the account
balance	AmountString	Mandatory	The balance of the account
transactions	Array of Objects	Mandatory	
{{			
transaction	Object	Optional	
{			
accountId	String	Mandatory	The ID of the account for which the transaction occurred. accountId must comply in accordance with <a href="#">CDR ID permanence</a>
invoiceNumber	String	Optional	The invoice number on which this transaction is included if it has been issued
description	String	Optional	Optional description of the transaction used for display purposes
transactionDate	DateTimeString	Mandatory	Date and time of the transaction
type	Enum	Mandatory	Type of transaction <ul style="list-style-type: none"> <li>• DEBIT</li> <li>• CREDIT</li> <li>• OTHER</li> </ul>
paymentMethod	Object	Mandatory	The payment details
{			
amount	AmountString	Mandatory	The payment amount
method	Enum	Mandatory	The method of payment. Values include: <ul style="list-style-type: none"> <li>• DIRECT_DEBIT</li> <li>• CARD</li> <li>• TRANSFER</li> <li>• BPAY</li> <li>• CASH</li> <li>• CHEQUE</li> <li>• OTHER</li> </ul>
}			

Field	Type	Mandatory	Description
services	Array of Objects	Mandatory	Array of services to which this transaction applies.
{			
service			
{			
serviceld	String	Mandatory	The serviceld representing a unique service identifier such as a mobile (MSISDN) or internet service (e.g NBN or ADSL)
invoiceNumber	String	Mandatory	The number assigned to this invoice in which this transaction is included
description	String	Optional	Optional description of the transaction used for display purposes
startDate	DateTimeString	Mandatory	Date when the usage period starts
endDate	DateTimeString	Mandatory	Date when the usage period ends
amount	AmountString	Mandatory	The amount charged or credited for this transaction prior to any adjustments being applied. A negative value indicates a credit
adjustments	Array of Objects	Optional	Optional array of adjustments arising from this transaction
{			
amount	AmountString	Mandatory	The amount of the adjustment
description	String	Mandatory	A free text description of the adjustment
}			
}			
}			
}			

Field	Type	Mandatory	Description
links	Object	Mandatory	
{			
self	URIStrIng	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
}			

## Transaction data for a specific account

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### High Level Information

<b>Title</b>	<b>Obtain transaction information for a specific account</b>
<b>HTTP Method</b>	GET
<b>URI</b>	/telco/accounts/{accountId}/transactions
<b>Security Scope</b>	telco:billing:read
<b>Pagination</b>	Not supported
<b>Specific Errors</b>	Not supported – 400 and 422 not expected to be returned
<b>Path Parameters</b>	<b>accountId</b> ID of the specific account requested
<b>Query Parameters</b>	None

### Request Payload

Not applicable

### Response Payloads

*HTTP Response Code: 200 OK*

Field	Type	Mandatory	Description
data	Object	Mandatory	
{			
account	Object		
{			
accountId	ASCIIString	Mandatory	The ID of the account for which the transaction occurred. accountId must comply in accordance with <a href="#">CDR ID permanence</a>
accountName	String	Mandatory	Name of the account
balance	AmountString	Mandatory	The balance of the account
transactions	Array of Objects	Mandatory	
{{			
transaction	Object	Optional	
{			

Field	Type	Mandatory	Description
accountId	String	Mandatory	The ID of the account for which the transaction occurred. accountId must comply in accordance with <a href="#">CDR ID permanence</a>
invoiceNumber	String	Optional	The invoice number on which this transaction is included if it has been issued
description	String	Optional	Optional description of the transaction used for display purposes
transactionDate	DateTimeString	Mandatory	Date and time of the transaction
type	Enum	Mandatory	Type of transaction <ul style="list-style-type: none"> <li>• DEBIT</li> <li>• CREDIT</li> <li>• OTHER</li> </ul>
paymentMethod	Object	Mandatory	The payment details
{			
amount	AmountString	Mandatory	The payment amount
method	Enum	Mandatory	The method of payment. Values include: <ul style="list-style-type: none"> <li>• DIRECT_DEBIT</li> <li>• CARD</li> <li>• TRANSFER</li> <li>• BPAY</li> <li>• CASH</li> <li>• CHEQUE</li> <li>• OTHER</li> </ul>
}			
services	Array of Objects	Mandatory	Array of services to which this transaction applies.
[[			
service			
{			
serviceId	String	Mandatory	The serviceId representing a unique service identifier such as a mobile (MSISDN) or internet service (e.g NBN or ADSL)
invoiceNumber	String	Mandatory	The number assigned to this invoice in which this transaction is included

