

Data Standards Body

Technical Working Group

Decision Proposal 275 – Holistic Feedback Telco Standards

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Context

In alignment with the [designation instrument that incorporates the telecommunication \(telco\) industry](#) into the Consumer Data Right (CDR) regime the Data Standards Body (DSB) proposing technical standards including API end points and payloads covering the information that has been designated.

Between July and October the DSB ran a series of consultations on CDR technical standards. This consisted of several Decision Proposals (DP)'s. Feedback was sought from the community on the payloads. This document provides a summary of the feedback and provides details of feedback for specific payloads including responses. The scope of the initial consultation is outlined below.

- Approach to Telco Standards ([Noting Paper 255](#))
- Telco Endpoints ([DP 256](#))
- Telco Customer Payloads ([DP 257](#))
- Telco Product Payloads ([DP 262](#))
- Telco Account Payloads ([DP 263](#))
- Telco Invoice Payloads ([DP 264](#))
- Telco Billing Transactions ([DP 265](#))
- Telco Balance and Usage Payloads ([DP 266](#))

The end result of these consultations have been published as draft standards as part of the [Consumer Data Standards](#).

It must be noted that, until the rules have been finalised by the Treasury the proposal in this document is only tentative. The Data Standards Body is required to recommend standards only in accordance with the rules and designation.


Decision To Be Made

Provide summarised feedback and decisions on the Telco standards through the consultation process and define candidate API standard specifications.

1. Overall Feedback

Product Types

Feedback was provided on the narrowness and ambiguity on the scope of product “types”. Namely mobile and fixed internet definitions. In response to this feedback and guidance is being sought and no decision has been made yet. At the high level it is suggested these types be updated from MOBILE and BROADBAND to:

- MOBILE 
- INTERNET

These types are derived from the reflection on the types specified in the rules.

Network Subtypes

Feedback was obtained on specifying access network types for products. It’s still being evaluated if this will be beneficial (i.e. a search parameter). If required feedback is requested on the list as specified below.


- NBN (FTTP/ FTTC/ FTTB)
- DSL (ADSL/ VDSL ..)
- CABLE (HFC)
- FIXED_WIRELESS (NBN)
- SATELLITE (NBN)
- FIBRE_OPTIC (Non NBN)

Further feedback from industry is welcomed.

Service ID's

There has been some feedback on Service ID's as these are not standardised in either mobile or internet services. Some operators use [Full National Number](#) (FNN) to represent services. For NBN services this varies. For mobile some providers use MSISDN or a proprietary service ID. For the CDR a unique identifier is required adhering to [CDR ID Permanence](#) requirements.

Usage International and Roaming

Separation of datasets in for International and Roaming. 

2. Telco Endpoints Feedback

Sector name as “telco”

No feedback was provided on the sector name. It was concluded to use the recommended shortened terminology “telco”. This provides brevity and shortens domain URI’s and security scopes

e.g. /telco/abc/xyz

Additional Telco Endpoints

Through consultation on the Accounts payload ([DP 263](#)) it was decided to add the following endpoints. These endpoints are also consistent in the CDR with the energy sector.

Account Payment Schedule

Title	Obtain the payment schedule for the account with the service provider for the current customer
HTTP Method	GET
URI	/telco/accounts/{accountId}/payment-schedule
Authorisation Scope	telco:accounts:paymentschedule:read

Account Concessions


Title	Obtain concession data for the account with the service provider for the current customer
HTTP Method	GET
URI	/telco/accounts/{accountId}/concessions
Authorisation Scope	telco:accounts:concessions:read

Updated Consolidated List of Telco Endpoints


Product Endpoint Summary

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

Customer Data

Customer end points will leverage the existing “common” end points developed for the banking sector. These can be viewed online in the [current version of the standards](#). 

Account Endpoint Summary

- GET /telco/accounts
- GET /telco/accounts/{accountId}
- GET /telco/accounts/{accountId}/payment-schedule
- GET /telco/accounts/{accountId}/concessions 



Invoice Data Endpoint Summary

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

Transactions Data Endpoint Summary

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

Balances and Usage Data Endpoint Summary

- GET /telco/accounts/balance
- POST /telco/accounts/balance 
- GET /telco/accounts/{serviceId}/balance
- GET /telco/accounts/usage
- POST /telco/accounts/usage 
- GET /telco/accounts/{serviceId}/usage

3. Product Data Feedback

Based on the identified data clusters and the assumptions on the inter-relationships between data

Incentives and Discounts



In addition to Bundles/ Plans and Pricing data. Incentives and discounts were explicitly added as properties to the detailed product payload based on the rules and in line with other sectors

Contract

Added a simple contract object. Removed isContract. No contract assumed for product if contract object is absent

Bundles

Removed isBundle field on product. Bundles are included in product detail. A bundle flag is included on the product overview, default is FALSE.

Billing Type

As suggested and a new type "UPFRONT_PAID" for subscription style services.

Usage Type

The "usage" type in product was renamed to "purpose" to reduce ambiguity.

As suggested and a new type "ALL" was added in addition to "PERSONAL" and "BUSINESS".

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Product Feature Category

In response to feedback on different types of features that could be included in a product/ bundle/ plan. An optional category ENUM has been suggested to be added to the "features" component. The category could also be used as a query parameter on the product API. Further feedback is sought.

The category currently includes:

- DATA
- VOICE
- MESSAGING
- HANDSET
- DEVICE
- NETWORK
- ENTERTAINMENT
- SUBSCRIPTION
- SOFTWARE
- OTHER

4. Account Data Feedback


Minimum and Maximum Values

Maximum and minimum values were added to charges

Payment Schedule - digitalWallet

Added digitalWallet to paymentSchedule in line with other sectors

Concessions, Rebates and Grants

In the Account payload consultation industry input was sought on specifics on Concession, Rebates and Grants. No specific data points arose apart from links to Services Australia concession cards. It has been decided without further feedback Rebates and Grants, are to be treated as types of Concessions. A 'type' field ENUM be added with values CONCESSION, REBATE, GRANT with CONCESSION the default if not specified. 

Removed hasConcessions, Grants and Rebates as they are implied by presence in the array.

Accessibility Data


It was noted during the Telco workshop call on 27/10/2022 several respondents mentioned that they do not manage any accessibility data. This will not be included in the technical standards at this stage.

Authorised Contacts

We are awaiting confirmation if authorised contacts will be required in the Telco standards


5. Invoice Data Feedback

PaymentStatus added to Invoice

A "paymentStatus" field was added to the invoice. Values include PAID, PARTIALLY_PAID and NOT_PAID. This is in line with other sectors 

Other Charges

Other charges object was added to the invoice including an amount, description and type. Types included are below.

"SERVICE", "EQUIPMENT", "NETWORK", "HANDSET", "DEVICE", "ENTERTAINMENT", "SUBSCRIPTION", "SOFTWARE", "OTHER" 

Ambiguity on POST method for Invoice (and other) API's

The use of POST API is to allow a client to pass one or more Account ID's to retrieve invoice(s). This is a common pattern adopted in the CDR in cases where there are many accounts but only a subset is

required to be retrieved. A separated list of accountId's is an input parameter to the API and returns a list of invoices for the accounts specified if available. The POST API's support pagination.

This pattern is also used in Transactions, Balances and Usage API's.

Accounts/ Services with no invoices

During a workshop it was noted some services/ accounts do not have invoices. Consideration was added for services that do not provide invoices such as some pre-paid services. It unclear if such services would have an account identifier to leverage the current API. In such instances it would be expected the Invoice API would return an error. For example 404 - Unavailable Telco Account which has been included in the [Telco OAS specification](#) for the CDR. Please also refer to the [standards error codes](#).

6. Transactions Data Feedback

Uplift to Transactions to align with other sectors

Modified transaction payloads to utilise UType pattern used in other sectors. General uplift of Transactions data payload

Transaction Types

Under "other" transaction types an enum is provided including:

SERVICE, NETWORK, EQUIPMENT, METERING, OTHER 

Voucher Top-ups 

Consideration was added for alternate payment methods in Telco such as the use of voucher based transactions. A new type has been added to the paymentMethod ENUM to include VOUCHER.

7. Balance and Usage Feedback

Account Level vs. Services Level Balances and Usage

Do we provide only account level Usage and Balances for some types of accounts where service level data is not available. 