

# Open Banking Implementation Guide

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# Transactions API v1.1.0

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The date ranges of the transactions returned by the GET /TRANSACTION message depend upon 2 date ranges, indicating the intent and requested time periods. The behaviour of the API can change depending on how these are populated (or not) and how they overlap. This is documented in detail below.

When version 2.0.0 is released the behaviour will change and the supporting documentation will change accordingly.

## 1. Pagination and Truncation

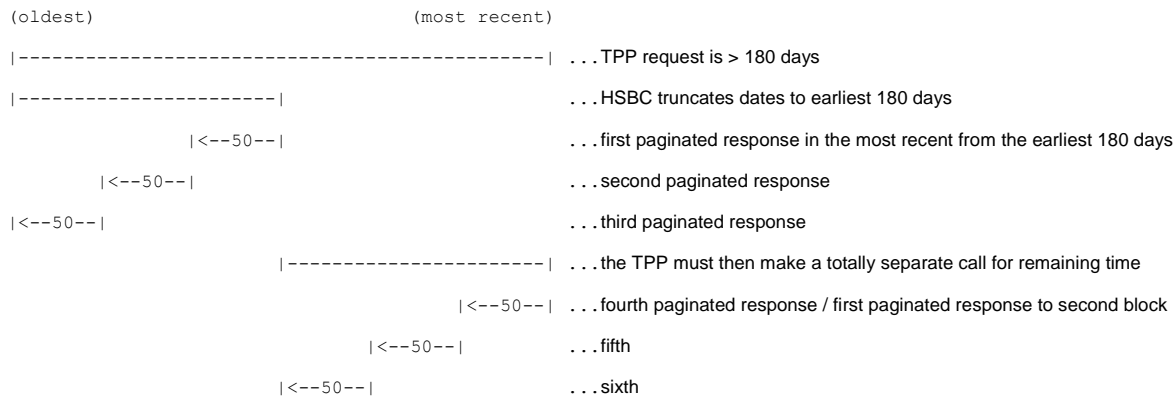
When the TPP sends in its POST /ACCOUNT-REQUEST, it can send in *transactionFromDate* and *transactionToDate*

- ◆ These are the time-limits of the period of transactions that the PSU has consented to the TPP seeing
- ◆ These can be for any duration
- ◆ If the request doesn't have these fields, HSBC defaults to *transactionFromDate* = 2190 days prior (i.e. 6 years), *transactionToDate* = the date the request is sent in

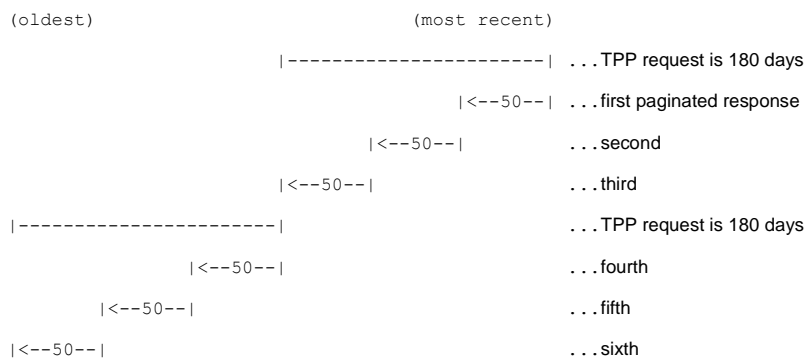
When the the TPP sends in GET /TRANSACTION, it can send in *fromBookingDateTime* and *toBookingDateTime*

- ◆ HSBC will accept a future-dated *toBookingDateTime*, but will truncate it from the time period it returns – termed 'future truncation'
- ◆ If no dates are provided, and the time between the *transactionFromDate* and *transactionToDate* is > than 180 days, HSBC will return using the intent's *transactionFromDate* to the *transactionFromDate* + 180 days
- ◆ HSBC will truncate dates that don't crossover with the intent's *transactionFromDate* and *transactionToDate* – termed 'crossover truncation'
- ◆ If the resulting duration is > 180 days
  - HSBC will restrict to the earliest 180 days; **this is a proprietary HSBC function** – termed 'max duration truncation'
  - If the TPP wants more than the truncated time period, they must send in multiple requests for different date periods (each of which could have paginated responses)
- ◆ To identify that future truncation, crossover truncation or max duration truncation have occurred, the TPP may wish to check the 'self' link returned, which will contain proprietary *fromBookingDateTime* and *toBookingDateTime* fields; it is not possible to identify the reason
- ◆ HSBC returns the transactions in reverse date order (i.e. most recent first)
- ◆ If, after truncation, the time period contains more than 50 transactions, HSBC will paginate the output, and the TPP must use the returned 'next' link

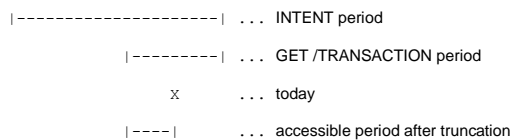
The following shows a worked example of max duration truncation and pagination; note how the truncation in effect requires the TPP to go forward in time, but the pagination within that period goes backwards in time:



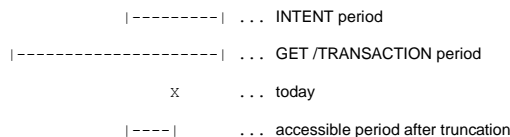
**TPPs may wish to keep their requests less than 180 days and to go backwards in time themselves, so that the following pattern can be achieved.**



The following shows a worked example of crossover truncation and future truncation; there are obviously various permutations of different periods crossing over in different ways, but the same principle applies:



Another example with different relationships:



## 2. Date Filtering

HSBC expects both the *fromBookingDateTime* and *toBookingDateTime* parameters to be passed in; if only one is passed in, it will not be honoured (exact behaviour will be determined according to which parameter and other factors).

## 3. Time Filtering

HSBC does not utilise times in transaction date-times, so the time components of *fromBookingDateTime* and *toBookingDateTime* are ignored, however HSBC will return the *fromBookingDateTime* and *toBookingDateTime* in the 'self' link without the time parameters in them, however it will set them to values of 00:00:00, which is incorrect for the *toBookingDateTime*, as it will actually return data until 23:59:59. To illustrate:

- ◆ Request: date1-time1 date2-time2
- ◆ Period of data actually returned: date1-00:00:00 date2-23:59:59
- ◆ Values in the 'self' link: fromBookingDateTime=date1-00:00:00 and toBookingDateTime=date2-00:00:00

# Disclaimer

This document contains information about the current functioning of certain of HSBC Group's Open Banking API endpoints as at the date of publication (24-07-18). While we have taken reasonable steps to ensure the accuracy, correctness and completeness of the information contained in this document, information is provided on an "as is" basis and we do not give or make any warranty or representation of any kind, whether express or implied. The use of this information is at your sole risk. We shall not be liable for any loss or damage whatsoever and howsoever arising as a result of your use of or reliance on the information contained in this document to the maximum extent permitted by law.