

# How far did the Dutch banks open up in payments and beyond? What APIs are on the menu? A practical overview.

## Open banking has taken off

In January 2018 the revised [Payments Service Directive](#) (PSD2) came into effect. Its aim was to further contribute to better and competitive European payments market. In September 2019 the PSD2 legislation was complemented with [EBA technical regulation](#) regarding among others Secure Customer Authentication.

One of the PSD2 outcomes was to mandate banks to provide open banking services, i.e. for Payments Initiation, Account Information and Confirmation Availability of Funds. These services were to be exposed via Application Programming Interfaces (APIs) and open for use by licensed Third Party Providers (TPPs), respectively being:

- Payment Initiation Service Providers (PISPs),
- Account Information Service Providers (AISPs) or
- Card Based Payment Instrument Issuer (CBPII)

TPPs can be licensed non-bank entities or banks (that are considered to be already licensed). The response of most of the banks was to take first steps in providing more or less basic APIs and associated developer portals with sandbox facilities.

In the Netherlands, the APIs and its business processes vary from bank to bank. Like in several other countries there was absence of detailed standardization guidance.

Until now, PSD2 APIs have mainly been used for Account Information retrievals, but Payments Initiation use cases are also showing growth.

The PSD2 was also a trigger for many banks to modernize their bank integration capabilities and build out APIs for Account Holders and software providers. We call these APIs premium APIs as opposed to the PSD2 APIs.

## After three years of test driving, Open Banking is under review for improvement

In 2022 the PSD2 is being evaluated through public consultation and targeted reviews and the outcome will serve as a basis for potential future proposals (next year) by the Commission for a revision of the PSD2-framework and the introduction of a new and broader framework for Open Finance. As input for the targeted review the Dutch Ministry of Finance has published their [assessment](#) and the conclude among others that the PSD2 has contributed positively to competition, innovation, security, consumer protection and adequate protection of privacy, but recommend better tools for payments users to control authorisations, increase EU-wide API standardization, reconsider PSD2 API usage to be free and expand the scope of PSD2 to savings and credit card accounts.

In parallel the European Payments Council (EPC) has developed and published a (v1.0) [SEPA Payments Account Access Scheme](#). It is an API standardization effort, with PSD2 as baseline and includes value-added services within the context of Open Banking. A next component of the Scheme, defining which APIs will be mandatory and the default business conditions, will be published Q2 2023. The scheme could further enable the uptake of Open Banking.

During this period of reflection, we thought it would be interesting to sample test how far the banks in the Netherlands have developed their PSD2 APIs and beyond. What API services do the (three largest) Dutch banks provide in practice? What APIs are PSD2 TPP related and what are the additional premium services?

**Overview of the Open Banking developments in the Netherlands**

For this overview we investigated the current APIs offered by the three largest Dutch banks, i.e. ABNAMRO Bank, ING and Rabobank. We have made a distinction between PSD2 API’s, open for use by TPPs, and premium APIs for use by Account Holders or their Software Service Providers only.

**Our research was done by assessing the APIs as published on their respective developer portals\***. For reference, we have included the respective links to the bank’s development portal for each API service.

To offset what the large banks are offering in the context of the Netherlands, we also looked at the APIs offered by the Dutch Bank Bunq, known for its highly open architecture.

In graphic 1 below we provide a high-level overview of the APIs offered by the largest Dutch banks, including a summary of what Bunq offers.

**Overview of NL open banking APIs (November 2022) – overview large banks**









Payment Initiation API's				Account Information API's				Other Open Banking API's			
PSD 2 regulated API's				PSD 2 regulated API's				PSD 2 regulated API's			
Single Credit Transfer (SEPA, Multi Currency)	X	X	X	Account information	X	X	X	Authorization & confirmation	X	X	X
Bulk Credit Transfer	X	X	X	Confirmation availability funds	X	X	X	Premium API's			
Bulk Direct Debit Transfers (SEPA)	X			Premium API's				Authorization			X
Additional types such as Instant SEPA CT or Domestic (non-EURO) CT		X	X	Account information	X		X	Payment request	X	X	X
Premium API's				Account event notification	X		X	FX	X		
Single Credit Transfer (SEPA, Multi Currency)	X		X								
Bulk Credit Transfers	X		X								
Bulk Direct Debit Transfers (SEPA)	X		X								
Additional types such as Instant SEPA (Payout) or Urgent	X		X								

**bunq**  
 Bunq seems to have another approach than the three major Dutch banks: an API for most client activities, questions and interventions. Besides the typical PSD2 regulated APIs, Bunq has APIs for opening additional (current or savings) accounts, account maintenance, requesting cards, card maintenance, adding documents or pictures to transactions, and many other API's.

Graphic 1: overview of the open banking APIs offered by the largest Dutch banks and Bunq

\*as per 08.12.2022

In the next graphics we provide the details of respectively the Payment Initiation, Account Information and 'Other Open Banking' APIs that the three largest Dutch banks are offering.

NL Functional Payment Initiations APIs (December 2022) – overview large banks			
Bank	API name (and link)	Users	Remarks
PSD2 regulated			
	<a href="#">Payment Initiation (PSD2)</a>	TPP	<b>Credit Transfers:</b> SCT, Standing Order, Multi-Currency, batch (SCT); <b>Direct debit;</b> SDD (batch)
	<a href="#">Payment Initiation</a>	TPP	<b>Credit Transfers:</b> SCT (or Domestic CT), Instant Payment , Multi-Currency, Standing Order, batch (SCT)
	<a href="#">PSD2 Single Payment Initiation</a>	TPP	<b>Credit Transfers:</b> SCT, Instant Payment , Standing Order, Multi-Currency.
	<a href="#">PSD2 Bulk Payment Initiation</a>	TPP	<b>Batch Credit Transfers:</b> payment files (PAIN.001) which may contain batches with (urgent) SCT, and (urgent) Multi-Currency
Service / Premium API's			
	<a href="#">Business Account Payment</a>	Account Holder	<b>Credit Transfers:</b> SCT, Standing Order, Multi-Currency, batch (SCT); <b>Direct Debit;</b> SDD (batch)
	<a href="#">Business Bulk Payment Initiation</a>	SSP	<b>Batch Credit Transfers:</b> payment files (PAIN.001) which may contain batches with SCT, urgent payments and Multi-Currency (regular and urgent)
	<a href="#">Business Instant Payout</a>	Account Holder	<b>Credit Transfer:</b> Initiate an instant pay-out without requesting authorization within the online banking channel. Rabobank validates certificate, signature info, order details, and consent before executing the payment:-
	<a href="#">Business Direct Debit</a>	SSP	<b>Direct debit;</b> SDD (batch)

\* In this context a TPP is a licensed PISP or Bank  
 \*\* Only if beneficiary bank is NL or BE and participates in SEPA IP scheme  
 \*\*\* Only if beneficiary bank is NL and participates in SEPA IP scheme  
 \*\*\*\* Software Service Providers such as accounting and bookkeeping software, part of 'Rabobank Boekhoudkoppeling'

Graphic 2: overview of the Payment Initiation APIs offered by the largest Dutch banks

The functional scope of the PSD2 Payment Initiation APIs that the major Dutch banks are offering are quite similar - as to be expected for a mandatory service. In general, the banks offer the initiation of SEPA single, standing order and batch Credit Transfers as well as Multi-Currency Payments. There are some differences such as offering a PSD2 API for Batch SEPA Direct Debits (ABN AMRO Bank), processing SEPA Instant Payments (under certain conditions, ING and Rabobank) and one API for all EU-countries the bank is active in (ING).







The Payment Initiation APIs differs more in the domain of the premium APIs.

Rabobank offers Payment Initiation for Accounting and Bookkeeping Software Service Providers (SSPs). The Account Holder will need to consent (once) and the software providers will be able to integrate with the bank on behalf of the Account Holder. They also offer an Instant Payout API. With this API, Account Holders can initiate 24/7 a payment without the need to authorize it separately within the online banking channel.

ABN AMRO Bank has opened up its APIs to its Account Holders for easy integration.

#### What is an API?





An API, Application Programming Interface, is a standardized and secure way for two applications (that for instance run on different platforms or at different companies) to communicate with each other, allowing one to call a service and receive a processed response. In the context of this article the API service requester is a software of a Third Party Provider or a Customer's ERP-system and the provider the Bank's banking system. At times Software Development Kits (SDKs), pieces of code, are offered by the API-provider to facilitate the requester to integrate and use the API. Generally, API-providers provide a developer portal to showcase and detail their APIs as well as provide a sandbox for developers to initially test the use of.

NL Functional Account Information API (December 2022) – overview large banks			
Bank	API name (and link)	Users	Remarks
PSD2 regulated API's			
	<a href="#">Account Information (PSD2)</a>	TPP	<b>Account details:</b> get name, currency; <b>Account balance:</b> current balance and currency; <b>Account transaction information:</b> transaction details
	<a href="#">Confirmation Availability Funds (PSD2)</a>	TPP	Retrieves confirmation on the availability of funds from an account.
	<a href="#">Account Information</a>	TPP	<b>Account details:</b> provides granted accounts and name, currency; <b>Account balance:</b> current balance; <b>Account transaction information:</b> transaction details. Credit card accounts included.
	<a href="#">Confirmation Availability of Funds</a>	TPP	Retrieves confirmation on the availability of funds from an account
	<a href="#">Account Information</a>	TPP	<b>Account details:</b> provides consented accounts and name, currency; <b>Account balance:</b> current balance; <b>Account transaction information:</b> transaction details.
	<a href="#">Confirmation Availability of Funds</a>	TPP	Retrieves confirmation on the availability of funds from an account

\* In this context a TPP is a licenced PISP/AISP or CBPII or Bank

Graphic 3: overview of the Account Information APIs offered by the largest Dutch banks

The PSD2 Account Information and Confirmation Availability of Funds APIs are quite similar for the three major banks, except for ING that also offers a PSD2 card information API.








NL Functional Account Information APIs (December 2022) – overview large banks			
Bank	API name (and link)	Users	Remarks
Service / Premium API's			
	<a href="#">Business Account Insight</a>	Account Holders	Enables business clients to receive a complete overview of real-time transaction details and balances from their Dutch ABN AMRO accounts into ERP/TMS.
	<a href="#">Business Account Notifications</a>	Account Holders	API (early access status) offers alerts which can automate the cash management process. It can service ABN AMRO Account Holders with various types of account events. Trigger notifications can be defined by the Account Holder and activate machine to machine processes at the Account Holder side.
	<a href="#">IBAN-Name check</a>	Account Holders	Obtain confirmation that the IBAN-Name combination match before initiating a payment. Powered by Surepay. Also for non-ABN AMRO accounts.
	<a href="#">Business Accounts Insight</a>	SSP	Receive account information of account holders with a Rabobank Business Account, covering transaction, balance and account detail information.

\* 'Early access availability' only

\*\* Software Service Providers such as accounting and bookkeeping software, part of 'Rabobank Boekhoudkoppeling'

Graphic 4: overview of the Account Information APIs offered by the largest Dutch banks

In the premium domain of Account Information APIs, Rabobank offers Account Information APIs to (non-licensed) Accounting and Bookkeeping SSPs and ABN AMRO Bank to its Account Holders for easy integration. ABN AMRO Bank also provides an interesting notification subscription (in early access) w.r.t. account events for transactional activities (such as amount, date, descriptions) and balance threshold changes. This API can be used for example to integrate customer support processes such as notifying customer support staff that a (Instant) payment has been made to trigger can release goods. Lastly, they have opened up the Surepay service IBAN-Name (confirmation of payee) check, allowing for instance corporates to validate payees.

Other NL Functional Account Open Banking APIs (December 2022) – overview large banks			
Bank	API name (and link)	Users	Remarks
Service / Premium API's			
	<a href="#">FX Trade</a>	Account Holder	Receive real-time foreign exchange rates, retrieve the status of requested quotes, and initiate currency conversions.
	<a href="#">Tikkie</a>	Account Holder	Create and send payment requests which initiates an <a href="#">iDEAL payment</a> .
	<a href="#">Transaction Screening</a>	PSPs	Enable to pre-screen transactions against sanction lists via secure access to ING's screening system and can be integrated into consumer payment flows.
	<a href="#">Payment Request</a>	Account Holder	Create and send payment requests which initiates an <a href="#">iDEAL payment</a> .
	<a href="#">Payment Request</a>	Account Holder/SSP	Create and send payment requests which initiates an <a href="#">iDEAL payment</a> .
	<a href="#">Rabo Smart Pay</a>	Merchant	Rabo Smart Pay services API to integrate webshops with the access functionality of Rabo Smart Pay.
	<a href="#">Smart Pin Backend API</a>	Merchant	This API is designed for use by merchants who want to manage their data of the payment terminal SmartPin within their own application/software.

\* Software Service Providers such as accounting and bookkeeping software, part of 'Rabobank Boekhoudkoppeling'

Graphic 5: overview of the Open Banking APIs offered by the largest Dutch banks

In the realm of 'other open Banking' APIs the three major banks all offer an API to initiate a Payment Request or Tikkie (ABN AMRO Bank, including a Tikkie-refund), based on iDEAL.

ING has APIs for its PSP-customers to facilitate the pre-screening of transactions against sanction lists.

Rabobank offers APIs to integrate the Smart Pay Merchant Solution.

## The open bank Bunq API offering

Bunq offers APIs for PSD2 TPPs and its (Bunq) customers. The scope of the payment APIs are quite similar to the large banks (logically) and cover SEPA (single and batch), Multi-Currency Payments and a Payment Requests. The same holds for Account Information APIs. Bunq makes a difference with its multitude 'account & card management' APIs, open to its customers for example to get Bunq invoice information, manage attachments to an account or payment, subscribe to many types of notifications, manage SEPA DD whitelists and manage credit or debit cards (eg order new card, change pin, get CVC2). Bunq has been able to do so because of their open architecture. We assess this not to be an easy task within a major bank's (legacy) architectures.

## Conclusions

### Overall conclusions and outlook.

After the mandated PSD2 step change, the development of additional Open Banking API's by the large banks has slowly taken off. As a logical next step, they have extended their APIs to modernize bank integration for Account Holders or Software Service Providers. ING does not (yet) seem to facilitate customer-bank integration with (premium) APIs. More creative APIs are gradually surfacing in the 'premium' domain for example at the Rabobank with the Business Instant Payout and Smart Pay Merchant Services APIs and at ABN AMRO Bank with APIs for cash management purposes (FX trade and account event notifications).

For the future we expect a continued drive for better standardization with improved customer journeys (eg relating to the Secure Customer Authentication process). This will fuel among others Account-to-Account payments as an alternative to cards payments. Interesting in this regard, are

developments in the UK where the Variable Recurring Payments (VRP) is surfacing. This is a form of payment instruction that can be set up and used to make a series of future payments. It is similar to the SPAA Dynamic Recurring Payments. Account Information APIs should also be extended to Savings and Credit Card Accounts.

In the domain of business banking we expect further extension of cash and treasury management premium APIs. This will allow corporates to easier integrate with their bank(s), improve management of their account and cards, real time information and in general better automation of their processes. See for example what [Natwest has developed as API-services](#).

Beyond open banking, in the domain of Open or Embedded Finance a lot of interesting new API service lie ahead as customer interaction further digitalizes. Offering an invoice or consumer loan or an insurance at a relevant point in a merchant or corporate customer journey is very interesting. Or the management of the account from the Account Holder ERP would increase efficiency and reduce risks.

As Open Finance progresses, we expect banking to initially become increasingly competitive. This will force banks to make more clear strategic choices. Do we want to be a bank that focused fully on customer intimacy (and shops with other banks to offer a complete set of banking products) or on operational excellence (large scale factories) or be an innovation leader, offering specific banking services and be a champion at it?

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