

Functional Information – Business Account Insight API

Integrating an API in your business will not only take IT capacity. Careful (re)design of your business processes, business requirements and customer impact is essential for a successful integration.

The reference documentation will provide all technical information the IT developers need. The download on this page will provide functional information you will need to:

- ▶ Work out the business case;
- ▶ Embed this API in your business processes;
- ▶ Construct your business requirements;
- ▶ Construct security requirements;
- ▶ Construct a maintenance plan;
- ▶ Understand the underlying bank product you are using through this API.

If you have any questions or feedback, please feel free to [contact us](#).

When you have not worked with APIs before and need to understand what they do, we advise you to read this [page](#).

All information in this document is presented in English. Our customer support team supports in both English and Dutch.

What is in this document?

This document is aimed at providing additional information next to API summary and the reference documentation information.

- ✓ This document contains information on
 - ▶ Functional diagrams
 - ▶ Types of transactions
 - ▶ Process diagrams
 - ▶ Security remarks
 - ▶ Business requirements
 - ▶ Information on the underlying reporting product
 - ▶ Versioning

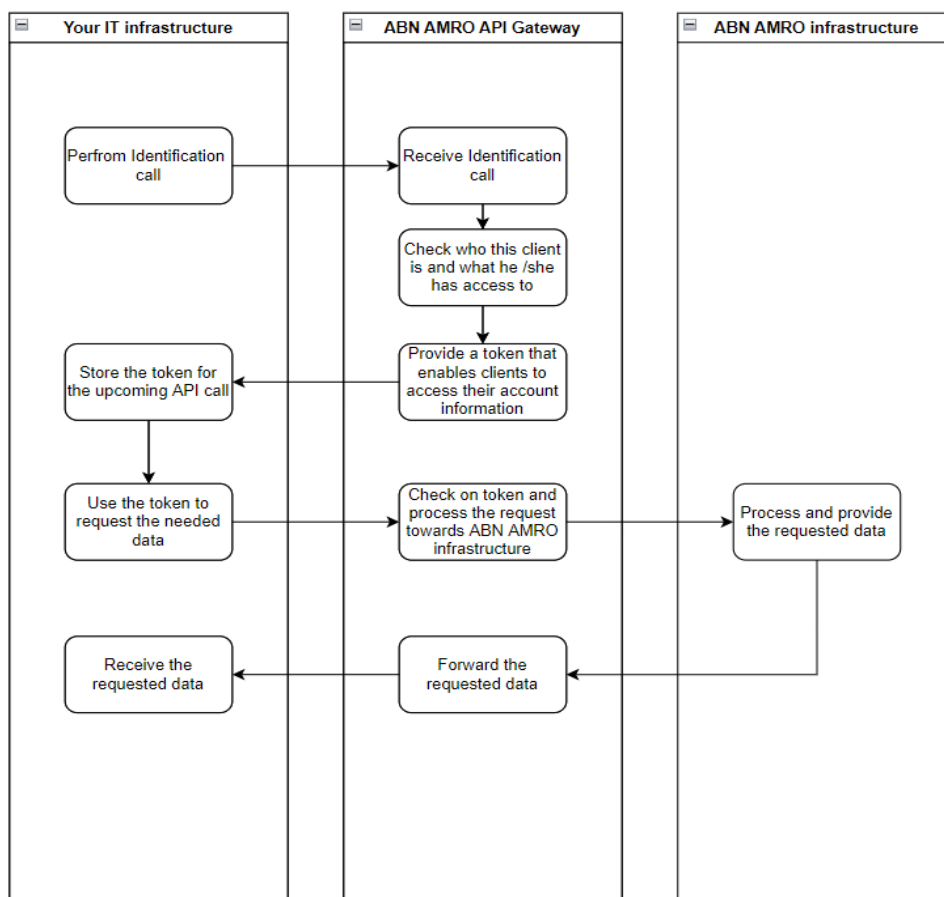
Functional Diagrams

The Business Account Insight API knows 4 different functionalities, or 'end-points', which can be addressed and implemented separately. Here you will find an overview of these 4 end-points. Firstly we will dive into the *API call process*. Secondly we will provide an overview of the *data points* and additional information which you will need to understand them.

API Call Processes

API Call Success Process

API's have many ways of working that differs per application. Knowing what process you are about to implement is very useful and will aid in having a high-over view of the implementation. This in turn will help with setting up business logic and help with trouble shooting. This sequence diagram provides an overview of how a successful API call is processed, displayed per actors in the chain.



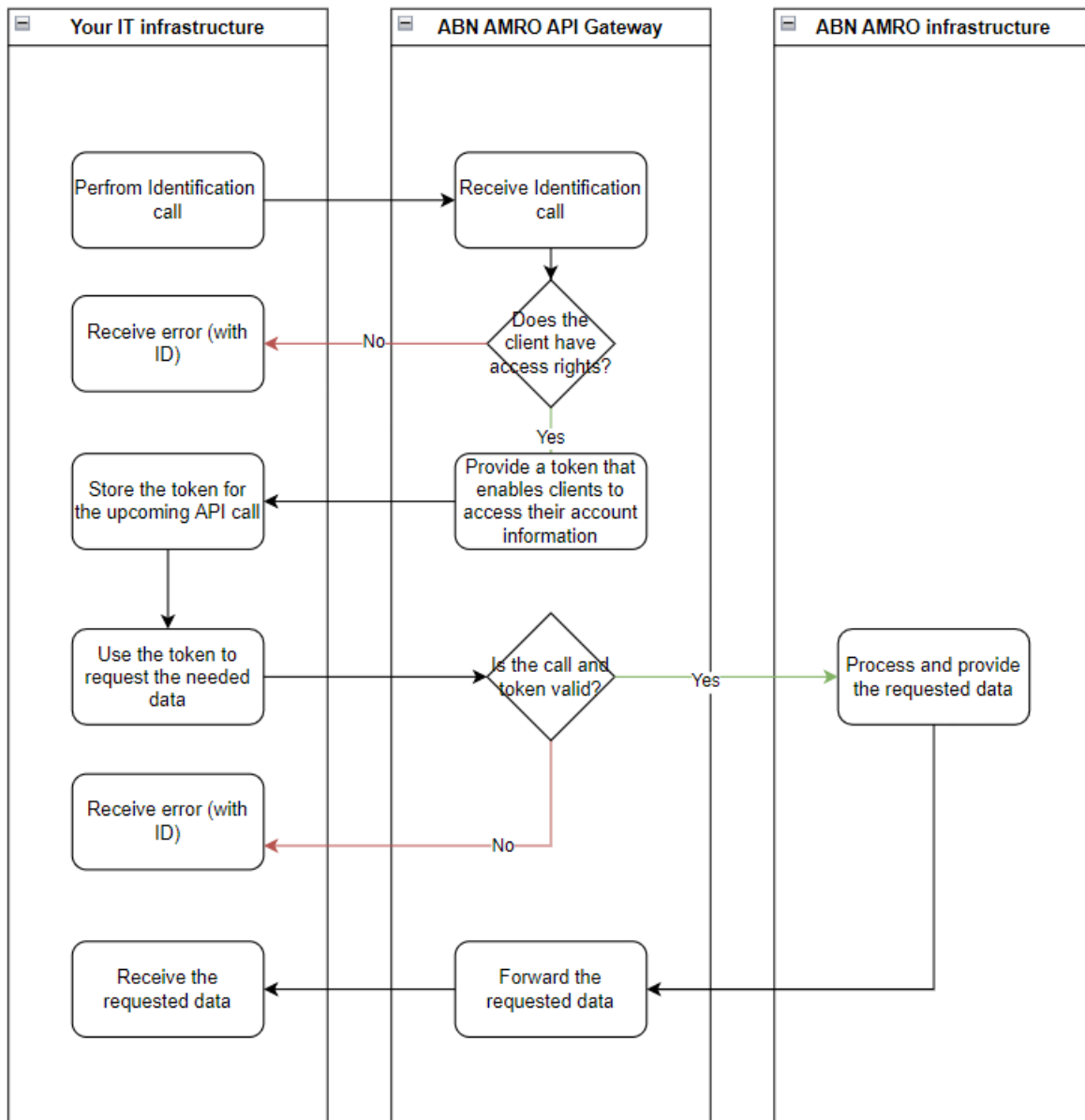
In this process your implementation will generate two moments of communication towards our APIs.

1. Identification / Authentication call
2. The API call to the Business Account Insight API.

API Call Success Process including Error responses

Not all API calls will succeed. Embedding error flows in your implementation is a must for successful and sustainable processing. What data point we provide for these errors are offered in the *data points* chapter.

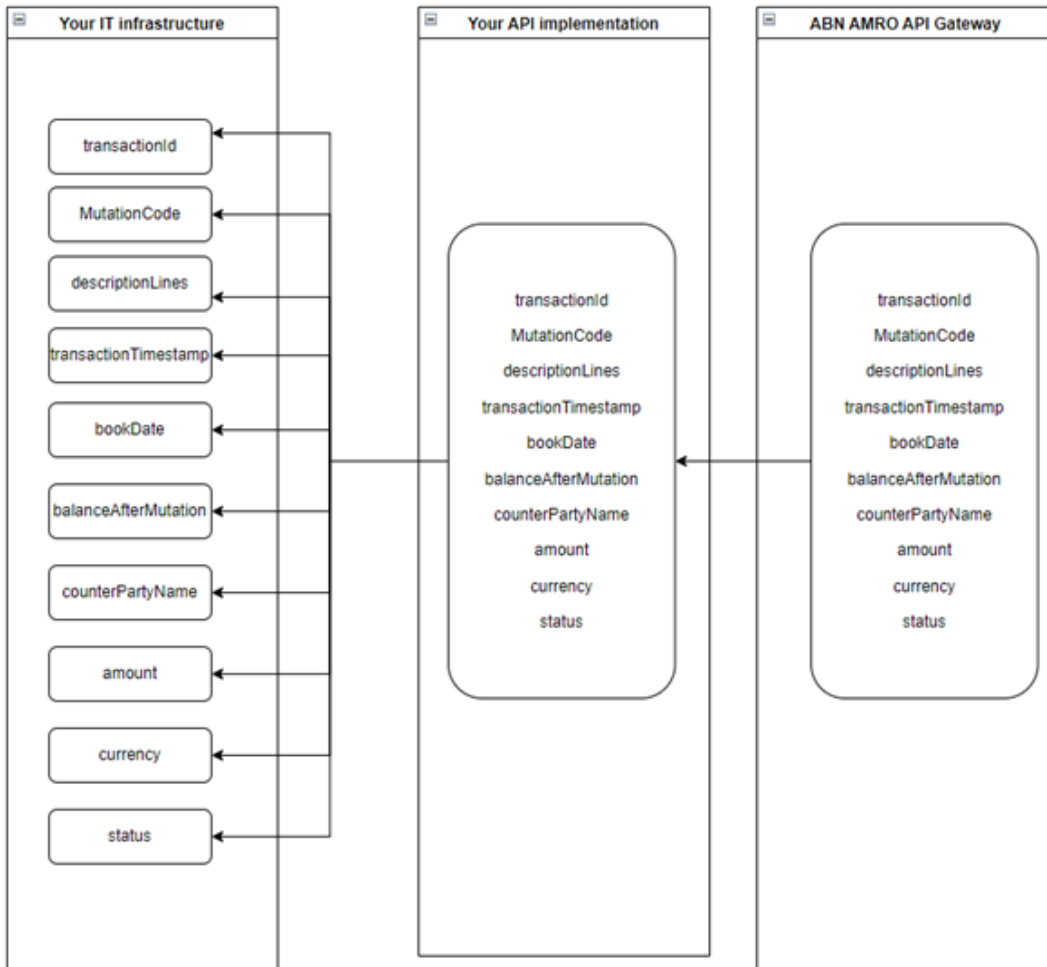
This sequence diagram provides an overview of how an error API call is processed displayed by which actors take part.



Error mapping and logging is a very important part of your implementation and should be monitored carefully. For every type of error response we provide an error response code, with which you will be able to understand why this action did not succeed. We advise to take up the error response data in your BI dashboards.

Import mapping

When a call has been successful you will be provided with data. This data is unstructured, which means it does not have a designated data type assigned to it. For your infrastructure to understand what the data means your implementation might need some import mapping. This is a step in which the imported data is labelled and stored in the way that is specific to your existing set-up.



Data points

Get Account Transactions

1. What it does.

With this end-point you will be able to retrieve all transactions performed on your account. This means all incoming and outgoing mutations. The data is not provided in a pre-structured fashion as with CAMT.053, but in an 'unstructured' way (so called JSON). This provides many benefits to the developer in integrating the data in an existing process or architecture. This also means that this API will not deliver any other pre-defined structure like CAMT.053 or MT940.

2. What data you can get with this API endpoint

All data points that are delivered can be found by clicking this [link](#), scrolling down till you see this dropdown window and clicking on it.

Responses

> 200 Successful operation

Please be aware that you need to click on the > to see the full list of data points

Additional information on *Mutation Codes* can be found [here](#).

Error response mapping is just as important as success response mapping. A complete list of the error responses provided by this endpoint can be found just underneath the **200 Successful operations** dropdown and looks like this:

> 400 Bad request/parameter error Detailed error list:

Error responses are provided in 400 (4xx) or 500 (5xx) codes. It is very useful to know that all 4xx responses indicate that an error was made in making the API call. A 5xx call indicates that the error originates from ABN AMRO's side.

Get Account Balance

1. What it does.

With this end-point you will be able to retrieve the current balance on your account. It will be presented in the currency the account is based on.

2. What data you can get with this API endpoint

All data points that are delivered can be found by clicking this [link](#), scrolling down till you see this dropdown window and clicking on it.

Responses

> 200 Successful operation

Please be aware that you need to click on the > to see the full list of data points.

Additional information on *Balance Types* can be found [here](#).

Error response mapping is just as important as success response mapping. A complete list of the error responses provided by this endpoint can be found just underneath the **200 Successful operations** dropdown and looks like this:

> 400 Bad request/parameter error Detailed error list:

Error responses are provided in 400 (4xx) or 500 (5xx) codes. It is very useful to know that all 4xx responses indicate that an error was made in making the API call. A 5xx call indicates that the error originates from ABN AMRO's side.

Get Account Details

1. What it does.

With this end-point you will be able to retrieve detail information of your account. It will be presented in the currency the account is based on.

2. What data you can get with this API endpoint

All data points that are delivered can be found by clicking this [link](#), scrolling down till you see this dropdown window and clicking on it.

Responses

> 200 Successful operation

Please be aware that you need to click on the > to see the full list of data points.

Error response mapping is just as important as success response mapping. A complete list of the error responses provided by this endpoint can be found just underneath the **200 Successful operations** dropdown and looks like this:

> 400 Bad request/parameter error Detailed error list:

Error responses are provided in 400 (4xx) or 500 (5xx) codes. It is very useful to know that all 4xx responses indicate that an error was made in making the API call. A 5xx call indicates that the error originates from ABN AMRO's side.

Get Batch Transactions

1. What it does.

With this end-point you will be able to retrieve detail information of a transactions batch performed for your account. This entails all types of batches, including salary batches.

2. What data you can get with this API endpoint

All data points that are delivered can be found by clicking this [link](#), scrolling down till you see this dropdown window and clicking on it.

Responses

> 200 Successful operation

Please be aware that you need to click on the > to see the full list of data points.

This data set is made of a hierarchy:

- Meta information on the batch (open the > to see Individual transactions)
 - Individual transactions (open the > to see Creditor or Debtor)
 - Creditor information
 - Debtor information

Additional information on *Mutation Codes* can be found [here](#).

Additional data on *Reason Codes* can be found [here](#). (please note that the only Reason Codes provided by this API are the codes that indicate rejection before settlement.)

Error response mapping is just as important as success response mapping. A complete list of the error responses provided by this endpoint can be found just underneath the **200 Successful operations** dropdown and looks like this:

> 400 Bad request/parameter error Detailed error list:

Error responses are provided in 400 (4xx) or 500 (5xx) codes. It is very useful to know that all 4xx responses indicate that an error was made in making the API call. A 5xx call indicates that the error originates from ABN AMRO's side.

Types of transactions

The previous chapter described how you can request all transactions that have been made on your account. In this chapter we provide you with more information about the different types of transactions.

With the introduction of SEPA (Single Euro Payments Area), we have one European payment market with uniform payment products. No more separate rules per country, but the same guidelines for each country. This makes it a lot easier to pay within the SEPA countries. All countries from the European Union belong to the Single Euro Payments Area, supplemented by a number of additional countries. All the participating countries can be found [here](#).

SEPA Direct Debit

With a SEPA direct debit, an amount is automatically debited from the payer's bank account on a one-off or recurrent basis. This is only allowed after the payer has given their consent by means of a mandate. The mandate can be done on paper or using an eMandate.

There are two different types of direct debits: SEPA core direct debit or SEPA business-to-business direct debit. Core direct debit is for collections from your personal and business clients. The payer has the option of having the direct debit refunded within 8 weeks of the debit.

Business-to-business direct debit is for collections from your business clients. The payer can't have the direct debit refunded, but can refuse it up to and including the day the direct debit is debited from their account. Before the direct debit can take place, the payer must register the details of the mandate with their own bank.

A direct debit on a one-off basis is used if you want to debit an amount from your client once only. You will need a new mandate for each direct debit transaction.

A direct debit on a recurrent basis can be used if you want to debit recurrent payments from your client, such as for a periodic subscription, insurance premium, membership fee or rent. The payer gives a recurrent direct debit mandate that allows you to debit amounts multiple times.

SEPA Credit Transfer

SEPA credit transfers are used within the Netherlands and other SEPA countries. There are single credit transfers or batches. Many of the single credit transfers can be credited to a recipient's account within seconds: every day of the year and at any time of the day, including evenings and at the weekend. Most of the Dutch banks and a large part of the other European banks support making superfast payments. An urgent payment is possible for payments that cannot yet be processed immediately.

With batch payments you can make multiple payments at once and save time. If you create a payment file and send it to your bank, payments with the same due date are automatically debited as one total amount. The batch of transactions are usually credited to the recipient's account within one business day.

If you often make payments to the same account, a standing order is a handy way of ensuring you never forget another payment. With a standing order you make an automatic recurring payment at a pre-determined day. And if you always want to keep a certain amount in your account and automatically transfer the surplus, you can opt for a standing order with different amounts.

Cross Border Transfer

A cross border transfer is a credit transfer outside SEPA or in a currency other than the euro. For a transfer to a bank account held at a bank outside SEPA, you always need the BIC of that specific bank. To receive a cross border transfer, the payer needs your IBAN number and the BIC of ABN AMRO.

There could be restrictions on transfers to certain countries, meaning transfers may not be possible or may be processed with delays. The restrictions may be imposed by the Dutch government, by another country, by us or by another bank.

End of Day Balance

In a traditional end of day report there is always a separate mutation in which the end of day balance is stated. However, the Business Account Insight API only sends the actual transactions that take place on the account, so a separate end-of-day balance cannot be stated.

However, the current balance is sent with each transaction, therefore the last transaction of the day automatically contains the end of day balance.

Process information

Usually an API implementation does not only include the construction of an application utilizing the API. Many types of processes are impacted and need to be embedded. This chapter will provide vital information needed for a successful integration.

Onboarding

In order to use our API we have set up a process that takes into account all aspects of the implementation. From legal and security, to technical and support. All this information can be found in this [PDF](#).

Billing

After the initial onboarding all fees are deducted from the IBAN which is used to set up the API contract and is shown on the monthly invoice 'Products and Services'. This IBAN is also used when more than one account number is used under this contract.

Support

Need technical help?

In case you need technical help, please visit our Support page under "Support" at the top menu on the Developer Portal. If your question is not stated at the [FAQ's](#), please create a [Support Ticket](#).

Questions regarding the status of a transaction or account can be answered by your regular client service desk.

Tip: If you have multiple questions, we advise you to create separate Support Tickets per question. This way we can make sure your question is routed to the corresponding colleague of ABN AMRO's Developer Support depending on your specific question. Also be aware, when discussing potential privacy related content, to create a ticket when logged in using your validated account. That way our staff can answer your questions sooner and more safely.

Note: Please note that developer support will only be provided on business days. Our general response time for support tickets is within two business days.

Incidents

In case you are experiencing any issues with one of ABN AMRO's API product, please visit our [Status & Maintenance](#) page under "Basics" at the top menu on the Developer Portal. This page describes what the issue is and the duration of it.

Note: In case of planned maintenance and breaking changes on the API product(s), ABN AMRO's Developer Support will timely inform you using the email address that is registered under your ABN AMRO Developer Account.

Maintenance

In the event that anything on the set-up of the contract needs to change you can contact our service department through this [link](#). Subjects that belong to this category are:

- ▶ Adding or deleting an account;
- ▶ Updating a certificate;
- ▶ Chang contract details.

Off-boarding

1. Plan when your company wishes to offboard, where the following step should be the last steps in the process;
2. Use the maintenance ticket to indicate that you wish to terminate the contract;
3. Our service team will provide an offboarding contract;
4. The document can be signed digitally;
5. You will receive confirmation of the termination of the service.

Security remarks

Security is of our utmost importance! Especially when it comes to transactions and its processing we take all precautions to provide reliable and safe services. When providing an API some of the security aspects is either shared or transferred to you as a client. We strongly advise to have a solid security plan for your integration so we have a complete and safe processing chain.

Access and Identity management

When designing the solution for your implementation of the Business Account Insight API be aware that the Access and Identity management regarding the transaction information should be part of it.

The Business Account Insight checks if it is the right company requesting the transaction information. It does and cannot check which person is viewing the data.

Certificate Management

If your company is not using an Integrator for the implementation, your company will be obligated to use a TLS-MA certificate when using the Business Account insight API.

The used certificate will have an end-date to its validity, after which the API will stop working. We advise to have monitoring in place on the timelines for the expiration date, as well as a process design for the change of this certificate. Renewal of the certificate can be requested via this [link](#).

Business Requirements

When designing your implementation of the Business Account Insight API we advise to take the following aspects in consideration.

ABN AMRO requirements

In order to obtain access for your account through the Business Account Insight API, ABN AMRO Bank holds several requirements:

- ▶ The ABN AMRO Business Account is based in The Netherlands
- ▶ A contract for Internet Banking Business or Access Online must be active
- ▶ A TLS certificate of the type Organisation Validation (OV) or Extended Validation (EV) from Digicert, Quo Vadis, Sectigo or Entrust without wildcard options.
- ▶ The organisation name issued on the certificate must correspond to the name of the API contract holder.

Clarity on the amount of API calls for your use-case

The amount of successful API calls and amount of reported transactions your implementation makes on a monthly basis, will determine the pricing for this API. This means that obtaining your data in real-time (for instance every minute) will bring a higher cost then obtaining the data once every hour.

Because of this we advise to define what is needed for your use-case, in order to make the business case for the implementation (if needed).

Error response retries

Having a clear requirement on how your implementation handles error responses from the Business Account Insight API will aid keeping control on your environment costs. Technically it is possible to retry a failed API call endlessly, however this will bring higher costs and a lower user experience.

Rate limiting

Please be aware that the Business Account Insight API holds a rate limit of 4 calls per second per Client_ID. API calls will result in errors when this amount is surpassed.

Transaction History

When implementing the Business Account Insight API often new databases or applications are also being used. These new environments do not hold the historic transaction data. This often results in obtaining the historic data over the API and consequently more calls than indicated when setting up the pricing tier. We advise to inform ABN AMRO about what your strategy is in this regard when onboarding, so we can take note of this.

Storing sensitive data

Often implementations on the Business Account Insight API are done and maintained by third parties, or 'integrators'. It is very important to take note that the transaction data that is requested through the API is subsequently stored, or temporarily held in the application of this provider. We advise to check the policy of your company regarding this topic. (if applicable)

Monitoring the implementation

ABN AMRO holds SLA's and agreement on the operations for the Business Account Insight API. Monitoring on the API is in place to check on down-time and error responses.

ABN AMRO advises to monitor your implementation on the API next to this, as the solution as a total includes the implementation on the clients' side.

Available account types

The Business Account Insight API provides its services based on these types of accounts

- ▶ Current account
- ▶ Savings account

Please be aware that, in order to use batches as a method of payment and the Get Batch Transactions endpoint, your company needs to have a batch processing contract with ABN AMRO first. Information on this product can be provided by your Cash Management Consultant or through this [link](#).

Available formatting

The Business Account Insight API provides all data in the form of JSON. Please check whether the application consuming the transaction data is able to work with this formatting. It might expect MT940 or CAMT.053, which this API does not provide.

Versioning

The API, like many other applications, is not static. Optional updates, security patches and mandatory upgrades of the APIs are made by ABN AMRO. This might require you to update the application that is built by your company based on the API.

Minor version changes

When ABN AMRO releases a new version on the API which provides new optional field of functionality we speak of a minor version release. The release is optional as it does not impact the correct working of the API implementation.

Major version changes (code breaking)

When ABN AMRO releases a new version of the API that impacts the functioning of the API implementation in such a way that the API will no longer work, we speak of a 'code breaking' or major version release. In this case actions will be required in upgrading your implementation of the API.

Communication

In both the minor and major releases we will notify you by e-mail, using the address you have registered on the developer portal.

In the event of a code breaking release we will provide information on the new version, along with timelines on go-live and depreciation (deletion of) of the 'old-version'.

To this end ABN AMRO will update the sandbox, so your developer can test the update in your application.

How many versions per year

In order to build your business case for the use of the API, we advise to take into account that major releases will be made through the year and your developers will need to provide maintenance on your application. We will provide a maximum of 2 major releases a year.

Disclaimer

ABN AMRO Bank N.V. ("ABN AMRO") is located at the Gustav Mahlerlaan 10 (1082 PP) in Amsterdam (The Netherlands). The phone number is 0900 - 0024*. The webpage of ABN AMRO is abnamro.nl. The webpage of ABN AMRO's Developer Portal is developer.abnamro.com.

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* You pay your usual calling fees for this call as determined by your telephone provider.