NextGen PSD2

A European Standard for PSD2 XS2A
The NextGenPSD2 Initiative is a dedicated Task Force of the Berlin Group with the goal to create an open, common and harmonised European API (Application Programming Interface) standard to enable Third Party Providers (TPPs) to access banks accounts under the revised Payment Services Directive (PSD2). In a unique partnership, participants in NextGenPSD2 are working together with the common vision that open and harmonised PSD2 XS2A interface standards for processes, data and infrastructures are the necessary building blocks of an open, interoperable market. True interoperability is an essential component of competitive pan-European PSD2 XS2A services that will contribute to further progress towards the European Single Market and benefit the payments industry in general and European consumers and businesses in particular.

Why is a standard API crucial for Access-to Accounts (XS2A)?

APIs are the cornerstone of the modern digital economy. Every time you buy from Amazon, use an App, make a payment, you are probably using APIs. APIs are used internally by businesses to share data between branches, customers, and suppliers. APIs are used externally by third parties to bring data together in new and exciting ways. Certain abilities make their usage so widespread:

- Ability to properly identify those, who access the resource
- Thus, protecting customer data from illegitimate access
- The possibility to publish it and allow widespread open source usage

So relying on APIs for initiating a payment or sharing information makes a lot of sense. However, PSD2 doesn’t state how APIs should look like in detail. So each bank could create and publish their own implementation. If you now imagine more than 4,000 banks in Europe, it is easily comprehensible that this is not a sustainable development. The efforts to implement and continuously maintain these vast amounts of interfaces is not viable and would impede any innovation based on XS2A. Thus standardisation is key to success.
Benefits to stakeholders using a standardised API

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<td>• Reduction of fragmentation risk across Europe</td>
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<th>TPPs and ASPSPs</th>
<th>Regulators</th>
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<td>• A single standard reduces implementation costs and efforts for ongoing maintenance</td>
<td>• Meet one of PSD2 core objectives to foster innovation</td>
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<td>• Cost savings on development, maintenance, enhancement and testing</td>
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<td>• Cost-effective compliance to PSD2</td>
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<th>Consumers and Business</th>
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<td>• Reachability to European banks with a harmonised framework</td>
<td>• Allows better control and security when opening up their data to the benefit of their customers</td>
<td>• Profit from innovative new services that are enabled with XS2A</td>
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<td>• Uniform access to the market</td>
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Why rely on the Berlin Group NextGenPSD2 standard API?

- **comprehensive** • covering the roles of Payment Initiation, Account Information and Confirmation of Funds
- **flexible** • covering a diverse range of strong customer authentication means
- **efficient** • re-using existing banking standards as e.g. ISO 20022
- **modern** • based on newest technologies like RESTful, JSON etc.
- **secure** • using identification standards as eIDAS
- **simple** • clear layered model where each actor can choose the parts relevant to them
- **pan-European** • actors from all over Europe have contributed to the framework
- **open** • it's publicly available for everyone

![Diagram showing the flow of services](image)
Participants of the Berlin Group NextGenPSD2 Initiative (as from February 2018)

The ‘Berlin Group’ is a pan-European payments interoperability standards and harmonisation initiative with the primary objective of defining open and common scheme- and processor-independent standards in the interbanking domain between Creditor Bank (Acquirer) and Debtor Bank (Issuer), complementing the work carried out by e.g. the European Payments Council. As such, the Berlin Group has been established as a pure technical standardisation body, focusing on detailed technical and organisational requirements to achieve this primary objective.

The Berlin Group first met in Berlin, hence its name, in October 2004 and currently has participation of 24 major players in the payments industry from 7 different euro-zone countries and from Sweden, Denmark, Norway, Iceland, Latvia, Estonia, Lithuania, Turkey, Bulgaria, Hungary and Serbia, together representing more than 25 billion card-originated transactions annually within the Single Euro Payments Area (SEPA). The participants are banks (ASPSPs), banking associations, payment associations, national and international payment schemes, and interbank processors working in SEPA.

The Berlin Group is not engaged in the implementation of standards within or between schemes. Participation to the Berlin Group does not imply either endorsement of any of the solutions identified, or a commitment to implement them. Decisions on the implementation of the standards delivered by the Berlin Group are left to individual market participants.

More information: [www.berlin-group.org](http://www.berlin-group.org)
Fact Sheet

**NextGenPSD2**

**Core services (italic is optional)**

**AISP**
- Establish account information consent
- Get list of reachable accounts
- Get account details of a list of accessible accounts
- Get transaction information for a given account
- Get balances for a given account

**PIISP**
- Get confirmation on the availability of funds

**PISP**
- Initiation of a single payment
- *Initiation of a future dated single payment
- *Initiation of a multiple/bulk payment
- *Initiation of a recurring payment

**Technical Characteristics**

**Transport Protocol**
- HTTP version 1.1
- TLS version 1.2

**Applicative Protocol**
- REST

**Authorisation Protocol**
- OAuth2 (optional)

**Character set**
- UTF-8

**Data structures**
- JSON & XML

**Data model origin**
- ISO 20022

**Identifier naming convention**
- ISO 20022 extended names

**Security Features**

**TPP authentication by the ASPSP**
- Based on TLS
- Electronic signature at application level (at ASPSP discretion)

**ASPSP authentication by the TPP**
- Based on TLS

**PSU**
- Delegated by the TPP to the ASPSP
- Based on TLS

**Data encryption**
- Based on PSU related data

**Fraud detection support**

**Documentation**

Technical specifications available at https://www.berlin-group.org/psd2-access-to-bank-accounts