

Open Banking:  
SIX sets new standards for  
the Swiss financial sector



**PROJECT DETAILS**

**Industry:** Financial industry

**Users:** Financial institutions, software and service providers as third-party providers (TPP)

**Team:** 5 software engineers (2 of them mimacom), product owner, requirements engineer

**Development period:**

January 2018 – today (ongoing development)

**PRODUCTS / TECHNOLOGIES**

- Angular
- Java 11
- Openshift
- Spring Boot
- Swagger API

SIX has developed the open banking solution b.Link for the Swiss financial sector. As an innovative solution, open banking will revolutionize the financial sector over the next few years:

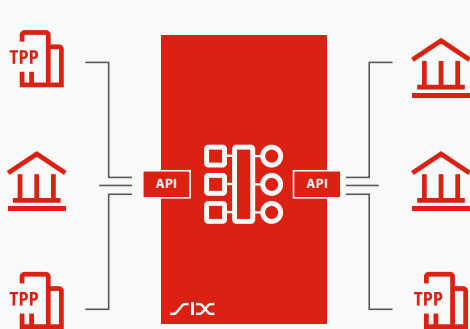


Financial service providers are transforming from self-contained banking offerings to platform providers that offer their customers exceptional user experience. mimacom has provided a decisive basis for modern processes with the latest technologies thanks to intelligent connections.



*The great harmony between the project team of SIX and mimacom is reflected in the result: Together, we have succeeded in developing b.Link as an innovative API platform for real-time open banking and successfully introducing it as a market-ready solution. b.Link forms a solid foundation with the latest, expandable technology for new participants and services. This offers all participants a sustainable competitive advantage.*

**Jean-Pierre Groner**, Head IT Management Payments at SIX



-  **A technical platform and interface**

---

-  **APIS standardized by SIX**

---

-  **Transparent and digital end customer consent process**

---

-  **Entrance examination executed by SIX**

---

-  **Participants only need **one contract with SIX****

---

-  **One central platforms provides **security, efficiency & agility****

b.Link connects financial institutions and third-party providers.

**Background → b.Link supports innovation in the Swiss financial industry**

b.Link is an open banking platform for the standardized and secure exchange of payment transaction data and account information between financial service providers and software as well as service providers, so-called third-party providers (TPP). Standardized interfaces (API) within this open banking platform connect the participants with each other and thereby enable simple and efficient communication. As a result of the increased cooperation, financial institutions and TPPs can jointly offer their customers innovative solutions for account information and payment deposits that offer an improved and simplified user experience and efficient workflows. Customers always have control over their data and can decide at any time with whom and for what purposes they want to share their data.

**Synergies for financial service providers and TPPs**

Where financial service providers and TPPs used to have to maintain and cultivate complex relationships individually - from review, to contracts, to technical connection - b.Link is now available as a central and standardized tool for cooperation. As a common touchpoint, b.Link simplifies

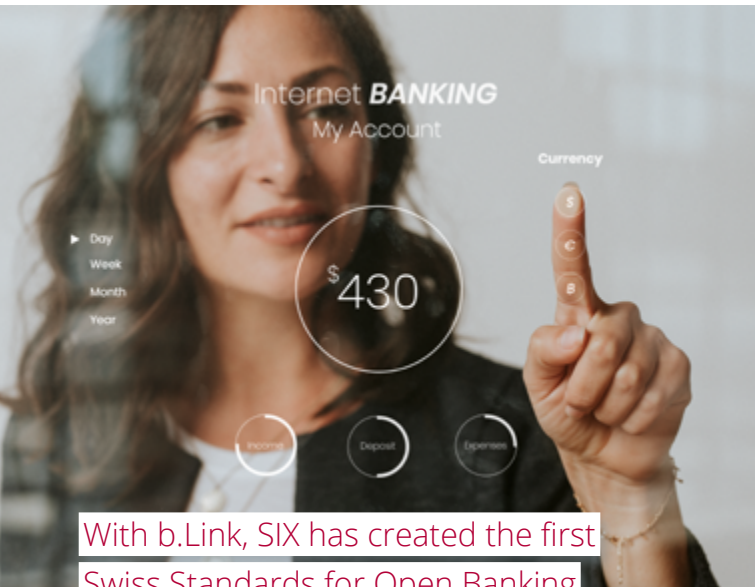
and accelerates the cooperation between all connected parties and enables them to efficiently supply new offers and reduce time-to-market.

**Major Swiss banks and TPP already on board**

With the two big banks UBS and Credit Suisse (including the Neue Aargauer Bank NAB) and the Zürcher Kantonalbank, the major players in the Swiss banking scene have already joined the platform. On the TPP side, b.Link is starting with KLARA. Further expansion steps, such as a simplified connection of TPPs and the broad integration of corporate customers, are being continuously pursued.

**Solution → Modern technology stack as innovative framework**

The b.Link platform is based on the Spring Boot Framework, Java 11, Webflux and Angular. Within the project mimacom handled the implementation of the core functionality (connectivity platform) and the security. In order to efficiently send the API requests and to guarantee the highest performance requirements for real-time data exchange, b.Link was implemented using a reactive tech stack (Spring WebFLux, Project Reactor).

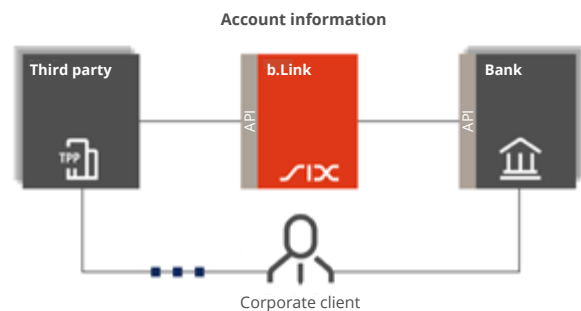


### High security requirements for protected data processing

As a financial services provider, SIX is subject to consolidated supervision by FINMA. Consequently, b.Link meets high data protection and security requirements and is additionally protected by a Swiss web application firewall and an API gateway. All transactions are logged in an audit-proof format and are available centrally for audits and billing if required.

The interfaces (API) are described in Swagger, an Interface Definition Language (IDL) for REST APIs and can be used by partners. mimacom developed practical simulators for the standardized and reliable testing and certification of the integration of new participants into b.Link.

The deployment of the application is consistently aligned with the latest technologies: The platform runs on OpenShift by using Helm 3 Deployment. This ensures that it will also meet future SIX requirements in real-time data exchange. SAP is integrated into the b.Link application via Web service to ensure the continuity of digital processes. This enables the transformation of connection data into invoice data in b.Link, which are then processed by SAP. A Hardware Security Module (HSM Box) is



### Secure Open Banking thanks to innovative solutions

Together with mimacom, SIX has created one of Switzerland's first platforms for open banking with the b.Link platform. In this way, mimacom is helping to lay an important cornerstone for secure digital banking solutions via third-party platforms. SIX runs b.Link as an open platform and will continuously increase the number of financial institutions and third-party providers as well as new implementations thanks to the participants' collaboration possibilities.