### SCION in finance and beyond

Peter Thüring
Head Information Technology
Swiss National Bank (SNB)

SCHWEIZERISCHE NATIONALBANK
BANQUE NATIONALE SUISSE
BANCA NAZIONALE SVIZZERA
BANCA NAZIUNALA SVIZRA
SWISS NATIONAL BANK



You have already heard a lot about SCION and its application and may be asking yourself:

WHY
is SCION important for the SNB and
HOW
does the SNB use this technology

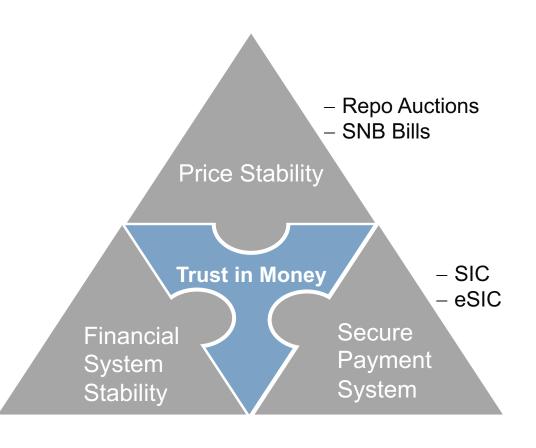
# SNB's mandate is to provide trust in money – this requires ways to perform financial transactions securely

Among the major tasks of the SNB are:

- to supply the Swiss franc money market with liquidity
- to maintain and facilitate a sound payment system.

In practice, these tasks are operationalized

- not as physical transfers of bills and banknotes
- but as account book entries based on digital messages.



# Secure digital communication is a key prerequisite for fulfilling the SNB's mandate



Lender of the last Resort-> ability to act at any time!

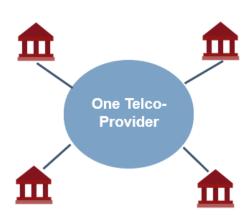
SCHWEIZERISCHE NATIONALBANK
BANQUE NATIONALE SUISSE
BANCA NAZIONALE SVIZZERA
BANCA NAZIUNALA SVIZRA
SWISS NATIONAL BANK

Prerequisites for this are:

- security about the identity of the participants
- unaltered transmission of messages and
- a stable and resilient communication system.

The communication system itself was not in focus for a long time and was taken for granted!

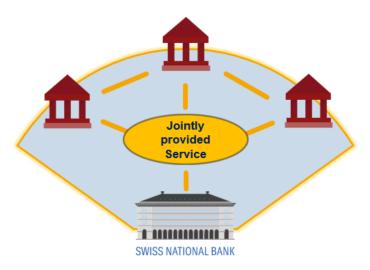
# Needed is a secure, flexible and resilient communication system for financial institutions



One provider to which all involved connect

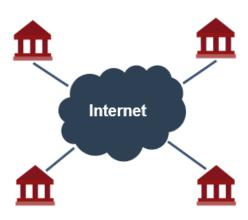
- + reliable
- + secure
- dependent

Provider lock-in



#### Service offering from multiple providers:

- initially Swisscom, Sunrise, SWITCH and SIX
- use SCION as the inter provider technology
  - + any-to-any architecture
  - + higher level of reliability and security
  - + protection against attack from internet

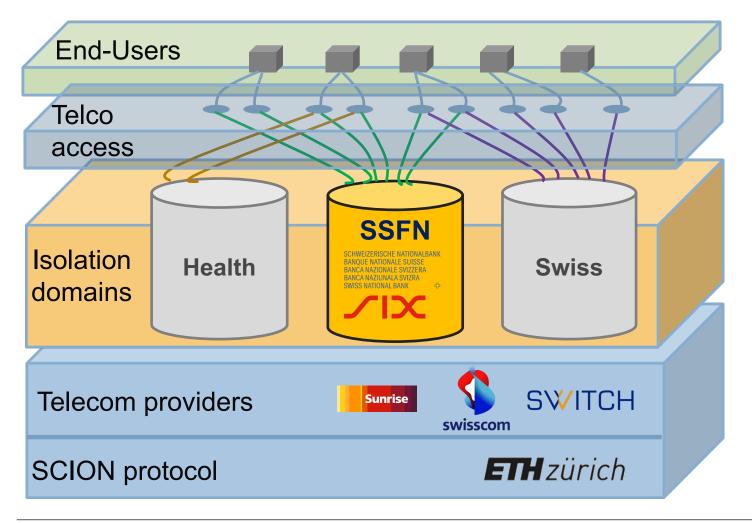


The **internet** as a cost-efficient network

- + flexible
- + cheap
- unreliable
- insecure

Not allowed in SIC

### The SNB and its partners have implemented such a network in the finance area



### Secure Swiss Finance Network (SSFN) ISD:

- Facilitates a sound payment system enabling *InterbankPayments*
- Supplies the Swiss franc money market with liquidity enabling Repo Auctions.

#### Swiss ISD:

Protection of work from Home Office.

## Beyond finance, additional use cases exist in areas such as cloud and mobile



- Increasing dependency on cloud services
- Management of 3<sup>rd</sup> party risks necessary
- How could SCION enable a secure, efficient and resilient connection with cloud providers?



- Integration on end devices like smart phones
- Protection of applications with critical data
- How could SCION enable a secure, efficient and resilient communication from end devices?

### Collaboration: The key ingredient for making this happen

- The SNB is already using jointly provided service offerings of Swiss Providers based on SCION Technology productively in several use cases.
  - Interbank Payments have been processed productively via the Secure Swiss Finance Network (SSFN) since mid-2022.
  - Working from the home office has recently become possible via SWISS isolation domain.
- And as mentioned, we believe that further use cases are possible to make our financial system more secure.
- For this the close cooperation between and with the provider is essential!

### Thank you for your attention!

© Swiss National Bank

SCHWEIZERISCHE NATIONALBANK
BANQUE NATIONALE SUISSE
BANCA NAZIONALE SVIZZERA
BANCA NAZIUNALA SVIZRA
SWISS NATIONAL BANK