



# Value Proposition of SSFN

(As of February 5, 2025)





The SSFN network is a controlled, isolated, and thus protected network based on the SCION protocol. It enables participants in the Swiss financial center to communicate securely with the SIX financial market infrastructures and with one another (any-to-any).

To ensure this purpose and to guarantee the functioning of the network, the three SSFN voting members SIX, SNB, and SWITCH are jointly responsible for governance. SIX has additionally assumed the roles of SSFN product owner as well as primary certificate issuer.

The value proposition of SSFN includes the following points:

- **Isolation:** The SSFN network connection is completely isolated from the public internet and other networks and is made available to participants who have been approved by the SSFN voting members.
- **SCION technology:** The network is based on the SCION technology developed at ETH Zurich, which addresses the shortcomings of today's internet architecture and enables a new level of security and performance in data exchange, even compared to other network protocols such as SD-WAN or MPLS.
- **Redundancy and resilience:** Through the collaboration of several internet service providers (ISPs) and other service providers, a very high level of resilience is ensured. A failure of an active network node or an ISP/network service provider can usually be compensated by quickly switching to alternative network paths without interrupting the application session.
- **Control of the routing path:** With SCION, participants can coordinate and specify the path of data packets through the network themselves, including alternative routes.
- **Identity-based access:** Access to the network (for ISP components and participants) is regulated by certificates issued by SIX, which enables controlled and secure usage and ensures that all participants in the network are identified.
- **Stability through cooperation:** The operation of the SSFN network components at ISPs/network service providers is coordinated to avoid systemic risks from updates and also from technological developments.
- **Openness to future developments:** Before new features are introduced, they are evaluated by the voting members in terms of their benefits and risks in relation to this value proposition.
- **Strong governance:** The voting members take due care to ensure the topicality and appropriateness of the SSFN regulations. The SSFN participants have committed to comply with the regulations.
- **Risk management:** A risk management system has been established for SSFN. The SSFN product owner manages and monitors the risks in coordination with the voting members. This allows for controlled, continuous development and thus makes an active contribution to both assuring and maintaining quality in the SSFN.