



**SCION**  
ASSOCIATION

# SCION: THE NEXT- GENERATION INTERNET

For secure, reliable and high-performing  
data communication in today's world

April 2024

# TODAY'S INTERNET

Designed in the '80s, the current Internet – made up of more than 70,000 networks (or paths) through which data, such as pictures, videos, calls, financial and personal information, flows – can no longer meet the security, reliability, and performance needs of today's society.

When data is sent from one device to another, the route it takes is determined automatically, without the sender having any control over it. As a result, data can be routed through vulnerable, unsafe, or congested networks, which puts its integrity, availability, and performance at risk.



# ENTER SCION: A NEW, IMPROVED INTERNET

Offering data senders complete control over the path their data travels, filling the gaps of today's Internet



## IMPROVED SECURITY

Data reaches its destination,  
safe and sound.

- In today's Internet, data senders have to trust the entire Internet all the time. With SCION, senders know all entities in the network, and routing attacks (cyber-attacks meant to intercept, modify or block data) are prevented by design.



## ENHANCED RELIABILITY

Data reaches its destination,  
consistently.

- SCION overcomes disruptions in network communication and ensures reliable data transmission by promptly re-directing data in case of network failures or outages



## HIGHER PERFORMANCE

Data reaches its destination,  
quickly, with quality and cost-efficiency.

- With SCION, senders can select the optimal path that meets their performance requirements, including speed, quality and cost.

# THE WORLD OF SCION

A growing ecosystem

## THE EXPERTS DRIVING INNOVATION

With over sixty researchers and hundreds of practitioners using SCION in real-world scenarios, the deployment of SCION's technology continues to expand.

Research



## BUILDING INFRASTRUCTURE FOR COMPETITIVE EDGE

Service providers, integrators and vendors play a crucial role in managing and maintaining the infrastructure that enables SCION. They offer SCION services to the users, enabling SCION's use today.

Integrators,  
ISPs,  
Vendors

SCION  
ASSOCIATION

## THRIVING THROUGH SECURITY, RELIABILITY AND PERFORMANCE

With SCION, enterprises in various verticals, non-profits, app developers and blockchain developers can have complete control over their online data flows, benefitting from security, reliability and performance advantages.

Users



# INSIDE THE SCION ASSOCIATION

Open, trusted, connected and curious



## OUR PURPOSE

# CREATING A SAFE CONNECTED WORLD

Our Purpose is to create a safe connected world. Because we believe in a future where the exchange of information can be made trustworthy; anytime, anywhere and for anyone. Our openness, curiosity to learn and innovate continuously pushes the boundaries of what is possible. It's what drives us and it's what makes SCION a truly transformative catalyst. Fast, reliable and scalable. This is why SCION is the first choice for everyone looking to elevate the secure exchange of data.



# OUR VALUES

The guiding principles we live by



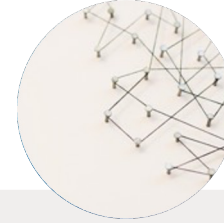
## WE ARE OPEN

- We actively seek and welcome new ideas, empowering innovation and continuous improvement.
- We cultivate a culture of broadening horizons and learning, constantly challenging ourselves to explore new ways of making SCION and everyone within even better.
- We are inclusive and nurture a community that celebrates diversity, embracing everyone's unique contributions.
- SCION is an inviting space where collaboration and teamwork thrive.
- Together, we build an open ecosystem, uniting diverse talents and perspectives to continuously elevate SCION as the transformative leap in internet technology.



## WE ARE TRUSTED

- At the core of our motivation lies a deep commitment to the safety of information exchange – making our lives safer and better.
- But it's not just about protecting sensitive data; it's about safeguarding the trust and confidence placed in the SCION technology we continuously elevate.
- This extends to the people we collaborate with, fostering a culture of mutual trust and respect in our entire ecosystem: academics, researchers, implementation partners, users etc.
- We believe that building strong relationships lays the foundation for a reliable and successful future of SCION.



## WE ARE CONNECTED

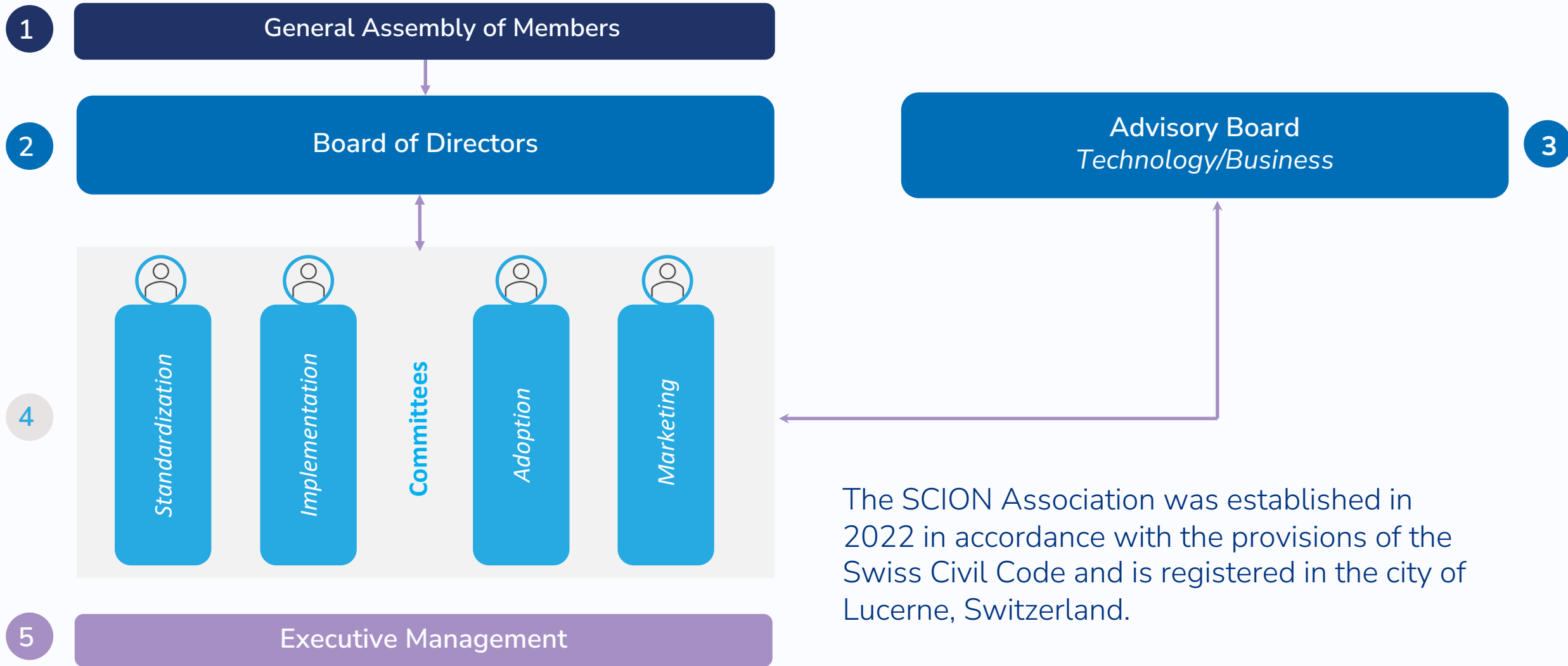
- Connectivity is the heartbeat of SCION and our society. It links our revolutionary technology with the real world.
- And it fuels our passion to continuously think and build secure data exchange technology, fostering deep trust and collaboration within and beyond our ecosystem.
- We forge bonds that transcend boundaries, uniting as teams and individuals.
- With SCION technology as our catalyst, we revolutionize internet architecture, driven by the profound belief in a future where every connection matters, anytime, anywhere and for anyone.



## WE ARE CURIOUS

- We live relentless curiosity, encouraging everyone in our environment to embrace a thirst for knowledge, explore new frontiers, and challenge the status quo.
- We always go deep and love to dissect complexity – and then to resurface with simplicity.
- The desire to learn and innovate, pushing the boundaries of what is possible to make the internet a more secure place is what drives us.
- It's what makes SCION a truly transformative catalyst to safely exchange information. Fast, reliable and scalable.

# GOVERNANCE - OVERVIEW



The SCION Association was established in 2022 in accordance with the provisions of the Swiss Civil Code and is registered in the city of Lucerne, Switzerland.



# BOARD OF DIRECTORS



LOTHAR THIELE

Professor,  
ETH-Delegierter für Digitale  
Transformation, ETH Zürich



PROF. RETO FRANCONI

Chairman BoD Swiss,  
UBS Board



DR. ULI SIGG

Private individual



DR. THOMAS WELLAUER

SIX Group BoD



PROF. VANESSA WOOD

ETH Board, VP Corporate  
relations



DR. THOMAS MOSER

SNB Observer



ANDREA MAECHLER

BIS Observer

# ADVISORY BOARD MEMBERS



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Member of the Executive Board of the Deutsche Bundesbank



JOS DIJSSELHOF

CEO, SIX Group



MARTIN JETTER

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MARTIN BOSSHARDT

CEO Anapaya



MARKUS NISPEL

CTO EMEA, Extreme Networks



ADRIAN PERRIG

Professor, ETH Zürich



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Member of the Executive Board / CDO, Volkswagen Group



PETER THÜRING

Head IT, SNB



KLAAS WIERENGA

Chief Information & Technology Officer, GÉANT



HUI ZHANG

Chief Scientist, Chairman of the Board, Conviva

# OUR TEAM



NICOLA RUSTIGNOLI

Co-CEO



LUZIUS CAMERON

Co-CEO



KATARINA GARIC

Marketing & Communications  
Manager



JEAN-CHRISTOPHE HUGLY

Software Engineer



KEVIN MEYNELL

Community Engagement Manager

# GROWING THE SCION MOVEMENT

Empowering communities, creating value

## TECHNOLOGY

The technology keeps evolving to provide more and more benefits to its users, more use cases are developed and deployed.



## ECOSYSTEM

The ecosystem keeps growing together, creating new adoption areas and building up a larger and larger SCION network.



# CREATING A SAFE CONNECTED WORLD

Together with our Members



# ENABLING THE SUCCESS OF THE ECOSYSTEM

How we are driving progress in four core areas



## STANDARDIZATION

We create the specifications to implement SCION, with the goal of making it a global Internet standard.



## OPEN SOURCE

We coordinate and maintain a SCION implementation for research, development, and experimental deployments.



## BRAND & COMMUNITY

We raise awareness of the benefits and features of SCION while fostering an actively engaged community.



## CERTIFICATION

We ensure compliance and global interoperability through a program\* to certify that implementations, equipment, and people working on SCION meet the required standard.

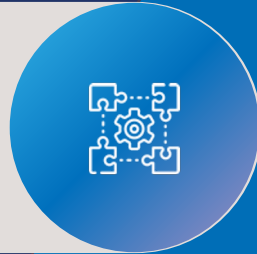
\*Coming soon

# SCION STANDARDIZATION

A big step towards global adoption

## INTEROPERABILITY

Multiple implementations ensuring compatibility.



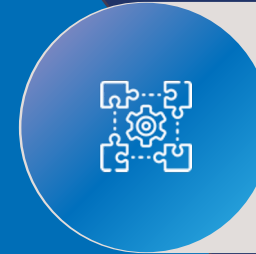
## OPEN ECOSYSTEM

Anyone can succeed with a clear specification.



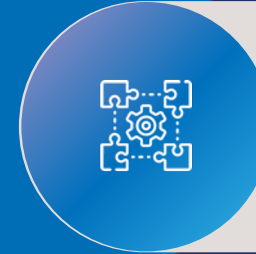
# SCION

ELEVATING SECURE COMMUNICATION



## BETTER TECHNOLOGY

Multiple wider community review by renowned experts and global recognition.



## CERTIFICATION

Fundamental for a certification program.

## WHAT IS OUR ROLE?

Standardization technical committee

SCION draft specification (see: [datatracker.ietf.org](https://datatracker.ietf.org))

Representation at standardization development organizations

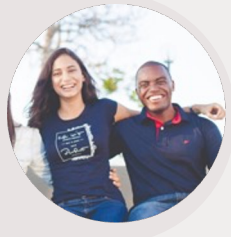
# HOW CAN MEMBERS GET INVOLVED WITH STANDARDIZATION?

Unlock exclusive benefits

Be informed with timely updates on the latest developments in the SCION project.



Attend meetings with the Standardization Committee and stay connected with like-minded companies.



Join us at IETF events worldwide for networking and collaboration opportunities.



## STANDARDIZATION COMMITTEE



NICOLA RUSTIGNOLI  
Chair, SCION Association



FRITZ STEINMANN  
SIX Group



ROGER LAPUH  
Extreme Networks



WILLIAM BOYE  
Swiss National Bank



SAMUEL HITZ  
Anapaya



JUAN GARCIA PARDO  
ETH Zurich



MIKAEL HOLMBERG  
Extreme Networks



SIMON LEINEN  
Switch



# SCION OPEN SOURCE

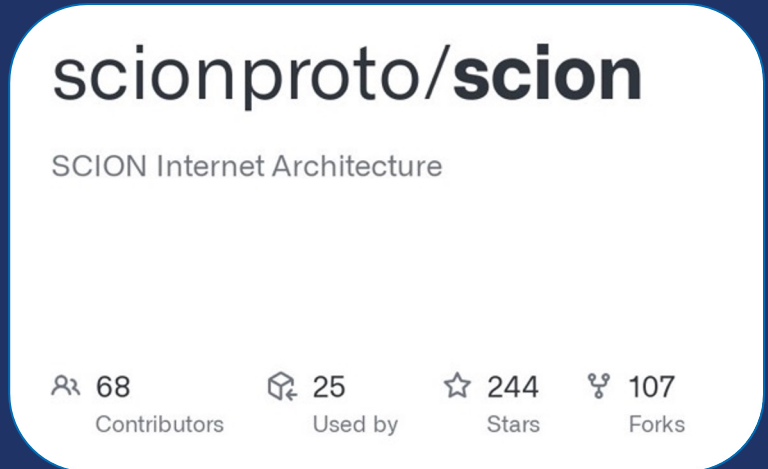
Fostering a healthy community with transparency and collaboration at its heart

## WHAT IS OUR ROLE?

- Custodians of the open-source SCION implementation.
- Actively contribute to software development projects.
- Support through code contribution reviews.
- Provide documentation.
- Define the open-source roadmap.
- Organize member community meetings.

## WHY DO WE DO THIS?

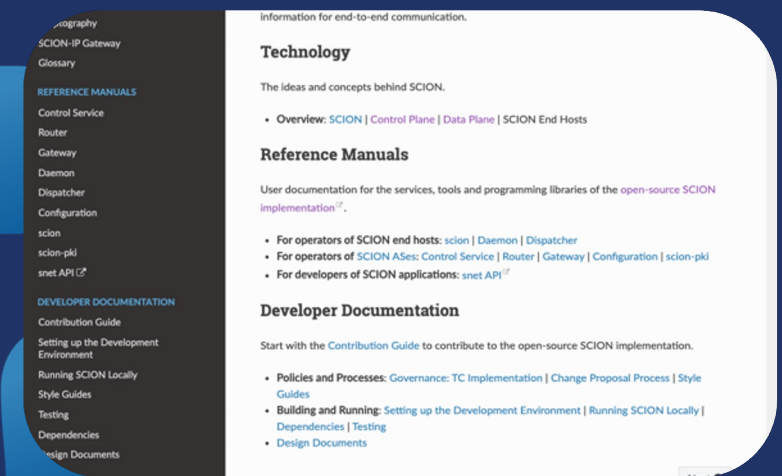
- To make sure the SCION ecosystem can rely on a stable, quality reference implementation.
- To have a vendor-independent, low-barrier entry point to SCION.
- To ensure that there are multiple software options for SCION adopters.



**scionproto/scion**

SCION Internet Architecture

68 Contributors   25 Used by   244 Stars   107 Forks



Technology

The ideas and concepts behind SCION.

- Overview: [SCION](#) | [Control Plane](#) | [Data Plane](#) | [SCION End Hosts](#)

Reference Manuals

User documentation for the services, tools and programming libraries of the open-source SCION implementation.

- For operators of SCION end hosts: [scion](#) | [Daemon](#) | [Dispatcher](#)
- For operators of SCION ASEs: [Control Service](#) | [Router](#) | [Gateway](#) | [Configuration](#) | [scion-pki](#)
- For developers of SCION applications: [snet API](#)

Developer Documentation

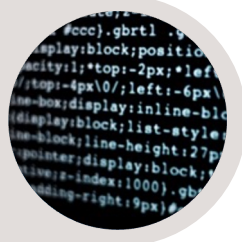
Start with the [Contribution Guide](#) to contribute to the open-source SCION implementation.

- Policies and Processes: [Governance](#): [TC Implementation](#) | [Change Proposal Process](#) | [Style Guides](#)
- Building and Running: [Setting up the Development Environment](#) | [Running SCION Locally](#) | [Dependencies](#) | [Testing](#)
- Design Documents

# HOW CAN MEMBERS GET INVOLVED WITH IMPLEMENTATION?

Unlock exclusive benefits

Opportunity to contribute to the development of the SCION open source.



Have a direct say in determining the next steps of SCION's progress



Participate in hackathon projects at worldwide events.



## IMPLEMENTATION COMMITTEE



MATTHIAS FREI

Chair, SCION Association



DOMINIK ROOS

Anapaya



MARC FREI

ETH Zurich



FRANCOIS WIRZ

ETH Zurich



LUKAS VOGEL

Anapaya

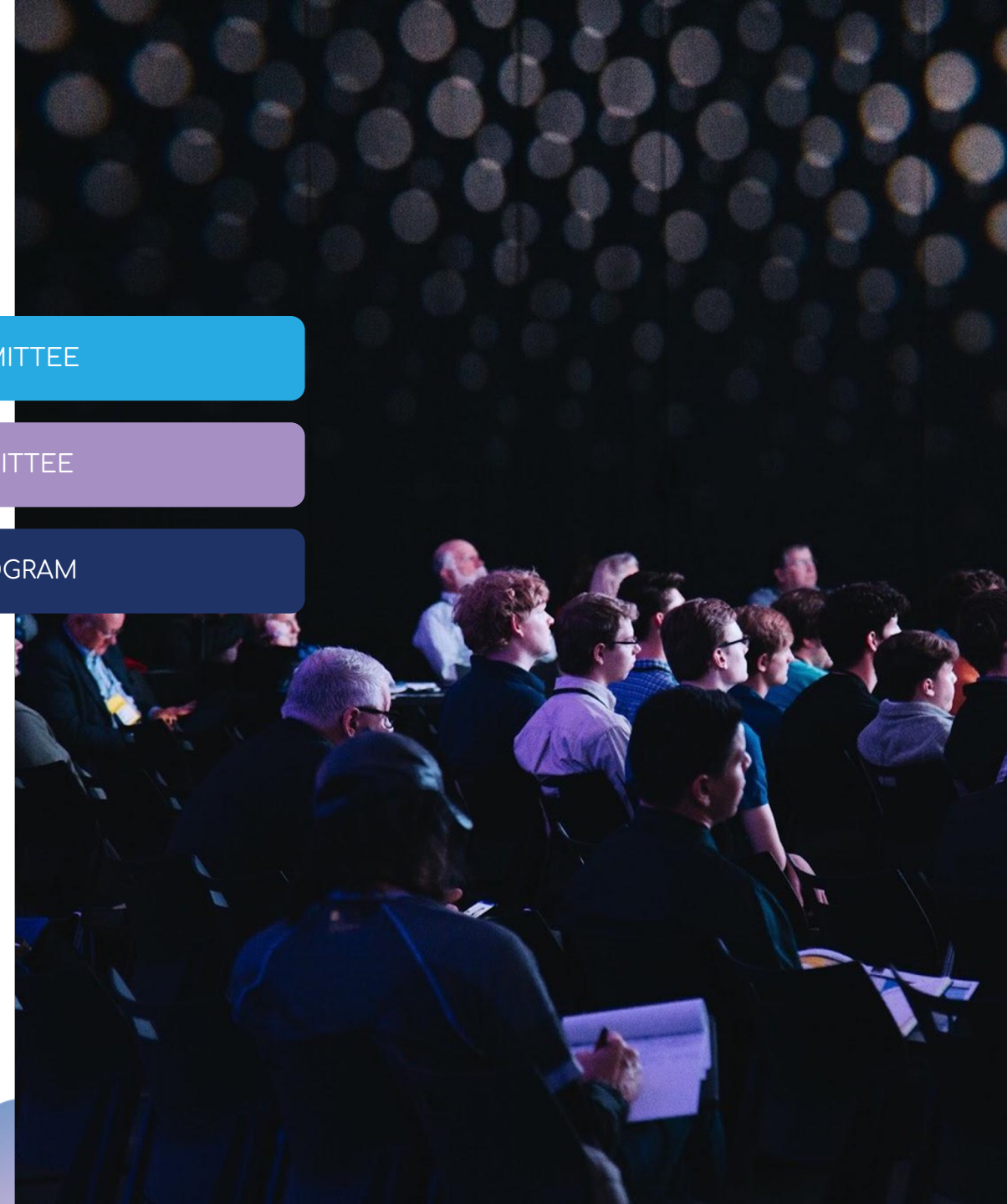
# SCION BRAND & COMMUNITY

Spreading the SCION story worldwide

MARKETING COMMITTEE

ADOPTION COMMITTEE

AMBASSADOR PROGRAM



# MARKETING COMMITTEE

Unlock exclusive benefits

Get your products recognizable thanks to the SCION brand and trademark.



Enhance your marketing impact with co-branded campaigns and gain valuable insights into the success of campaigns led by other members.



Participate in joint events in Switzerland and abroad and get exposure.



IVONNE CANO HÄLG

Anapaya



JÜRIG SCHNEIDER

Six Group



PATRICIA MEYRE

Axpo Systems



JULIA TRUNKWALTER

Sunrise Business



KARIN SCHMID

Cyberlink



KATARINA GARIC

Chair, SCION Association

# ADOPTION COMMITTEE

Expanding the SCION ecosystem

Identify SCION use cases, benefits, challenges and business models – develop market analysis.



CORNELIUS DORN  
Six Group



PATRICK BOLLHALDER  
Anapaya



DAVID HAUSHEER  
OVGU Magdeburg

Identify sectors for future SCION adoption and how these can be developed - connect to stakeholders, industry bodies & international initiatives.



FRITZ STEINMANN  
Six Group



URS FISCHER  
HIN



ANDREAS QUADT  
Eraneos

Define and document best practices for SCION deployment - e.g. ISD governance, adoption playbook.



KEVIN MEYNELL  
Chair, SCION Association



STEPHAN ULRICH  
Cyberlink

# SCION AMBASSADORS

Promoting and supporting SCION



## HOW CAN YOU HELP?

- Speaking about SCION at industry events
- Writing or contributing to webinars, articles and blogs
- Providing insight on using SCION in specific markets
- Undertaking outreach with users and potential users
- Developing business cases for SCION adoption
- Developing and giving training on SCION, such as tutorials, workshops and online training
- Reviewing and advising on government policy and regulatory developments where SCION offers a solution
- Promoting membership of the SCION Association



## SKILLS AND EXPERTISE

- Knowledge of telecoms, network security, Internet routing and the SCION technology specifically
- Ability to explain the business value of SCION to different stakeholders, including commercial companies, governments, and other public sector organizations
- Understanding the needs of target markets and how SCION can help
- Willingness to be a national, regional or sector specific expert, and how SCION can offer solutions
- Track record in developing customer relationships for Internet products and services
- Skilled in technical training delivery, including to non-technical audiences.

# OUR MEMBERSHIP MODEL

Join a vibrant community, be a catalyst for change!



# SCION ASSOCIATION MEMBERS

## SUPPORTER MEMBERS

**ETH** zürich

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



DR. ULI SIGG  
As a private  
individual

**SIX**

## ADOPTER MEMBERS



cyberlink



eraneos

**ETH** Foundation



**Switch**



# MEMBERSHIP & BENEFITS

Join the SCION ecosystem

ADOPTER

COMMUNITY

SUPPORTER

- Exclusive use of the SCION wordmark & logo in marketing & products for commercial use (free for academia)
- Be listed as a SCION provider on [www.scion.org](http://www.scion.org)
- *Free SCION AS number assignment\**



- Be featured at SCION Day & community events
- Be part of general assembly, voting rights (excl. free tiers)
- *Marketing starter package (including basic messaging)\**
- Join non-technical WGs



- Right to Technical Committee membership
- *Custom joint events under the SCION banner \**
- *Featured content for social media and/or articles upon joining\**
- *Certification discount\**



- Access to SA leadership for strategic discussions/guidance



\* Coming soon

# VALUE-BENEFITS FOR ISPs

Telecommunications providers, IXPs and NRENs



## STANDARDIZATION

### ADVANTAGES

- Define further use cases
- Make the technology better thanks to your feedback and experience
- Interoperability between networks is maintained

### BENEFITS

- Reaffirm your role as an early adopter in a growing global SCION Internet
- Get early insights into future technology evolution
- Guarantee long-term credibility of technology



## OPEN SOURCE

### ADVANTAGES

- Influence technology future developments

### BENEFITS

- Explore new use cases
- Gain advantage with early insights into future technology developments



## BRAND & COMMUNITY

### ADVANTAGES

- Featured at events (e.g. SCION Day)
- Use of the SCION logo
- Listing on scion.org
- Marketing starter package

### BENEFITS

- Connect with potential customers and like-minded companies
- Expand and accelerate market entry
- Lower entry barrier for your SCION offering
- Recognition by being an official SCION provider



## CERTIFICATION

### ADVANTAGES

- SCION-Certify your employees, devices, deployments for a discounted fee

### BENEFITS

- Maintain security & quality across the whole SCION ecosystem
- Differentiate from competition
- Protect your investment by being a true quality SCION ISP

# THANK YOU

Time for questions!

[SEND ME AN EMAIL](#)



NICOLA RUSTIGNOLI  
Co-CEO SCION Association

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[VISIT OUR WEBSITE](#)

