

Welcome remarks



Prof. Adrian Perrig
Network Security Group, ETH Zürich



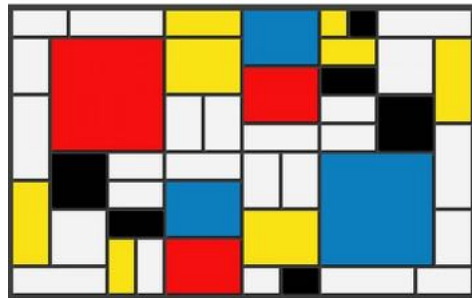
2021 Highlights: Research



Global secure
time sync



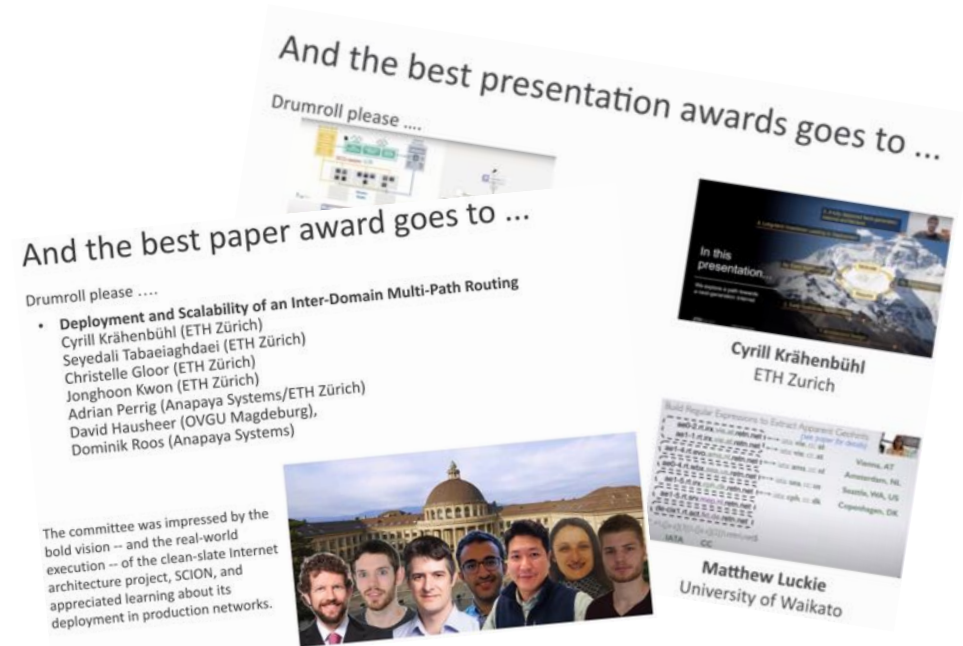
First globally scalable
bandwidth guarantees
(COLIBRI)



Mondrian zoning
system



Green
Routing



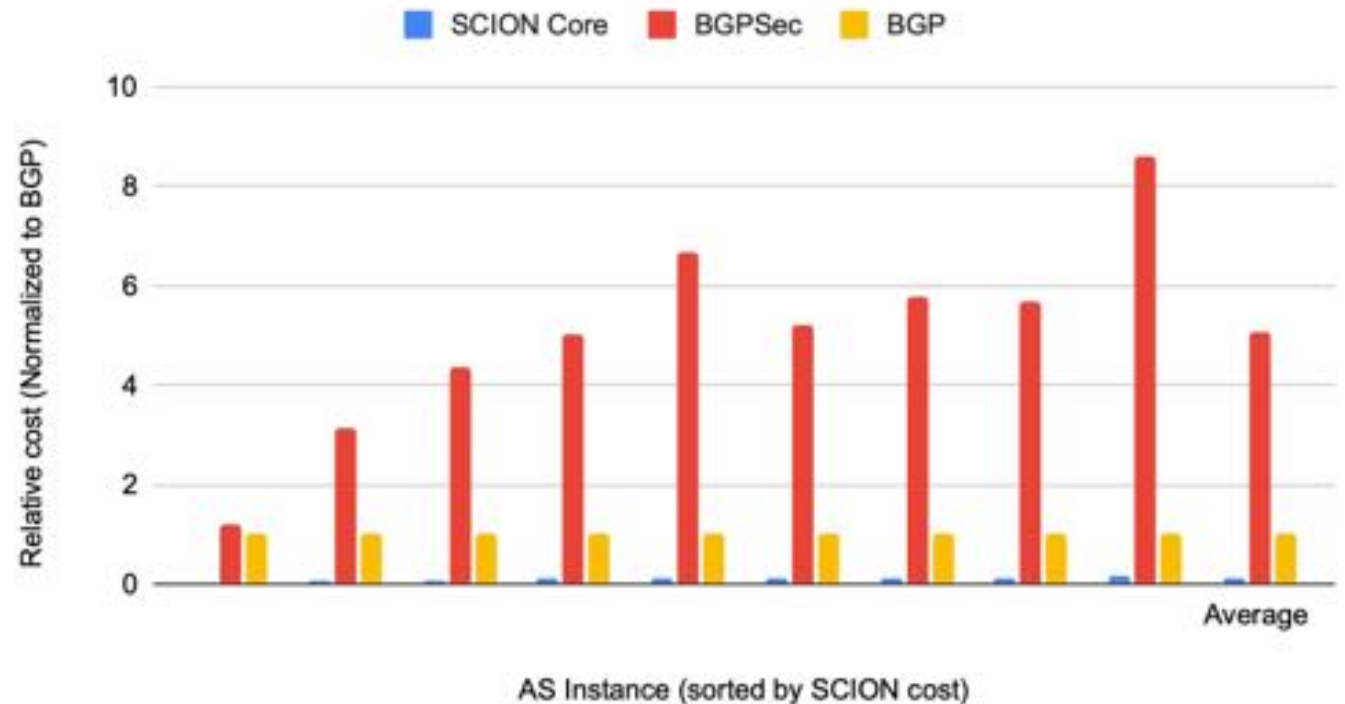
Awards at top
conference
(CoNEXT'21)

2021 Highlights: Scalability Demonstration

Scalability analysis:

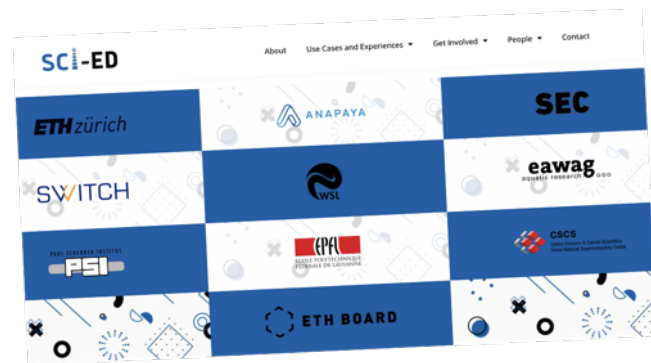
on a per-path basis, SCiON expends 200 times less effort than BGP, and 1000 times less effort than BGPsec!

SCiON Core, BGPsec and BGP



2021 Highlights: Development and Deployment

New ISPs, SCI-ED, SBAS, DRKey & COLIBRI in SCIONLab



Deployment

P4 router, Video app, LINC, Lightning Filter, Hercules, ...



New implementations









































SSFN Launch



New SCiON Book

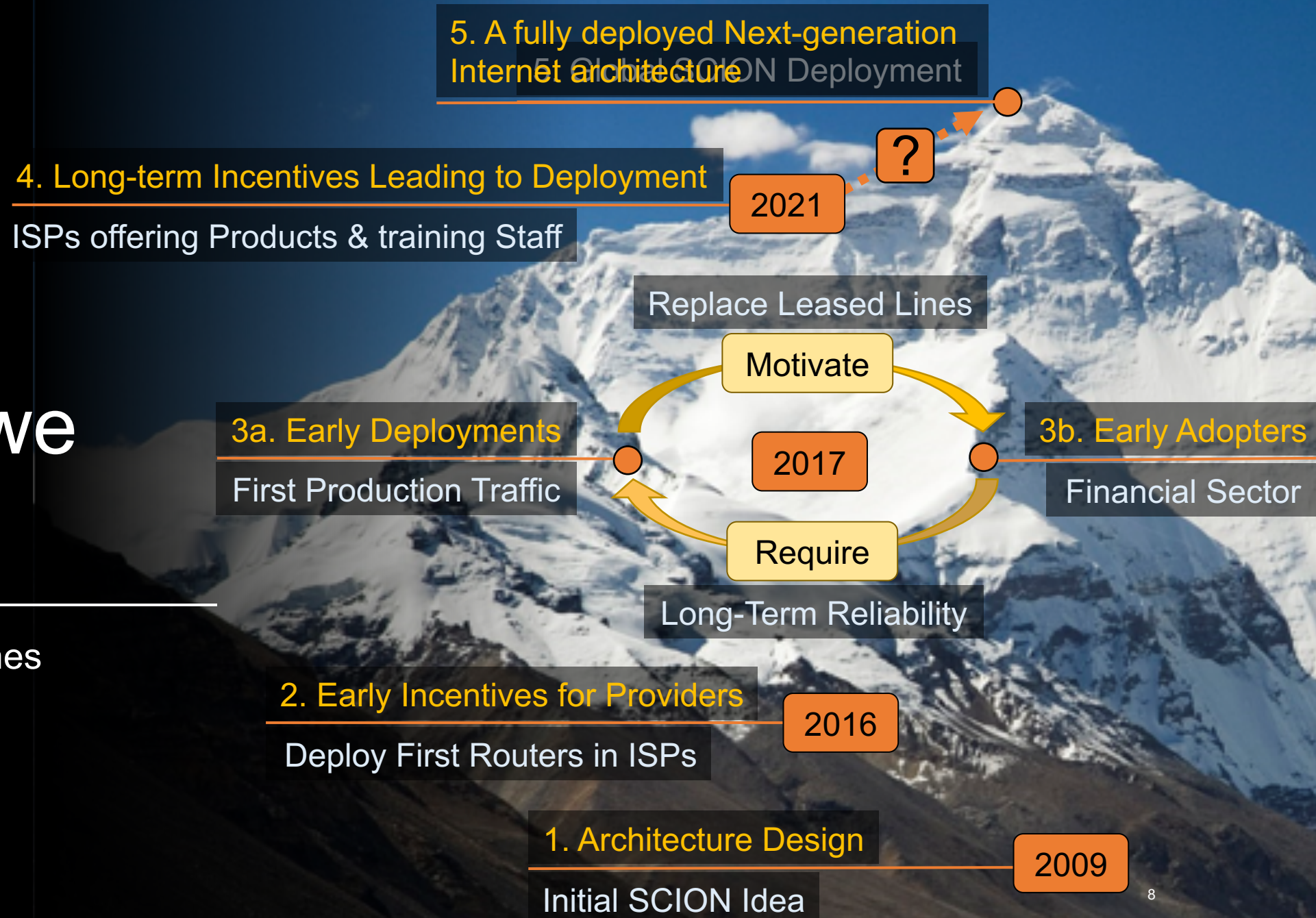
Technologies to Drive Deployment

Scenario		Backbone ISP 		End host ISP 		End Application 	
		SRC	DST	SRC	DST	SRC	DST
Locally deployed SCION IP Gateway (SIG)							
SCION built into application (Used if present in end-host ISP)							
“Happy Eyeballs” standard with SCION support							
Secure Home Office (Carrier-Grade SIG deployed at ISP)							
Secure Backbone AS (SBAS)							

 Change required  No change required

How did we get here?

Deployment Milestones



SCiON Journey

- For 12+ years, we have been on our SCiON journey
- We now have an internet architecture that is faster, greener, and secure
- Thank you for joining us on our expedition to establish the new internet!

