



## **Internet Standards, Security and Safety Coalition (IS3C)**

Annual Report for 2025

### **Introduction**

The Internet Standards, Security and Safety Coalition (IS3C) is an IGF Dynamic Coalition of stakeholders with the shared goal of making online activity and interaction more secure and safer by achieving more widespread and rapid deployment of existing security-related Internet standards and best practices. Links for further information:

<https://www.intgovforum.org/en/content/internet-standards-security-and-safety-coalition-is3c> <https://is3coalition.org/>

The coalition's research activities were undertaken by the following working groups in 2022:

WG1: Security by design – Internet of Things;

WG9: Emerging technologies.

The following is a report of their activities in 2025.

### **Working Group 1 : Security by Design**

*Chair: Nicolas Fiumarelli*

*Vice-chair: Sam Goundar*

The knowledge acquired by the working group in the past year merged with a project started in WG9. WG1 member and co-author of its 2022 report, João Moreno Falcão, participated as co-project lead.

### **Working Group 7: Consumer Protection**

*Chair: Wout de Natris – van der Borght*

Throughout 2024 and the first half of 2025 IS3C has undertaken activities to start this WG. So far, it has not found enough support to revive this working group.

### **Working Group 9: Emerging Technologies**

*Chair: Elif Kiesow – Cortez*

*Vice-chair: Maarten Botterman*

In December 2024 Afnic, the .FR registry, commissioned a report on the implications of IoT and ICTs not transitioning to post-quantum cryptography in a timely manner. WG 9 with assistance of the WG1 team on IoT security by design set out its research.



In Lillestrøm at the 20<sup>th</sup> IGF IS3C presented its latest report called 'Socio-political and technical implications of IoT and PQC policies'. In 2025 IS3C presented on the (expected) outcomes at EuroDIG, Paraguay IGF, EU CyberNET, IGF webinar on PQC, ICANN and the IGF. This is the summary of the report.

The advent of quantum computing is attracting the attention of national governments with its potential to present a profound and urgent challenge to the very foundation of digital security. With billions of Internet of Things (IoT) devices rapidly connecting our world, from smart homes to critical infrastructure, the vulnerability of current cryptographic systems to future quantum attacks is a pressing concern. Our latest report of the findings of a collaborative study undertaken by the UN Internet Governance Forum's dynamic coalition Internet Standards, Security and Safety (IS3C) and the French domain name registry Afnic, examines the critical need for Post-Quantum Cryptography (PQC) to achieve greater security in this ever-expanding global IoT landscape.

This comprehensive study explored existing IoT vulnerabilities due to insecure devices enabling massive cyberattacks and risks created within complex supply chains. The report maps the global policy landscape, showcasing diverse yet converging strategies from the US (with its mandated PQC transition by 2035) and the EU (emphasizing recommendations and hybrid solutions). Nations worldwide are recognizing the urgency and launching proactive programs to secure their digital futures.

The report also addresses the profound societal, legal, economic, and environmental implications of this transition. Protecting long-term privacy, meeting evolving data regulations, and mitigating the potential costs of quantum-enabled breaches are major challenges.

We offer actionable recommendations for governments, industry, and service providers. Key strategies include developing national PQC roadmaps, fostering public-private partnerships, investing in domestic PQC innovation, integrating quantum-resistance in the design of IoT devices and making informed procurement decisions. International collaboration, global standardization, and robust capacity building are vital for a unified secure response.

The time to act is now. Join us in calling for a quantum-resistant IoT ecosystem, safeguarding our connected world for generations to come.



This is the link to the full report:

<https://is3coalition.org/docs/socio-political-and-technical-impacts-of-iot-and-pqc-policies/>

WGs 3, 8 and 9 have been invited to give presentations on past and/or upcoming work for EU CyberNET, Asia-Pacific IGF and several Latin-America cyber meetings.

### **New areas of IS3C's work expected to launch in 2026**

IS3C has started the next phase supporting the timely and coordinated transition to PQC. The goal is to start at a minimum two WGs under our WG9. One for the DNS transition to PQC and one on the transition of the routing layer of the internet. This work will include several webinars to introduce the work. A third working group could work on the topic from a generic angle.

WG 2 on education and skills will propose a project to educate children from 8 – 12 in cybersecurity and in search of support and funding.

WG7 will restart its aim to start a project on consumer protection and ICT security by design.

### **Overall Management of IS3C's business**

IS3C organised three general meetings in 2025 including one at the UN IGF in Lillestrøm. The number of IS3C subscribers who are members of the coalition is 147. IS3C's website has over 2.000 subscribers. On LinkedIn IS3C has close to 500 followers. The members of IS3C decided in 2025 IS3C to become a working group under ISOC.NL. The contract with ISOC.NL was signed in December. This gives IS3C a legal entity to work from and have contracts signed.

Three IS3C working groups active in 2025 organised individual management and planning meetings during the year, WGs 2, 3 and 9. In January 2025 WG 8 formally disbanded after a concluding meeting, because its task was concluded at the 2024 IGF in Riyadh with the publication of its toolkit and all remaining tasks, mainly communication, fulfilled.

In 2025, several IS3C leadership positions changed. Mark Carvell stepped down as senior policy advisor. He has not yet been replaced. Janice Richardson stepped down as WG 2 chair and traded places with vice-chair Awo Aidam Amenyah, who is now chair. After Lillestrøm WG 9 chair Elif Kiesow – Cortez stepped down. Vice-chair Maarten Botterman now holds her position. João Moreno Falcão is the new vice-chair.



## **Financial Support**

In 2025 IS3C received sponsorship funding and in kind support from the following organisations: SIDN, E-Governance and Internet Governance Foundation for Africa (EGIGFA), and Afnic.

## **IGF support activities**

IS3C has been an active member of the UN IGF's Dynamic Coalitions Coordination Group (DCCG) and is promoting the means for achieving greater recognition of dynamic coalitions as policy incubators which contribute to the IGF's annual outcomes. IS3C supports to have two DC representatives function in the MAG to assist in integrating DC processes into the IGF programme.

In 2025 IS3C actively participated in organizing webinars highlighting DCs work and organized and moderated the webinar on PQC.

To support these goals IS3C has delivered input to the WSIS+20 process, as part of DCCG, the Dutch NLIGF/government response and individually. It presented in the DCs meeting with the WSIS+20 co-facilitators in Lillestrøm and in DC workshops there as moderator and presenter.

Wout de Natris – van der Borght

IS3C Coordinator

26 January 2026