IS3C Research Project (March-November 2022)
Resolving the current skills gaps in cybersecurity education

The recent escalation in the number of cyber attacks and online crime has made cybersecurity an increasingly urgent challenge for Internet governance policy at a time when digital technologies are transforming national economies and the daily lives of citizens. It is important that national and regional strategies which address these risks to digital security are supported by tertiary education and training programmes that provide graduates and trainees with the necessary knowledge and expertise about security-related Internet standards and relevant ICT best practice.

The UN Internet Governance Forum's multi-stakeholder coalition IS3C (Internet Standards, Security and Safety*) is undertaking research in March-November 2022 to examine why tertiary educational curricula and vocational training often fail to provide graduates and trainees with the necessary knowledge and skills in cybersecurity, Internet standards, governance and architecture that employers in the cyber industry sector require.

The research will be conducted in a diverse range of markets in Africa, North America, Latin America, Asia-Pacific region and Europe. Given the important roles of young people as stakeholders in the evolution of Internet technologies and innovators in the global cybersecurity sector, the initial phase of questionnaire and interview-based research will be conducted in March-May 2022 in close cooperation with the IGF's Youth Coalition on Internet Governance (YCIG) and the global IG youth community. The key questions are:

- What are the main competences companies look for when hiring graduates to join their cybersecurity workforce?
- What are the main gaps between the competences companies seek and those which graduates possess upon completion of cybersecurity-oriented vocational or tertiary studies?
- Which cybersecurity profiles are the most difficult to fill?
- What measures are companies and educational institutions taking to meet the challenge?

The second phase in June-August 2022 will be an online survey to collate quantitative data on the competence priorities of the cybersecurity and the tertiary education sectors in the different regions. This will be followed by a round of regional IS3C stakeholder workshops in September/October 2022 which will review the questionnaire, interview and survey results.

The proposed policy recommendations and guidelines that will be the outcomes of this research project will be the subject of an IS3C online global stakeholder consultation in November 2022. The final outcomes will be presented in a report to the UN's annual Internet Governance Forum (IGF) in December 2022 which will:

- explain the knowledge and expertise about cybersecurity and Internet standards that industry is looking for;
- highlight the main gaps between industry's expectations and the knowledge and expertise that tertiary educational and training institutions deliver;
- describe examples of good practice that address these gaps;
- make policy recommendations for decision-makers in education and industry training, and set out practical guidance in the form of toolkits.

*IS3C is a UN Internet Governance Forum (IGF) dynamic coalition which was established in 2020 to bring together experts from the public sector, industry, the technical community, civil society and academia, with the shared goal of making online activity and interaction more secure and safer by achieving more widespread and rapid deployment of existing Internet security standards and relevant ICT best practices. More information about this multistakeholder coalition is available at: https://www.intgovforum.org/en/content/internet-standards-security-and-safety-coalition-is3c.

Contacts for further information:

Janice Richardson - Vice Chair, IS3C Working Group 2 E: info@insight2act.net

Wout de Natris – IS3C Coordinator E: denatrisconsult@hotmail.nl

Mark Carvell – IS3C Senior Policy Adviser   E: markhbcarvell@gmail.com