



## Meeting notes IS3C 6<sup>th</sup> General Meeting

By: Wout de Natris

Date: Thursday 8 September 2022, 13.00 UTD

### 1. Opening

The chair, Wout de Natris, opens the meeting and welcomes all participants. There are no changes to the agenda.

Wout gives a short introduction to IS3C and the steps undertaken in the past two years. He points to the progress made in 2021, when the working groups 1 to 3 were formed and workprogrammes agreed upon. In 2022 the programmes in WG 1 and 2 have started, as the initial funding for research in these groups has been found.

He indicates the general interest in IS3C is rising, matching IS3C's ambitions that have been shared widely. This also shows from proposals to start new working groups in 2023. All these topics will be presented on in this meeting.

### 2. WG1 research project update

In WG1, security by design – Internet of Things, research was started during the summer of 2022. Nicolas Fiumarelli, the chair, explains the work that is undertaken. Of the foreseen nine phases, the research is now in its 4<sup>th</sup> phase. Four researchers from three countries are working on a comparative study on policy documents on IoT security. In total 22 countries, from different regions, are involved. Most regions are well-represented. Only Africa and Latin-America less so. Documents can originate from governments, regulatory bodies, codes of practices, etc. They are analysed and mapped, so to find the good and best practices and to identify gaps between the theory and practice of cyber security. An intermediary presentation on the first research results is expected in three weeks.

### 3. WG2 research project update

Janice Richardson, chair of WG 2 on Education & skills reports on the current status of the research. WG2 is progressing as expected in analysing the gap between the competences industry is expecting from tertiary educational facilities where cyber security is concerned and what it actually teaches to students. Research started in spring with interviews with CEOs and COOs. This led to the identification of the lack of transversal skills, as critical and holistic thinking and professional skills, where cyber security is concerned. In the next phase a survey was created to substantiate these findings. This phase runs until 20 September, after which the results will be shared. Then work starts on phase 3, the organization of workshops in which industry and education are brought together.



Noteworthy is that the WG is in close cooperation with the Youth DC of the IGF and APIGF. Both have contributed on a voluntary basis to the work. The results so far show that there is a gap. Now we have to identify the best practices and provide recommendations on how to close the gap.

#### **4. WG3 research project update**

There is no change in the situation for WG3, so no update is provided.

#### **5. WG4 outreach strategy**

Wout reminds everyone that in April the IS3C website was launched. It will undergo its first revision soon, to keep it up to date. The WG is moving into its second phase, the development of a communication and outreach strategy. Olévié Kouami, vice-chair, states that the work can focus on capacity building by creating workshops so that the intentions and the results of IS3C will become better known and more people become involved. Mark Carvell, assists in the development of the strategy. He points to the presentations we have been able to make in Internet governance fora around the world. We are getting our message across. In the future IS3C needs to reach out better in the America's. Also we have to engage with a clear message, a core script, and a shared understanding of what we say to others. The website needs to be fully up to date. We are looking for volunteers to work with WG4.

Olévié adds that IS3C needs to reach out to other communities as well. E.g. SSAC in ICANN. The chair answers that at least one of the members is very much aware of our work. He adds that this could be the same for other Internet resource organisations, like RIPE NCC, but also special interest groups in industry and government, so that they become more aware of what we are trying to achieve. This could lead to more support.

Selby Abraham, our IS3C website manager, states that soon links will be provided so that they can be shared on LinkedIn, etc., which will make our profile better also.

#### **6. New Working Groups**

Three initiatives have come up in the past months, expressing interest in starting a working group. Each has the opportunity to present itself.

##### *a. Routing security (TBC WG 8)*

*Naveen Lakshman 'introduces the idea for a working group to start in 2023 on routing security. He shows a few slides. The world on average faces 5 to 7 routing incidents a day, from hijacks to ddos attacks. This year the count is over 1.000 incidents already. There are many initiatives around the world, but adoption of the RPKI standard is still too slow. The reason for this is that not enough network operators adopt the standard and there's not enough pressure from regulatory bodies and*



*policy makers. The WG would start reach out to policy makers, regulators and industry and to organize outreach workshops on the topic’.*

A comment focuses on regulatory bodies. They may take decisions that break networks. This must be taken into account. Another comment focuses on the need to take RPKI validators into account. Also DNSSEC could be added here. Focusing on these specific topics will assist in drawing more attention to IS3C.

*b. Quantum computing and encryption (TBC WG9)*

Narine Khachatryan could not present at the last moment. Wout reads the text that she provided:

*“The new Working Group will serve as an entity to research quantum computing and quantum encryption, in particular its standardization process and maintain relationships with related technical communities and other interested organizations.*

*In recent years, there has been a substantial amount of research on quantum computers – machines that exploit quantum mechanical phenomena to solve mathematical problems that are difficult or intractable for classical or conventional computers. When large-scale quantum computers are built, they will be able to break many of the public-key cryptosystems currently in use. This would seriously compromise the confidentiality and integrity of digital communications on the Internet and elsewhere. For this particular reason, we need to think about quantum-resistant cryptography, or post-quantum cryptography, which aims to develop cryptographic systems that are secure against both quantum and classical computers, and can interoperate with existing protocols and networks.*

*Some engineers predict that within the next twenty or so years sufficiently large quantum computers will be built to break essentially all public key schemes currently in use.*

*If we will look back at history, it has taken almost two decades to deploy modern public key cryptography infrastructure. Therefore, regardless of whether anyone can estimate the exact time of the arrival of the quantum computing era, work is starting now to prepare the information security systems to be able to resist quantum computing.*

*This is briefly about why and how the idea of this new WG was born. In the near future this group may work to identify gaps and opportunities and develop deliverables.*

*Among the far-reaching goals we can propose*

- the deployment of best practices on encryption (Wout proposed),*
- support to the quantum-safe cryptography community in development and deployment of relevant frameworks to protect data in movement or data at rest.*

*Our next steps: We will work on the strategy and the program for our working group.*

*At this moment our work is based on voluntary contributions of experts. We welcome anyone who would like to join, even if you would like to just listen to our calls.”*

A comment is made on the title of the WG. Perhaps it should read “post quantum encryption”. The development is very much around the corner already. It is pointed out, that there’s already work



going on at the IETF on quantum communication. IETF is looking at algorithms already for post-quantum. It is worth reaching out to this group.

Wout points out that IS3C will not develop standards but will work on facilitating deployment. Also, NIST has published four potential standards quite recently, that were recognized and accepted by NIST after a competition. The question is, as always, are they being deployed? That could be our role.

*c. Data governance (TBC WG6)*

The United Nations, UNDESA, approached the coordinator last winter if IS3C would be interested to work with UNDESA on the topic of data governance. In spring several researchers were invited to present their interest to UNDESA. As no one was selected at the time of the meeting, Wout reads a short statement based on the terms of reference of the research:

*“In line with the above, the Consultant will perform the following duties:*

- 1. Conduct a global study of data security as part of a proposed data governance framework, based on emerging trends and best practices of data governance, data management and coordination;*
- 2. Propose a set of recommendations based on 1), and present their findings.*
- 3. Expected outputs and delivery dates:*
  - a. Outline of consultancy approach/strategy (minimum of 5 page), through conducting needs analysis and survey questionnaires with relevant key stakeholders;*
  - b. Global study of data security as part of national data governance framework;*
  - c. Policy recommendation report summarising key findings and recommendations as per work assignment, including sharing the results of the work with the Digital Government Branch of DPIDG (in connection to the E-Government Survey) and the Internet Governance Forum annual meeting.”*

This WG, #6, on Data Governance starts as soon as the contract between the U.N. and the consultant is signed.

The first two potential working groups will be invited to present a working plan, schedule, leadership, etc. at the IGF in Addis Ababa. There it will be decided whether they will commence. The third will already share intermediate outcomes.

IS3C members with an interest in the respective topics can step forward and share their interest with the presenters and join any of the three WGs. Also funding needs to be found to be able to proceed.

Also a WG on consumer protection (TBC WG7) has been considered. We were approached from South America to participate in a call for a grant from a fund. We made it to the second round but got turned down. For this reason this WG has not started yet. A plan of action has been fully developed and can be used at any moment.



## **7. IS3C at IGF and the Global Digital Compact**

IS3C has received three slots at the upcoming IGF. Unfortunately, the workshop proposal on education & skills did not come through, again. We do have:

- Day 0 , Monday 28 -11 at 09.30 on Internet of Things
- Day 3, Thursday 1-12 at 16.20, General Meeting
- Day 4, Friday 2-12 at 13.45 Networking Session

On day 2 is the DCCG Main Session at 13.50, that Mark Carvell is co-organising. (All times are in local Ethiopian time.)

Mark Carvell shares that the U.N. Secretary General, Antonio Guterres, has called upon the world to deliver input to his Global Digital Compact. IS3C has decided that it will respond to this call and work together to fill in the survey published on the website of the U.N.'s Tech Envoys Office. Four volunteers have stepped up to work together on our input. The kick off meeting is expected soon. The deadline for our work is 31 December. This work leads up to a U.N. Summit on the Future in September 2023.

Nicolas Fiumarelli agrees with this step and warns that the hard work for the group will come at the IGF and the short period after it, towards the deadline. He adds a potential angle: The safety and security of people who connect to the Internet for the first time.

## **8. DC Coordination Group**

Mark Carvell reports on the work carried out by Wout and Mark in the DCCG, that coordinates between all 24 IGF DCs and the MAG and Secretariat. The chair is Markus Kummer. There's a MAG liaison, Adam Peake and a consultant, Sorina Teleanu (until 30-09). Our contribution focuses mainly on how to integrate (the work of) DCs better into the IGF as a whole. IS3C aims to produce policy recommendations. This places us in a position to present outcomes as IGF outcomes. It is important to convince others in the IGF chain, e.g. the MAG chair and members, that several DCs will be producing potential IGF tangible outcomes, that the IGF can help disseminating. The DCs Main Session will be used, in part, to have this discussion. This will include invitations to the MAG (chair), the Leadership Panel, Tech Envoy, parliamentarians, etc. Wout has sent a letter to the MAG chair in July containing several proposals, including a mid-year event on intersessional work within the IGF and more space at the IGF. There have been no decisions yet.

## **9. IS3C funding**

Wout reports on received funding and the progress made here compared to 2021.

Microsoft sponsors WG 1 on IoT security by design for \$ 40.000

SIDN Fonds donated € 10.000 to WG2 on Education and Skills

NASK donated € 10.000 to WG2 on Education and Skills



Microsoft supports the Leadership Team for \$ 5.000

SIDN supports Wout for € 10.000

EGIGFA, ecp, Platform Internetstandaarden support IS3C in kind.

Currently there are two applications for research grants with the RIPE Fund on behalf of WG 2 and WGs 3 and 5 that have to be decided upon.

There's a clear need for more funding in order to continue our work. In the coming weeks a new letter requesting support will be sent to multiple organisations. They are asked to donate a specific amount of money: € 5.000. Any suggestion from you on who to reach out to in your country is very welcome, so IS3C can cast its net as wide as possible. We need your network, so please assist us.

We are making progress and are taken more seriously. This gives rise to celebration.

## **10. AOB**

Selby Abraham asks a question on the GDC Team. Wout answers that a date for the kick-off has not yet been set, but it will be in week 37. The process is to be discussed in that meeting. It is not something the Leadership Team decides on.

## **11. Wrap up**

Wout concludes that IS3C has made considerable progress as the work in the WGs show. We are able to present tangible outcomes at the IGF. This is what makes it so important to be recognized as such and an important reason to professionalise our outreach strategy, communication and use our website to the utmost. There is some work ahead. The chairs and Leadership Team will be working on texts for the website and work in this with Selby Abraham, our website manager.

Mark asks participants to distribute our findings to their respective networks and hopes first time participants will remain with the IS3C and join one of the working groups.

The next General Meeting is at the IGF.

## **12. Close**

Wout de Natris closes the meeting and thanks everyone for their contributions and participation.