



Awareness Meeting Report

Where

The awareness meeting took place at the Manos Conference Center, in Chaussée de Charleroi, 135, B-1060 Brussels, Belgium.

When

The awareness meeting took place in November 23th, 2018.

It started with a light lunch at around 12:30pm, giving the speakers and attendees the opportunity to arrive on time and mingle.

The meeting proper started around 2 pm and finished close to 6pm.

Why

The COST Action CRYPTACUS (IC1403) wanted to organise an awareness meeting for policy & decision makers as a high-level opportunity to raise awareness on the challenges tackled during the Action on the area of cybersecurity for the Internet of Things (IoT), and to gather leading experts from academia across Europe to discuss the cybersecurity challenges that remain open and could have a bigger impact on the future.

Attendees

Thanks to the work of the main organiser, Prof. Gildas Avoine, helped by Karina Marcus, the awareness meeting successfully attracted some of the most relevant practitioners and decision makers, together with some of the lead researchers in the area.

In total, there were 8 invited speakers and around 30 attendees.

Speakers

The awareness meeting was started with a welcome message by Dr Ronald de Bruin, Director of the COST Association and the presentation sessions were opened by Prof. Gildas Avoine, Action Chair of CRYPTACUS.

This was followed by a very interesting and informative presentation by Dr. Ioannis Askoxylakis, who spoke about the "EU Perspective on Cybersecurity for the IoT". Dr. Askoxylakis is Cybersecurity Policy Officer at the Directorate General for Communications Networks, Content and Technology of European Commission since 2018. Before joining the European Commission he has been Senior Researcher & Head of FORTHcert, the Computer Emergency Response Team of FORTH (2002-2018), member of the Plenary of the Hellenic Authority for Communication Security and Privacy (2016-2018) and Professor of Cybersecurity and Internet of Things at Bournemouth University (2015-2018).

Afterwards, Dr. Evangelos Ouzounis discussed "ENISA's activities in IoT Security" in a talk that was energetic and encouraged participants to liaise more with ENISA's activities for improving IoT security. Dr. Ouzounis is the head of ENISA's Resilience and Critical Information Infrastructure Protection (CIIP) Unit. His unit implements EU Commission's CIIP action plan, facilitates Member States efforts towards a harmonised implementation of incident reporting scheme, and develops good practices for national cyber security strategies and national contingency plans.

Prof. Bart Preneel was next, with a very informative and well-thought presentation under the title "How IoT Security is different from IT Security", that attracted many questions and showed a great degree of reflection on the characteristic challenges of IoT security. Prof. Preneel is comes for the prestigious computer security group at KU

Leuven, Belgium, which he leads. His research focuses on cryptographic algorithms and protocols as well as their applications to computer and network security. He was the president of the International Association for Cryptologic Research (IACR) in 2008-2013 and the project manager of ECRYPT. He was appointed IACR fellow in 2015 for outstanding service to the IACR, numerous research contributions, sustained educational leadership, and for leading the European cryptologic research community. His presentation lead to many questions that made it run well over its allocated time, but the discussions and answers were of great interest.

Prof. Lejla Batina, from Radboud University in Nijmegen, talked about "The Role of Hardware Security in IoT". Her talk presented a number of new and fascinating attacks of high relevance in the context of IoT security. Prof. Batina is a very promising young leader in Cryptography in Europe. Based in The Netherlands, she is the recipient of a VIDI grant by the Dutch government. She has published more than 100 refereed papers and served at 70+ program committees and gave more than 40 invited talks at conferences and summer schools.

Prof. Agusti Solanas followed with an interesting and very topical discussion about "Privacy in the Era of IoT and Ubiquitous Computing Systems". Prof. Solanas is the head of the Smart Health Research Group at the Rovira i Virgili University (URV), in Catalonia, Spain. His fields of expertise are mobile health, smart health, privacy, ubiquitous computing, and artificial intelligence, all areas where security is of critical importance and can save or cost lives. He has authored over 150 referred publications and is a senior IEEE member.

Next was Prof. Flavio Garcia, from the University of Birmingham in the UK, with a brilliant talk on "Automotive security, the Bad and the Ugly" where he presented all the results of his more than 10 years of

continuous and leading research on automotive security, together with plenty of insights and recommendations extracted from his discoveries. Flavio Garcia is a very young and promising professor of computer security at the University of Birmingham. His work focuses on cryptographic primitives and protocols for embedded devices. His achievements include breakthroughs such as the discovery of vulnerabilities in widely used contactless smart cards in electronic payment (e.g. Oyster Card) and access control systems (e.g. Amsterdam Airport). He has also found critical security vulnerabilities in automotive keyless entry systems, immobilisers and vehicle diagnostic services. His research has achieved significant media coverage.

Last was Prof. Julio Hernandez-Castro, from the University of Kent (UK) with a talk titled "IoT Ransomware", where he draw lessons and shared some thoughts about the implications of recent ransomware campaigns (NotPetya, Wannacry, etc.) and predicted a massive impact impact for European security and wellbeing if our efforts in securing IoT devices fail.

At this point the event had run almost for one hour longer than initially planned and, as a sizeable amount of attendees had left and most questions where formulated during the presentations, Prof. Avoine, chairing the meeting and in agreement with the attendees decided to close the meeting without running the panel discussion.

Conclusions

All in all, the awareness meeting was a success, attracting and engaging a sizeable number of high-profile decision makers, which participated actively with questions, taking notes and exchanging opinions in some of the most pressing issues in IoT security nowadays.