PROGRAMME

TUESDAY 22 OCTOBER

Welcome & Introduction

Adi Kouadio (EBU)) is a technologist and venture developer with more than 11 years in experience leading technology strategic programs in media and information technology. He joined the EBU in 2007 and is currently Senior Technology Project Manager managing the EBU's strategic programme on Cybersecurity since 2014. In parallel to the cybersecurity topic, he managed the EBU's video R&D and standardisation activities. He represented EBU's interest within various top media technology alliance such as DVB, MPEG UHDAlliance, including board seat at the VR Industry Forum (VRIF).

In addition, Adi is a technology advisor to the Eurovision Media Services, the business arm of the EBU and a business/fundraising advisor to various high-tech start-ups on the swiss start-up scene.

Adi is an Executive MBA graduate from IMD business school (Switzerland) and obtained his M.Sc. in communication systems at the Swiss Federal institute of Technology in Lausanne – EPFL (Switzerland).

David Garcia has been CISO at France Télevisions since 2010. Previously he was in charge with the networks of France 3 where he developed and operated a broadcast contribution nertwork over IP. He has worked several years for Thomson Broadcast Systems and then EMC2 before joining France 3 and France Télévisions in 2004.

KeyNOTE

Managing Cybersecurity at a large Multimedia Group

Andreas Schneider (Tamedia), born and raised in Munich, Germany, entered the field of IT Security at an early stage. Trained as a System Programmer, he took responsibility for a regional bank institute's entire mainframe landscape security. He then grew his specialization in the field of IT Security and IT Risk Management throughout various related roles like Consultant, Specialist and CISO, while transforming IT Security across different businesses and company sizes, including startup, regional and multinational within banking, IT and media. With more than 10 years of international specialist experience, he currently acts as the Group CISO at Tamedia, Switzerland's largest private media company, progressing Cyber Security to become more agile. He further holds several well-respected professional certifications, such as the C-CISO, CISM, CISSP, CRISC, and is also certified in ISO 27001 and ITIL V3. He lives with his wife and son in Zurich, Switzerland.

SESSION 1: Cybersecurity Landscape

Smart holes in your perception

We're increasingly blindsided by the media, our own biases and misplacing our paranoia and trust. This talk aims to be the Mythbusters equivalent of infosec & privacy.

Alex "Jay" Balan is the Chief Security Researcher and Spokesperson for Bitdefender. His career is focused on Information Security, Innovation and Product Strategy, fields in which he has so far accumulated over 15 years of experience. He drove the vision for Bitdefender's UNIX-based security solutions before kickstarting an ambitious project that would advance the company's R&D department and steer a good part of the company's focus towards technology and innovation. He is now furthering security and privacy research and has been actively involved in creating awareness by speaking at a number of conferences including DEFCON, Derbycon, RSA, Several BSides, ISC China, Interpol's meetings on Cyber Crime for Heads of Units, DefCamp, IMWorld, Future of Media and many others.

Deep learning based deepfake detection

Manipulation and forgery of visual media is being revolutionised by techniques based on Artificial Intelligence and Deep Learning.

The DeepFake phenomena is here to stay, and though not yet accessible to the layman, it soon will be.

QI has been working together with EPFL on forgery detection for the last 2 years, and we will outline our thoughts as to the threats and possible countermeasures countermeasures.

Anthony Sahakian (Quantum Integrity) holds a bachelor's form Georgetown's school of foreign service, and got his masters in economics from Plekhanov while developing real estate in Moscow. He founded his first company in 1996 and has been the principle in many ventures since. A veteran entrepreneur he has successfully managed in difficult markets and situations.

SESSION 2: Vulnerability Management – Think Like A Hacker, Work with Hackers

Crowdsourced Security: Get hacked before you get hacked

Go hack yourself: how your broadcast company can benefit from working with a crowd of ethical hackers.

Inti De Ceukelaire (intigriti) is a Belgian ethical hacker and bug bounty hunter. He has made national headlines numerous times with his security awareness stunts, reaching from manipulating the twitter account of US President Donald Trump to publishing fake news on the Vactican's website. As an ethical hacker, Inti hunts down security vulnerabilities in companies like Facebook, Google, Dropbox and the US Department of Defense. In 2018, Inti was awarded the "Most Valuable Hacker" award, one of the most prestigious titles an ethical hacker can receive. Inti has worked as a digital creative for VRT, the Flemish Public Broadcast company in Belgium.

Implementing Responsible Disclosure at VRT

What is a Responsible Disclosure Program and why should a company implement one? How to deal with Bug Bounties as a Public Broedcaster?

Gerben Dierick (VRT) &

Wim Wauterickx has been CISO at VRT since 2016. Before that he was responsible for VRT ICT Operations department for several years. Before joining VRT, his worked for more than 10 years at the Brussels Airport Company as IT Operations Manager, and had international experience within companies like Terremark (Verizon) and Descartes.

SESSION 3: Content Protection – New content protection services

Content security in federated cloud media workflows

The media ecosystem is rapidly shifting to cloud infrastructure. How do organisations build the processes and skills to maintain control on their content and distribution workflows.

Ben Schofield is a Digital Media Consultant focused on media and metadata logistics and content security with recent projects for the BBC, BARB, Neustar, Movielabs, CDSA and the BFI in the US, UK and Australia. As Director of Digital at Red Bee Media, he supported the launch and rapid growth of BBC iPlayer and helped major broadcasters and studios set up efficient digital content distribution to new platforms.

Protecting Live Content over Satellite and Beyond

As the threat of piracy is increasing on live sport content and to propose a futureproof alternative to proprietary solutions, an evolution of BISS encryption standard has been developed with simple and secure way to protect content In-Band but also adding tools to identify and remove leakers.

Julien Mandel works in ATEME since 18 years and is in charge of Contribution Segment as Marketing Directo He has been father as a Product Manager of Kyrion family products in place in Broadcast industry since year then was co-initiator and co-founder of BISS-CA standard. Now, World Wide influencer for pure Softwa Contribution products and BISS-CA market adoption

Adi Kouadio (EBU)

SESSION 4: Content Piracy – Threats and Measures

Price of Piracy: The Hidden Threats within Illicit Streaming Services

The cost of piracy is often calculated as the (theoretical) loss of revenue for rightsholders. This calculation however lacl an important additional cost, which is the cost for consumers. While pirated content might be perceived as readily ar freely available to the consumer, there is a price to pay. This presentation will detail how consumers are facing the advers effects of using Illicit streaming devices (ISDs) or services and as a result becoming a target and victim of maliciou activity.

Norbert van der Laan is lead Cyber Forensics in the cyber services team at Irdeto. He has a technical (securit background with hands-on ethical hacking and Incident Response experience. In his role, he leads investigations in major pirate operations and liaises with law enforcement by providing forensic support during datacenter raids and as a expert witness. Furthermore, he performs in-depth security assessments on video infrastructure for key operators and provides them with pragmatic plan into how to improve their overall cyber defense against rising content security threats. Before Irdeto, he was a cybersecuri consultant at Deloitte, and supported clients throughout various industries on how to improve their (digital) security.

'Free to Air' does not mean Free! The challenges of IPTV piracy for broadcasters.

This session will explore the commercial and legal challenges posed to broadcasters - particularly those who broadcast free to air in their home countries - by IPTV piracy. Technically trivially easy, highly mobile, and well funded, global IPTV piracy poses a significant threat to legitimate broadcasters, who cannot compete on a level playing field with pirates who pay nothing for the underlying content, comply with no regulation, and pay no tax.

Diane Hamer qualified as a solicitor in Australia, specialising in media and intellectual property law. After moving London, she took up a role as the BBC's trade mark lawyer before moving to BBC Studios (the BBC's wholly owne comemrcial subsidiary), to head up BBC Studios' content and brand protection function. Before becoming a lawyer, Diane worked in th television industry.

SESSION 5: CYBERSECURITY IN AGILE ENVIRONMENT – From DevOps to DevSecOps

Agile Cybersecurity Management

Andreas Schneider (Tamedia)

Secure Development Life Cycle

Secure development of software and systens is crucial for a reliable and secure media environment. It is the basis for reliable apps, websites, devices, etc. For the Dutch Broadcast Organisation, with 17 Milion of potential viewers, surfers and listeners, it is mandatory that our provided services are available, its integrity is guaranteed and that there is no doubt about the authenticity of content. Secure development helps in achieving these goals.

Dennis 't Jong - Information Security Officer for the NPO since november 2018. More than 18 years of experience in (cyber) security, includir three years in the media

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SESSION 6: CYBERSECURITY INFRASTRUCTURE – leARNING FrOM PEERS

Two Years' Experience with a Media Company SOC

David Garcia (France Télévisions) – see above

Active Directory Security: The Untold Story of 10 Years of Failure, and How to Emerge Stronger

Sad to say, Active Directory is not only the cornerstone of our infrastructures' security, it's also one of its weakest points. Since the early 2000's, it's been the common denominator of all large-scale attacks on desktops and industrial information systems. The recent announcement of the compromise of 3 major anti-virus editors due to their vulnerable AD infrastructures is a striking, though somewhat ironic, example. And, surprisingly, the root cause of these attacks is not always to be found in software vulnerabilities or architectural weaknesses. More often than you'd think, they find their very origin in poorly implemented – or downright counterproductive – security measures that do more harm than good. During this session, we will shed light on the most epic failures we encountered during real-world incident responses. We'll present detailed attack scenarios that hackers have successfully leveraged, in the wild, to break into their victims' Active Directory and to wreak havoc in their vital assets. Taking into consideration what we know from modern threats, we will describe pragmatic tactics to reclaim control of our Active Directory infrastructures. And for those afraid of yet another sales pitch: our recommended approach isn't product-centric and spans over many security initiatives, from hygiene best practices to incident readiness through monitoring and threat hunting. For our collective safety as a society, we, at Alsid, think it's time to get serious about AD security. Come join us at our workshop and help us make a difference.

Sylvain Cortes is an Identity & Access Management (IAM) and cybersecurity expert. He works mainly with large organizations to execute identity and directories governance projects, including authentication processes, cross-OS privileges management, cloud identity management, and Active Directory cybersecurity. He has developed a deep expertise in AD bridge projects integrating Active Directory with various operating systems like Unix, Linux, and MacOS. Sylvain has been a Microsoft MVP in Active Directory, MIM, and Identity & Access for 13 years.

A Novel Approach in Outsourced SOC

SOC implementation: how to address this challenge, shorten reaction time and increase visibility

Christian Raemy (Hacknowledge). With more than 25 years in cyber security, I began as technical security engineer at Switzerland's largest retail company.

Designed, implemented and operate security solutions to protect the network and systems during 6 years.

I moved to the EPFL, The Swiss Federal Institute of Technology in Lausanne in charge of the security of the windows environment during 6 years. during this period, I was regularly interviewed in different media (Newpaper, Radio, TV) as a security expert.

My next challenge have been Security consultant during 10 years for all kinds of customers in Switzerland as well as in Europe. I audited, designed and implemented security solutions in various kinds of environments.

Now I'm in charge of customer's HK SOC implementation and follow up to insure appropriate security level detection and quality of service.

SESSION 7: IP INFRASTRUCTURE SECURITY

Is your supply chain solid as a rock?

Since US' Target in 2014 to recent Airbus' hack, suppliers are a key element of company's risk management. How to evaluate the risks? How suppliers are handling such evaluation? How to enforce security requirements in RFPs? What can bring cyber insurance in this context? The objective of this presentation is to provide feedback of experience.

With more than 25 years working around the world, including 16 years in the PayTV industry, **Eric Bärenzung** moved to the cyber security world in 2014. Working now as Consultant for his company, 0x70, Eric is helping companies to define and implement their cybersecurity strategies, from raising awareness to security tools implementation, including 3rd party security assessment. His current main mission is the banking industry. More info available on https://www.linkedin.com/in/ericbaerenzung/

Security by Design: Building BBC Cardiff

Mike Ellis has worked for the BBC since leaving university in 1993, initially on the rollout of DAB in the UK where he helped to design the equipment used at transmitter sites and in the studio centres, as well as defining the test sequences used to validate receiver performance. During this time, Mike sat on the WorldDMB Technical Committee drafting, reviewing and updating the DAB standards. He also contributed to the development of the WiFi wireless networking standards aiming to improve the handling of media carriage over WiFi, something which is now commonplace.

More recently, Mike was the Technical Architect for the BBC's two largest studio building projects in the last decade: MediaCityUK and Phase 2 of Broadcasting House. Both of these projects gave him exciting new challenges to face, both broadcast-related and network-related, and the chance to work with an excellent team of designers and project managers to develop innovative solutions.

Mike is the Head of Architecture for Production Systems in the BBC, covering everything needed to turn an idea into delivered content. He focuses mainly on the future of content, finding efficient ways to use cost-effective technology to produce discoverable, personalised content that can be distributed to and consumed seamlessly by the audience wherever they are and on whatever device they wish to use.

Connected Media Risk Assessment Methodology.

This presentation shows the path that the autor is following in order to make a research over the security of the connected media, and why he started to investigate this topic. As one of the deliverables of the Doctoral Works, a Risk Assesment methodology for connected media infrastructures is presented.

Alvaro Martin Santos is Cybersecurity Technical Officer in RTVE, where started working on IT Security and IAM 11 years ago. He is Computer Science Engineer and is pursuing a PhD in Industrial Engineering, with a specialization in Security of IP broadcasting technologies at UNED - Universidad Nacional de Educación a Distancia (Spain).