



BIOS

TUESDAY 12 OCTOBER 2021 (09:55 – 17:20 CET)

10:00 – 10:10 **Welcome & Introduction**



Hans Hoffmann (PhD) is EBU Senior Manager and head of unit on media fundamentals and production technologies in the EBU Technology and Innovation department. He has been for 9 years with the Institut fuer Rundfunktechnik (IRT) as research staff in new television technologies until moving to the EBU in 2000. In the EBU he has been leading many activities on media integration, production technologies, technology evaluations, and he established the EBU HDTV testing lab, and work with EBU Members on IT based digital workflows and open innovation strategies. More recently he and his team looked at emerging technologies such as immersive media (UHD, NGA), AI-Data, EU 5G projects, IP and cloud-based media. Hans is the current president of the SMPTE for 2021-22 (“the global home for media professionals, technologist and engineers”). He has been author of many EBU Technical documents; IEEE papers and is a standing speaker and contributor to

international conferences and recipient of the 2020 Richard Theile Medal.

KEYNOTE

10:10 – 10:40 **Cybersecurity: Human-centric Reporting, and Risks for Journalists as targets**



The CyberPeace Institute provides a perspective on two key themes in cybersecurity: (1) cybersecurity reporting and shifting the focus to what happens to people, the victims of cyberattacks, and (2) the importance of cybersecurity for journalists themselves.

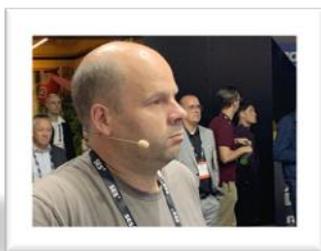
Stéphane Duguin has spent two decades analysing how technology is weaponized against vulnerable communities. In particular, he has investigated multiple instances of the use of disruptive technologies, such as AI, in the context of counter terrorism, cybercrime, cyberoperations, hybrid threats, and the online use of disinformation techniques.

@DuguinStephane <https://www.linkedin.com/in/stephaned9999/>

SESSION 1: CYBERSECURITY THREATS IN 2021

MODERATOR: RAINER JOCHEM (SR, MCS CHAIR)

10:40 – 11:10 **Cybersecurity threats to public service media in 2021**



Public service media are increasingly a target for cyber-attacks. MCS group has done a compilation of all the threats they experienced in 2021.

Gerben Dierick combines running the network team at VRT with his role as Information Security Officer. He currently co-chairs the EBU’s Media Cybersecurity Group and lectures on networking and cybersecurity topics at the University College Leuven Limburg.

11:10 – 11:40 **Hacking humans; the social media threat**



Social media are an invaluable resource to journalists, but they’re also a significant threat. This session will examine how social media and publicly available sources have been used to gather information about targets and facilitate attacks on them and their families.

Martin Turner is Managing Director of Full Frame Technology, a company specializing in cybersecurity for the media sector. He draws on his experience as a former BBC journalist and editor to provide awareness courses that help staff reduce risk without complicating the production process.

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11:40 – 12:10 Ransomware attacks in 2021



Ransomware has a long history, going back to 1989. But they have become a massive problem as they more and more have an impact beyond the company, on end-consumers and the operations of critical infrastructure.

Don Smith leads the CTU™ Cyber Intelligence Cell: a global team of experienced threat analysts who, through the application of established intelligence practices, deliver actionable and timely intelligence products on the threats most relevant to SecureWorks clients. Don also leads the CTU research team in EMEA.

Don joined SecureWorks in 2005 and, since then, has been instrumental in establishing a CTU presence in EMEA and building important relationships for SecureWorks in the region. His enthusiasm and threat expertise means that he regularly represents

SecureWorks at industry events. Don has 28 years' experience in the IT industry and was previously responsible for security architecture and operations for a multi-billion enterprise, where he took a lead role in successfully integrating 14 acquisitions. Don's first exposure to security was in 1991 responding to an intrusion at a UK University. He is a recognized subject-matter expert many areas of cybersecurity and advises SecureWorks and SecureWorks' clients globally. Don is the industry co-chair of the Strategic Cyber Industry Group in the National Cybercrime Unit at the National Crime Agency.

12:10 – 12:40 Modern standards keep us connected!

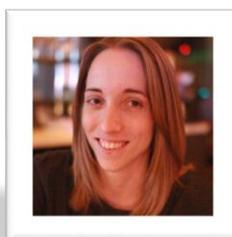


To keep the internet open, free and secure we need to adopt modern internet standards. They safeguard our connections, our privacy and our information and are needed for transparent use of the internet.

Gerben Klein Baltink (Internet.nl) Experienced digital security advisor, working in several public-private partnerships

KEYNOTE SESSION

13:30 – 14:00 Adventures in Securing High-Risk People



Newsrooms have security requirements not seen in other departments. What are they? How do we learn about them? How do we address them? This keynote will share adventures in securing high-risk people, including building the newsroom security program at The New York Times.

Runa Sandvik works on digital security for journalists and other high-risk people. Her work builds upon experience from her time at The New York Times, Freedom of the Press Foundation, and The Tor Project. She is a board member of the Norwegian Online News Association, a certified sake sommelier, and tweets as @runasand.

SESSION 2: MEDIA PROJECTS AND SECURITY

MODERATOR: GERBEN DIERICK (VRT)

14:00 – 14:25 BBC Information Security Knowledge Graph

A quick overview on the BBC Information Security team's approach to capture the semantics and idiosyncrasies of a 100 year organisation into a working set of definitions of entities and their properties into a model that allows us to support of a dynamic and efficient risk management process.

Bruno Garrancho (BBC)

14:25 – 14:50 Securing SRT live streams



SRT is an open source video transport protocol that enables the delivery of highquality and secure, low-latency video across the public Internet.

Stefan will present on the implementation of SRT at SWR and the challenges of QoS and firewall configurations in a media production environment.

Stefan Ringhoffer (SWR) is presenting about the implementation of SRT at SWR and the challenges of QoS and firewall configurations in a media production environment.

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14:50 – 15:15 Cybersecurity in sport events: the Euro 2020



The challenges around making the Euro 2020 secure, impacts of new production workflows on the broadcast network security, risks in infrastructure that include remote production, operators working from home, and multinational venues, plus an outlook on what's next.

Geoffrey Crespin (EVS) is well-versed in cyber-security matters, having previously worked as a cyber-defense consultant for European governments and institutions, and in the telecommunications sector. He joined EVS in 2020 as Senior Solutions Architect, helping customers design infrastructures that ensure their assets and workflows are properly secured.

Vincent Gafanesch is ICT Security Specialist for UEFA, I've started 6 years ago working for UEFA in the ICT Security team. My role is to help UEFA securing assets and information with a specialty in Identity and Access Management



15:15 – 15:40 Cybersecurity at CBC/Radio Canada's new broadcast facilities



CBC/ Radio Canada has recently moved to a brand new building. Security is at the heart of the migration project.

As Senior Director of Core Systems Engineering, **François Legrand** manages the team responsible for CBC/Radio-Canada's core infrastructure capital projects, including media over IP initiatives. In his free time, François is an avid maker and is interested in anything related to CNC woodworking, 3D printing and Arduino or ESP based DIY electronics.

Philippe Edmond is Senior Director of Governance and Information Security at the Canadian Broadcasting Corporation. He began his professional career in France in 1999 as manager of IT in a Business school. Having a natural attraction for IT security, he obtained a Master of Computer Engineering with specialization in IT security in 2005. After successively holding positions of network and security engineer, project manager and team leader at SFR, he decided to move to Canada in 2013 to work with EGYDE Conseils, a firm specialized in computer security and recently acquired by KPMG. Become head of the information security governance practice, he carries out several strategic mandates such as information security strategy, information security audits and the development of a quality management system. He then became an internal auditor specialized in information security at Quebecor where he developed a great interest in the media sector. In 2018, Philippe became Director of IT compliance and the information security plan of TVA Group. There, he deployed the first information security program and thereby led a major security culture change within the organization. Since February 2021 at CBC/Radio-Canada, he manages a team responsible for cybersecurity, audit and risk management, vulnerability management, security incident response and information security awareness.

SESSION 3: MEDIA SYSTEM VULNERABILITIES

MODERATOR: GERBEN DIERICK (VRT)

16:00 – 16:30 Hacking broadcast systems

Broadcast Technology relies more and more on IT systems. This transition results in a fundamental change in protection goals and how to achieve them. While stability and availability remain the primary protection goals, the way to achieve them is fundamentally different in a digital infrastructure. Sadly, today's broadcast systems and infrastructures do not reflect this: They are easy to breach, because they rely on outdated security assumptions. In this presentation, we will investigate the most common shortcomings and how to avoid them.

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Linus Neumann (Consultant & Hacker) is a penetration tester and IT security consultant focussing on critical and highly complex infrastructures such as mobile networks and broadcast systems.

16:30 – 17:00 Cybersecurity test campaign on smart TV receivers



DTG has investigated on how TV manufacturers are now having to reconsider how they categorise their products, the impacts of upcoming IoT legislation on Smart TVs and other network connected devices.

Alex Buchan is a Director at SafeShark, a DTG Testing joint venture with Connect devices which has developed a consumer IoT cyber security assurance scheme backed by BSI certification. The scheme uses SafeShark's unique and innovate Intercept platform to provide objective and continuous cyber security testing against international standards such as ETSI EN 303 645

17:00 – 17:30 SMPTE ST 2110 Security and What standards organizations are doing



Securing SMPTE ST 2110 systems is becoming an important issue. Many users and equipment vendors do not know where to start. To assist, standards and related organizations such as SMPTE, JT-NM, AMWA, and the EBU are working on specific parts of the security challenge. This presentation summarizes the ongoing work in the different organizations.

Leigh Whitcomb is an architect for Imagine Communications, having joined the company in 1991. He participates in SMPTE, and IEEE standards committees, including serving as co-chair of SMPTE 32NF Network/Facilities Architecture Technology Committee. Whitcomb became a SMPTE Fellow in 2017. He holds a bachelor's in Computer Engineering and a master's in Electrical and Computer Engineering.

17:30 – 18:00 ROUNDTABLE: Making the pyramid green: how can media systems be more secure?



Peter Brightwell leads BBC R&D's work on infrastructure for live IP production, and is a frequent contributor to industry initiatives on interoperability. He is a vice-chair of EBU's infrastructure and security SP, and chairs the Networked Media Incubator and NMOS security groups of the Advanced Media Workflow Association. (BBC),

Brad Gilmer is President of Gilmer & Associates, Inc, Executive Director of the Video Services Forum (VSF), and Executive Director of the Advanced Media Workflow Association. Brad is a SMPTE Fellow and the first recipient of the SMPTE Workflow Systems Medal. Brad was previously employed at Turner Broadcasting System in Atlanta where he and his staff were responsible for Engineering and Operations for the Entertainment Division Worldwide. He is an author and editor and has written many articles on computers and networking for media industry publications.



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Félix Poulin is with the national public broadcaster CBC/Radio-Canada where he leads the Media over IP Architecture Lab. Before that mandate, Felix was lead expert on live IP at the EBU. Felix completed his diploma in electrical engineering at Montreal's Polytechnique with his final thesis done at MIT. Felix is an active contributor to the SMPTE, EBU and user-chair of the AMWA NMOS Steering board.

Ievgen Kostiukevych is a member of the EBU Technology & Innovation team. He has gained more than a decade of experience in the broadcasting and sound production industry, including experience in change management, solutions architecture and AoIP integration. He is working on topics of IP networks, media over IP, PTP, networks programmability and automation, etc. Ievgen is a member of SMPTE and AES.



- Leigh Whitcomb (Imagine Communications),
- Gerben Dierick (VRT)

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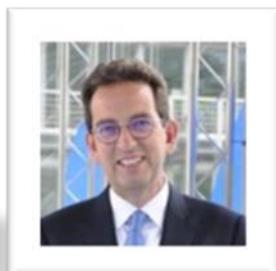
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WEDNESDAY 13 OCTOBER 2021 (09:55 – 16:40 CET)

09:55 – 10:00 Onpening and Welcome



Antonio Arcidiacono is Director of Technology & Innovation at the European Broadcasting Union. He has extensive experience in conceiving, developing and taking new products and services to market. Since joining the EBU in September 2018, Antonio has launched several initiatives designed to leverage the collective expertise and momentum of the EBU Membership for technology innovation, deliver key building blocks for the digital transformation of public service media, and strengthen collaboration between PSM, European policy initiatives, start-ups and academic institutions. Two of Antonio's most recent initiatives are the 5G Media Action Group (5G-MAG) and EuroVOX. 5G-MAG currently counts 40 members from the industry and aims to ensure future 5G standards are fit for purpose in media production and distribution. EuroVOX is a collaborative project of the EBU and several of its Members that aims to break down language boundaries for users and content. It consists of an open framework upon which services can be built, and a set of tools for media creators, such as speech-to-speech translation. Antonio previously

worked as Director of Innovation and a Member of the Management Committee at Eutelsat; the European Space Agency; Telespazio, and Selenia Spazio

SESSION 4: SECURITY AWARENESS AND REGULATIONS

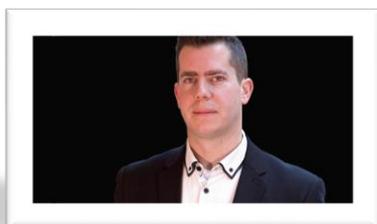
MODERATOR: RAINER JOCHEM (SR, MCS CHAIR)

10:00 – 10:30 **Digital Target Hardening**

How my team apply 'Digital Target Hardening' to enhance the safety of individuals at risk from digital threat actors. This is achieved through leveraging wider information security tools as well as the application of specific tools and techniques.

Mike Bond (BBC) Information Security Manager within the InfoSec Operations team at the BBC where I have been for the last two years managing a small team providing Digital Forensic, Digital Investigative and Digital Target Hardening support. Prior to this spent 15 years in UK Law Enforcement.

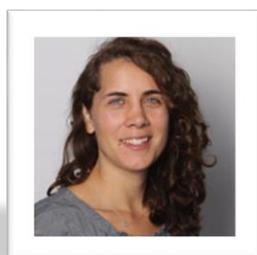
10:30 – 11:00 **Executive awareness of cybersecurity**



How to create, build and operate a successful top-down cybersecurity strategy. The presentation will provide you with key insight about how a cybersecurity strategy should be built, what would be the key drivers and how to get strong support from the executives

Fabrice Guye (ELCA) Experienced Senior Manager and Business Director within Cyber Security field with extended management responsibilities from technical teams to principal consultants: development of strategies, development of products, services and solutions, processes and metrics, staffing plan, recruitment and operational management (cost, budget and efficiency).

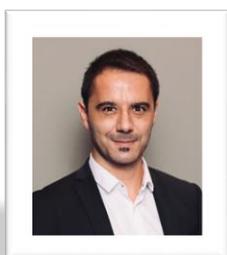
11:00 – 11:30 **The security awareness programme at SRG**



With the constant change in the cybersecurity landscape, media organizations can no longer just rely on technological defenses to keep them safe. Employees are an essential part of the security problem. This is why cybersecurity education is a priority and must be addressed in every organization. During this online session Mona Brunner from SRG will share insights of the security awareness programme at SRG.

Mona Brunner is currently working as specialist in security awareness & communication at SRG SSR. Her previous stages were as cyber security consultant specialised in ISO 27001 Audits and Information security governance.

11:30 – 12:00 **GDPR and CLOUD Act: possible approaches for assurance and compliance**



The invalidation of the Privacy Shield alongside the approval from the US government of the CLOUD Act has created several concerns within the cloud market. European cloud users are unclear on what risks they face when using the leading cloud services providers. Is there a compliance risk vis-a-vis the GDPR? Are there risks for the confidentiality of their data? Are there risks for their reputation?

In this presentation, Daniele Catteddu, Chief Technology Officer at the Cloud Security Alliance (CSA), will provide an overview of the problem at stake and propose some possible compliance and technical solutions to continue an organization's transition to a cloud environment securely.

Daniele Catteddu (CSA) is a security and risk management practitioner and privacy evangelist. He worked in senior roles in both the private and public sectors. Currently, he is the Chief Technology Officer at Cloud Security Alliance, where he is responsible for driving the adoption of the organization's technology strategy and building the certification and training service portfolio

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(CCSK, CCAK, etc.). Mr. Catteddu is the co-founder of the CSA STAR Program. He is a member of the Italian Standard National delegation at ISO/IEC SC27. He is a lecturer at the Maastricht University Centre on Privacy & Cybersecurity, a member of the European Privacy Association Scientific Committee, and the Advisory Board of the Kent University Cyber Security Center. In the past, he worked at ENISA, the European Cyber Security Agency, as an Expert in Critical Information Infrastructure Protection and Emerging and Future Risks. Before joining ENISA, Daniele worked as information security advisor in the banking and financial sector. He is a frequent keynote speaker in leading cyber security conferences and author of several scientific papers in cybersecurity and privacy. He obtained relevant cybersecurity certifications (CISM, CISA) and a master's in business administration and economics (University of Parma, Italy).

KEYNOTE

13:30 – 14:00 **Enabling Software Security with DevSecOps**



A lot of folks talk about the “what” behind DevSecOps, but few have mastered the “how” that makes it a success. With Development and Operations functions fused together in most organizations, Security must become a first-class cultural component in software engineering practices. In this talk, Check Point Field CISO Cindi Carter will share the story of how her team at a health IT company succeeded in implementing the secure Software Development Lifecycle for an organization with more than 3500 reluctant developers worldwide.

In this session, you will learn how to build in cybersecurity rather than bolting it on later:

- Understand the developer's mindset and motivation
- Exploit the company culture and incentivize developers to desire security
- Expand from a few early adopters to thousands of developers
- Overcome the roadblocks that arise along the way

Cindi Carter (IntSights) Global, multi-industry Cyber Security and Information Technology Executive offering Startup and Enterprise Security leadership. Expertise includes building

Security practices in highly regulated industries, turning strategic goals into actionable outcomes, influencing a Culture based on “Secure from the Start”, developing secure architecture & engineering capabilities, and highly collaborative engagement (C-Suite, Board, Clients and Industry).

SESSION 5: CYBERSECURITY LATEST TECH

MODERATOR: LUCILLE VERBAERE (EBU)



Lucille Verbaere joined EBU as Senior Project Manager, coordinating Media Cybersecurity activities. She has 20y-experience in Cybersecurity, Telecommunications, Air Transport and Semiconductor industries: she started as an R&D engineer at ST Microelectronics, doing research on wireless telecom systems (Today's IoT domain). Then Lucille joined SITA as program and product manager for infrastructure and cloud-based data management services to airports and airlines worldwide. In her last position at ID Quantique in Geneva, Lucille was responsible for a portfolio of cybersecurity products, based on quantum physics.

14:00– 14:25 **Overview and feedback on Microsoft's security portfolio**



Nowadays, Microsoft is one of the top leaders in the cybersecurity market, investing billions dollars in this field every year. Marketing aside, during this presentation, we will go through a quick overview about Microsoft's security solutions and share our field experience. Pros and cons will be exposed, benefits will be presented, and the real challenges behind the scenes, especially when migrating from a multi-vendors based security stack to a consolidated approach using Microsoft, will be explained.

Benoit Ramillon is a Cyber Security Architect with 12 years of experience in international environments, having provided security advisory in various domains and for companies of all sizes. He also had the opportunity to carry out additional roles related to technical pre-sales, team leader, partnership and portfolio manager, trainer, professional services consultant and CISO-as-a-Service. Currently Information Security

Expert within UEFA's Security Governance team, he's the Incident Response Manager as well as the technical security lead for various topics (cloud security, incident response, security monitoring (SOC), Microsoft security). In his spare time, Benoit loves practicing different sports and other outdoor activities, as well as reading and learning new skills.

14.25 – 15.50 **The Secure Credentials-Sharing Utopia**

Credentials should not be shared between different users. Still, sometimes, password sharing is necessary: how can we do it right? There are many Password Managers that include functionalities for secure password sharing. However, there's no one-size-fits-all solution. We'll talk about Password Managers Pros and Cons, ways to share passwords with guests and we'll have a sneak peek at HW-tokens, FIDO2 and password-less solutions.

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Marco Bellaccini (RAI). I'm an IT Infrastructure Architect at RAI. I design reliable, secure and automated IT systems for Television Production. I'm an Electronic Engineer (EE MSc). I joined the TV Engineering Department of RAI in October 2014. Previously, I did Robotics research at The Biorobotics Institute of Sant'Anna School of Advanced Studies and at Sapienza University of Rome.

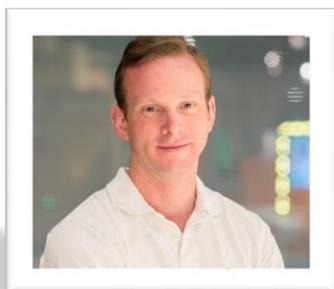
Personal website: <https://bellaccini.it> - Twitter: <https://twitter.com/lasagnasec> - GitHub: <https://github.com/marcobellaccini>

15.05 – 15:30 **Creating Awareness against Cybersecurity Threats from Production to Distribution**

Cybersecurity threats are becoming as innovative as the piracy services being served to end users. It is a billion dollar business. We can only minimize risks by protecting our most valuable content with the technology available to us. What can not be protected needs further awareness so threats can be detected with intelligent data available. Finally we need an enforcement strategy. Join us to learn more how to efficiently PROTECT, DETECT and ENFORCE together

Ilker Urgenc (Akamai) has +10 years of experience out of the Broadcast Industry where he began his career as an engineer in the TV industry – Be it on the content production side or the broadcast tech solution provider side. His curiosity out of the broadcast world then hit the Digital Media online world. During the last 10 years he extended his broadcast knowledge from a CDN perspective as a media specialist helping customers finding the right solution set while scaling and protecting OTT services be it Live and/or VOD Streaming. <https://www.linkedin.com/in/uergenc/>

15:30 – 15:55 **Application Security Security Automated**



It can be hard to cut through the marketing hype in cybersecurity. In this talk, I'll focus on application security (appsec), which is the root cause for a large number of hacks. I'll bring you through the basic building blocks of the four corners of appsec, what they do, and the tradeoffs. I'll tell you why fully autonomous appsec focuses on fuzzing, and why most enterprises (especially devops) are moving in that direction, contextualized within those tradeoffs and motivations.

CEO and co-founder **David Brumley** received his PhD in Computer Science from Carnegie Mellon University. Brumley is a tenured Professor of ECE and CS at Carnegie Mellon University, and was previously director of the CMU Security and Privacy research institute. Brumley's research has garnered numerous awards, including the Sloan Award and the US Presidential PECASE award.

twitter: @thedavidbrumley

linkedin: <https://www.linkedin.com/in/david-brumley-5aa57298/>

15.55 – 16:20 **Defending against the ransomware threat**



Ransomware is currently on the top of media company lists of cybersecurity concerns. This session will consider some practical control steps in each of the 5 NIST Cybersecurity framework domains (Identify, Protect, Detect, Respond, Recover) to help mitigate ransomware risks to your organisation.

Andrew Sands (BBC) Responsible for the BBC's Cyber Security Operations team which includes a 24x7 SOC who provide incident response, security monitoring, threat intel and vulnerability scanning services and the BBC's digital forensics function.

CLOSING:

16:20 – 16:45 **The cybersecurity outlook for 2022**

Rainer Jochem (SR, MCS Chair)
